

**Arkansas Child Development
and Early Learning Standards**

***Strategies and Activities:
Preschool***



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Introduction

Arkansas Child Development and Early Learning Standards Strategies and Activities: Preschool was created to help early childhood professionals in developing quality developmentally appropriate curriculum, goals, and environments for children in their classroom. Based on the *Arkansas Child Development and Early Learning Standards: Birth through 60 Months*, this document focuses on ages 37 through 60 months. Some indicators (knowledge or skill that one would expect to see in a child) will begin developing in infant and toddler years, but are not be mastered until children are older than 36 months.

AR CDELS Strategies and Activities: Preschool is organized by the nine AR CDELS **Domains of Development and Learning**:

- Social and Emotional Development
- Cognitive Development
- Physical Development and Health
- Language Development
- Emergent Literacy
- Mathematical Thinking
- Science and Technology
- Social Studies
- Creativity and Aesthetics

Each domain is further divided into more specific areas of development or learning, which are called **domain components**. Each domain component consists of **learning goals** related to the component. These are the specific areas of development and learning in which children should show progress. Each learning goal consists of one or more **strands** that represent subskills within the learning goal. Within each strand, there is a progression of expectations for what children should know and be able to do at different ages in early childhood. Each step in the progression is called an **indicator**, which outlines the knowledge or skill that one would expect to see in a child related to that learning goal within a specific age range. It is important to note that because typical child development and learning varies widely from child to child, many indicators span multiple age ranges. For example, when an indicator spans the birth through 8-month and 9- through 18-month age ranges, that means the behaviors and skills will be developing and observed for most children somewhere between birth and 19 months (AR CDELS, 2016).

The Arkansas Child Development and Early Learning Standards Committee established a set of **guiding principles** that informed the development of the standards. Those guiding principles are:

- The foundations of early development and learning begin before birth.
- Families are children's first and most influential teachers.
- Child development and learning unfold within each child's specific social and cultural context.
- All areas of development and learning are equally important and influence a child's school readiness and life success.
- Early learning standards should be grounded in the science of child development and early learning.
- Children's learning happens through the active, playful exploration of their environment and participation in meaningful interactions with others.
- Children learn in a variety of ways and develop at varying rates.
- Children can demonstrate mastery of the standards in a variety of ways.
- Early development and learning standards are not a curriculum or assessment, but provide the areas of and expectations for development and learning to which curricula and assessments must align.
- Children develop and learn best in environments that are psychologically and physically safe and that foster strong relationships between caring adults and children.
- Early development and learning standards should be central to the state's early childhood professional development and higher education systems and a range of supports should be provided to facilitate teachers' understanding and use of the standards.

Early development and learning is complex and interrelated, resulting in many potential ways to discuss and describe phases of development and learning. To make this complexity more manageable, the birth-through-60 month age span is divided into five **age ranges** and the standards are organized into progressively smaller groupings of content (AR CDELS, 2016).

- Birth through 8 months
- 9 through 18 months
- 19 through 36 months
- 37 through 48 months, and
- 49 through 60 months

The strategies and activities in this document are separated by age range. Each child is different and there can be a wide range in children's development and learning. The *Arkansas Child Development and Early Learning Standards: Birth through 60 Months* has highlighted behaviors and signs to watch for that might indicate a developmental delay or behavior issue. Where applicable, those warning signs have been listed at the start of each Domain of Development and Learning section. Companion publications *AR CDELS Developmental Rating Scale: Birth through 36 Months* and *AR CDELS Developmental Rating Scale: 19 through 60 Months* have been created and can help the early childhood professional identify developmental delays and/or behavioral issues. The *AR CDELS Developmental Rating Scales* as well as the *AR CDELS Strategies and Activities* are available for download on Early Care and Education Projects *For the Provider* webpage under Arkansas Curriculum and Supplemental Publications.


Reference:

Arkansas Department of Human Services, Division of Child Care and Early Childhood Education. (2016). *Arkansas child development and early learning standards: Birth through 60 months*. Little Rock, AR: Author

Reading and Using *Strategies and Activities: Preschool*

Strategies and Activities: Preschool is based on the *Arkansas Child Development and Early Learning Standards (CDELS): Birth through 60 Months* and is designed to support teachers in helping children meet learning goals. It is organized by Domain of Development and Learning, Domain Component and Learning Goal. The strategies and activities within this document were developed for preschool children (37-60 months) from the indicators located within each learning goal in the Arkansas CDELS.

Strategies and Activities: Preschool is arranged by Domain of Development and Learning. Each Strand is listed in the left column and the associated strategies and activities are in the middle column labeled **Teaching Strategies**. The right column has examples of how those teaching strategies might be implemented. Throughout the text there are referrals to the resource section, indicating there are additional resources that accompany those strategies or activities. These additional resources are located at the end of that Domain of Development and Learning.

| Domain Component | | Learning Goal |
|--|--|---|
| SE2. EMOTIONAL EXPRESSION AND UNDERSTANDING | | |
| SE2.1 EXPERIENCES, EXPRESSES, AND REGULATES A RANGE OF EMOTIONS | | |
| Strand | EMOTION EXPRESSION <p>Teaching Strategies</p> <ul style="list-style-type: none"> • Create an environment in which children feel emotionally safe; an environment in which they learn to recognize and label emotions, develop the ability to constructively express emotions, and become aware of their effect on others. • Understand and accept that children experience a wide range of emotions. • Notice and comment on the emotions children are expressing. • Label children's emotions and your own. Use simple words such as sad, happy, and afraid. • Validate a child's feelings. • Encourage children's feelings of pride in their accomplishments. • Point out to children that others have feelings. • Promote a classroom environment that supports children in their daily endeavors. • Expect accidents and mishaps to happen and view these as an opportunity to help children learn rather than making them feel embarrassed, shamed, or guilty. • Provide safe spaces in the classroom and playground for children to safely express strong emotions that may lead to unsafe behavior. • Help children express emotions without harming themselves, others or property. | <p>Examples</p> <ul style="list-style-type: none"> □ Help children constructively express emotions. Encourage them to discuss when and why they have felt this way: <ul style="list-style-type: none"> "You sure looked surprised" "I know you were scared when..." "You must be so proud" "It made her angry when..." □ Include a variety of large and small group activities to introduce emotion words and to provide opportunities for children to express their own feelings and emotions: <ul style="list-style-type: none"> ○ Read books and sing songs related to emotions. ○ Collect pictures of real people that show a variety of emotions and discuss why they think the person might be feeling that way. □ Use puppets to encourage children to talk about their emotions. □ Suggest to Lex, who is pounding on the table in anger, that he may get out the play dough and pound it. □ Create a safe space, such as a relaxation station, where children can go which includes soft materials, pillows for punching, stress balls for squeezing, and calm music playing. <p> For more information on social emotional training and curricula see the Resources section (pg.8).</p> |
| | EMOTION REGULATION <p>Teaching Strategies</p> <ul style="list-style-type: none"> • Serve as a model and a support for children as they are developing self-regulation skills. • Be consistent and responsive to each child's strengths and needs. • Create a predictable environment and schedule so children know what to expect. • Arrange the physical environment so children can function independently as they select activities and materials. • Involve children in discussing ways they can regulate their emotions. | <p>Examples</p> <ul style="list-style-type: none"> □ Help a child who is angry to express their feelings to the person who upset them. "You made me so angry when you knocked over the tower I was building." □ Encourage children to STOP, THINK and take a deep breath. (For more information on self-regulation strategies visit the Center on the Social and Emotional Foundations for Early Learning [CSEFEL] website). □ Go outdoors and look and listen to the beautiful things in nature such as clouds, birds singing, flowers and trees. |
| Resources are available | | |

Social and Emotional Development

It is vitally important that Arkansas’s early childhood professionals focus on the social and emotional development of young children. New research has uncovered the dramatic impact that early relationships and social interactions have on a child’s academic performance and mental health, as well as on the success of future relationships.¹ In fact, research has found that an individual’s soft skills—those traits related to interpersonal skills and emotional intelligence—are critically important to success in the workplace.² A child’s earliest interactions with parents, early childhood professionals, and other children shape their identity, influence how they regulate their emotions, and mold the way in which they communicate, cooperate, empathize, and navigate relationships with others. Accordingly, much in the same way that early childhood professionals foster learning in emergent literacy and mathematics, they must also work to achieve secure, nurturing relationships with children and promote their social and emotional health and growth.

Potential Warning Signs of Behavioral Issues or Developmental Delay

- **By 4 years old (48 months)**, a child shows no interest in interactive games or make-believe, ignores other children, or doesn’t respond to people outside the family.
- **By 5 years old (60 months)**, a child doesn’t show a wide range of emotions, shows extreme behavior (unusually fearful, aggressive, shy or sad), is unusually withdrawn and not active, is easily distracted, has trouble focusing on one activity for more than 5 minutes, doesn’t respond to people or responds only superficially; or doesn’t play a variety of games and activities.


¹National Scientific Council on the Developing Child (2004). *Children’s emotional development is built into the architecture of their brains: Working paper No. 2*. Retrieved from: www.developingchild.harvard.edu.

²National Bureau of Economic Research. (June 2012). *Hard evidence on soft skills* (Working paper). Cambridge, MA: Heckman, J. J. & Kautz, T.

| SE1. RELATIONSHIPS WITH OTHERS | | |
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| SE1.1 FORMS TRUSTING RELATIONSHIPS WITH NURTURING ADULTS | | |
| INTERACTIONS | Teaching Strategies <ul style="list-style-type: none"> ♦ Make it a priority to know each child well and to build a secure and trusting relationship with each of them. ♦ Interact frequently with each child one-on-one, using the child’s name each time. ♦ Listen to and talk with children about things in which they are interested in. ♦ Interact nonverbally with children through smiling, hugging, nodding, making eye contact, and getting down on child’s eye-level. ♦ Recognize that a child may need special attention. Children may experience many types of crises in their lives such as separation, divorce, serious illness, death, or a natural disaster. They often need someone they trust to listen to them and offer them support and comfort. | Examples and Activities <ul style="list-style-type: none"> □ Validate children’s efforts and accomplishments. Acknowledge what they did and how they did it. For example, say “Rachel, you added more blocks to that tower to make it taller.” □ Respond promptly to children who come to you for help or support. Offer physical and verbal comfort. For example, put your arm around the child and say, “Jason, I know that hurt when you fell on the sidewalk. Let’s look at your knee and see if it needs a band aid.” |
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| ATTACHMENT RELATIONSHIPS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children separate from their family with minimal distress and provide daily opportunities for children to form secure and trusting relationships with a caregiver and other adults in the learning environment. ◆ Be available to greet each child and parent/family member by name as they enter the classroom. Prepare the classroom in advance so that the focus can be on the child and family at arrival. ◆ Ask that families say goodbye to their child and leave promptly to minimize child's anxiety. ◆ Let children know that adults in the classroom are there to protect each of them. ◆ Provide a predictable environment for the children. Introduce each child to the daily schedule and routines. ◆ Be in the classroom at consistent times each day, letting children know if a teacher will be absent. ◆ Honor a child's need for quiet time to absorb the new environment. Create a quiet corner where a child can go to be alone as he or she makes the transition from home to the learning community. ◆ Keep commitments made to children. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ If a child is experiencing difficulty during separation, stay near the child after the family member leaves. Speak in a calm voice, comfort the child and reassure her Grandma will be back at the end of the day. Guide the child to become involved in an activity, "Yesterday you enjoyed building blocks, would you like to go build a structure with me?" □ When leaving for the day establish a predictable routine (song, dance, clap) to do with children before they leave or the teacher leaves. "We wish you well, we wish you well, as you are leaving here Mia, we wish you well." |
| SE1.2 INTERACTS WITH PEERS | | |
| DEVELOPS FRIENDSHIPS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide an environment and plan activities that offer children opportunities to get to know each other and to develop friendships with a small group of children. ◆ Provide daily opportunities, both indoors and outdoors, for children to work and play together in groups that they form themselves and in small teacher-created groups. ◆ Allow friendships between children to develop naturally. Friendships cannot be dictated by others. ◆ Arrange the classroom in learning centers to accommodate from two to four children so that they can get to know each other. ◆ Name the children who are not in attendance today, say how much we miss them and hope they will be back tomorrow. Suggest that children create a get-well card for a child who is sick. ◆ Refer a child who needs assistance to a peer to provide the needed help or information. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Give children many opportunities to develop positive peer relationships and begin to make friends. <ul style="list-style-type: none"> ○ Use a children's book such as <i>Will I Have a Friend?</i> by Mariam Cohen to start a discussion about making friends. ○ Pair children to work on a task such as pulling toys from the shed to the playground. This provides opportunities for children to work with someone they usually do not choose. □ Establish with children a rule that focuses on the idea that all children have the right to play in all areas of the classroom and outdoors. □ Include materials, such as board games and dramatic play props, which encourage peer interactions and collaborative play. |

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| STAGES OF PLAY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide large blocks of unstructured play. ♦ Create a large enough area for children to play alongside one another. <p>Definitions:</p> <p>Parallel play — Playing next to but not directly involved in another child’s play.</p> <p>Associative play — Engaging in the same activity as other children sometimes interacting through talking or sharing toys.</p> <p>Cooperative play — Communicating and collaborating with other children in role play or to achieve a goal.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Have multiples of the same type of materials, such as art supplies, so that children can interact freely with the materials and each other rather than being concerned with having access to them. □ Add props to learning centers that support parallel, associative, and cooperative play: <ul style="list-style-type: none"> ○ Puzzles and snap-together toys in the Manipulative Center often result in parallel play. ○ Books, story boards, and story-telling figures in the Library Center or a magnifying glass and interesting objects to explore in the Discovery Center may result in both parallel and associative play. ○ Cooperative play is <i>more</i> likely to occur when materials such as medical office props are added to the Dramatic Play Center or a tool kit is added to the Block Center. Props such as these suggest to children different roles for each child and working together on a project. |
| SOCIAL SKILLS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Create a caring community of learners through the environment you provide and the activities you plan. Provide community building opportunities and involve children in solving conflicts that arise. ♦ Establish a system that allows all children to have classroom responsibilities or tasks such as feeding the fish or setting the table for lunch. This should not be a reward or a punishment, but the right of each child. ♦ Make snacks and mealtime a social time; a time when you and the children eat together and talk about things that are of interest to them. ♦ Encourage children to ask other children for a turn in a learning center. ♦ Plan activities that offer children opportunities to be part of a group. ♦ Establish with children classroom expectations and rules that focus on keeping self and others physically safe, respecting the rights of others, and caring for the environment. ♦ Help children become aware of how their behavior affects others. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide activities and opportunities for children to collaborate on projects such as a large floor puzzle or a group mural. Suggest that children cook a meal and set the table for guests in the Dramatic Play Center. Play games such as <i>Concentration</i>, <i>Bingo</i>, or <i>Lotto</i> with small groups of children. Make sure each child who shows interest has a turn and that there are no winners or losers. □ Throughout the day, include words such as cooperation, sharing, and taking turns. Model appropriate language for the child who is watching and waiting for a turn, “That looks fun—pouring the water into the cup. May I have a turn? Mari, would you like to try this too?” □ Verbalize to children: “When you took that book away from Lionel it made him sad.” □ Problem solving activities: If a problem occurs that needs addressing by the group, call a class meeting, state the problem, help children generate possible solutions, and guide them to make a plan. Follow up to see if the plan is working. □ Collect pictures for discussion that show children in conflict. Guide children to discuss the problem, the feelings of the children in the picture, and suggest solutions. |

| SE2. EMOTIONAL EXPRESSION AND UNDERSTANDING | | |
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| SE2.1 EXPERIENCES, EXPRESSES, AND REGULATES A RANGE OF EMOTIONS | | |
| EMOTION EXPRESSION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Create an environment in which children feel emotionally safe; an environment in which they learn to recognize and label emotions, develop the ability to constructively express emotions, and become aware of their effect on others. ♦ Understand and accept that children experience a wide range of emotions. ♦ Notice and comment on the emotions children are expressing. ♦ Label children’s emotions and your own. Use simple words such as sad, happy, and afraid. ♦ Validate a child’s feelings. ♦ Encourage children’s feelings of pride in their accomplishments. ♦ Point out to children that others have feelings. ♦ Promote a classroom environment that supports children in their daily endeavors. ♦ Take the opportunity to help children learn through accidents or mishaps rather than making them feel embarrassed, shamed, or guilty. ♦ Provide safe spaces in the classroom and playground for children to safely express strong emotions that may lead to unsafe behavior. ♦ Help children express emotions without harming themselves, others, or property. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Help children constructively express emotions. Encourage them to discuss when and why they have felt this way: <ul style="list-style-type: none"> “You sure looked surprised.” “I know you were scared when. . .” “You must be so proud.” “It made her angry when. . .” □ Include a variety of large and small group activities to introduce emotional words and to provide opportunities for children to express their own feelings and emotions: <ul style="list-style-type: none"> ○ Read books and sing songs related to emotions. ○ Collect pictures of real people that show a variety of emotions and discuss why they think the person might be feeling that way. □ Use puppets to encourage children to talk about their emotions. □ Suggest to Lex, who is pounding on the table in anger, that he may get out the play dough and pound it. □ Create a safe space, such as a relaxation station, where children can go when they are expressing strong emotions. Include soft materials, pillows for punching, stress balls for squeezing, and calm music playing. <div>  <p>For more information on social emotional training and curricula see the Resources section (p. 8).</p> </div> |
| | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Serve as a model and a support for children as they develop self-regulation skills. ♦ Be consistent and responsive to each child’s strengths and needs. ♦ Create a predictable environment and schedule so children know what to expect. ♦ Arrange the physical environment so children can function independently as they select activities and materials. ♦ Involve children in discussing ways they can regulate their emotions. ♦ Provide a quiet place in the classroom for children to calm down. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Help a child who is angry to express their feelings to the person who upset them. “You made me so angry when you knocked over the tower I was building.” □ Encourage children to STOP, THINK, and take a deep breath. (For more information on self-regulation strategies visit the Center on the Social and Emotional Foundations for Early Learning [CSEFEL] website.) □ Go outdoors and look and listen to the beautiful things in nature such as clouds, birds singing, flowers, and trees. □ Model for children deep breathing techniques and encourage children to practice breathing with you. |

| SE2.2 INTERPRETS AND RESPONDS TO THE FEELINGS OF OTHERS | | |
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| EMPATHY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s development of empathy through modeling and by taking advantage of play situations to encourage them to show empathy toward others. ◆ Respond sensitively to children who are upset, hurt, or angry. ◆ Observe children during times of play, to model empathy. ◆ Ask a child what he can do to help another child who is upset. <p>Teacher Note: <i>Empathy is emerging in the preschool years.</i></p> <p>Definition: Empathy — Seeing a situation from someone else’s perspective; comprehending another person’s feelings.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Say to a child who begins to cry when her grandfather leaves the classroom, “I know you feel sad because your granddad has gone to work. He’ll be back to get you this afternoon.” □ For modeling empathy during children’s play, say to a child playing with a baby doll, “Alex, I think that baby is cold. Can you find a blanket for her?” or “Ramona, I think Joseph has skinned his knee. How can we help him?” □ To a child who spills his milk at the lunch table and begins to cry, ask a child sitting nearby, “Josh, it looks like Nathan spilled his milk. How can we help?” |
| EMOTION UNDERSTANDING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Use a variety of strategies to help children understand and interpret how other people feel. ◆ Involve children in discussing and demonstrating how we can tell how someone is feeling. How can we tell if a person is happy, angry, sad, surprised, or scared? <ul style="list-style-type: none"> • facial expression • body language • tone of voice | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Read books such as <i>The Way I Feel</i> by Janan Cain with the children; a book that clearly shows in the illustrations the emotions of the character in the story. Prior to reading the book, invite children to look at the child on the cover and predict how she is feeling. Then after the reading discuss with them whether or not their predictions were correct. □ Present situations to children to help them understand how others feel. <ul style="list-style-type: none"> ○ How do you think a child feels when other children tell him they don’t want to play with him? ○ When a child who has been absent because of illness returns and the children tell her they missed her, how do you think she feels? ○ When a child finally learns to pedal a tricycle, how do you think she feels? ○ How do you think a child feels when it begins to rain on the day he and his family had planned a trip to the zoo? |

| SE3. SELF-AWARENESS AND SELF-CONCEPT | | |
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| SE3.1 SHOWS AWARENESS OF SELF AS UNIQUE INDIVIDUAL | | |
| SENSE OF IDENTITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Help children develop a sense of who they are. ♦ Names are an important part of who children are and how they identify themselves. ♦ Provide unbreakable hand-held and full-length mirrors so children can see themselves. ♦ Incorporate children's names and photos into the environment and activities. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Use children's names: <ul style="list-style-type: none"> ○ When talking with them. ○ When taking attendance. ○ On name cards for songs and finger plays, in choosing helpers, and in graphing a child's preferences, creating a classroom book, individual cubbies. □ Remind children to call you and each other by name. □ Acknowledge children's ages and birthdays (unless a child's family does not celebrate birthdays). Children love to talk about how old they are, how old they will be on their next birthday, and what they will do when they reach a certain age (for instance, go to kindergarten when they are five). □ Develop a birthday book with an individual page for each child's photo and birthdate. |
| CHARACTERISTICS OF SELF AND OTHERS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Help children become aware of gender identity. Refer to children as either <i>boys</i> or <i>girls</i>. ♦ Plan activities and provide materials to help children recognize similarities and differences in their own and others' personal characteristics. ♦ Include materials and equipment both indoors and outdoors to accommodate the different interests and abilities of the children. ♦ Address diversity and differences positively. ♦ Provide opportunities for children to recognize that others have different interests, ideas, beliefs, and abilities than they do. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide props and dress-up clothes for both males and females so that children can role-play different occupations. □ Include books that show males and females in non-traditional roles. □ Encourage children of both sexes to work with all types of equipment such as carpentry tools, building materials, and cooking utensils. □ Involve children in graphing personal characteristics such as eye color and hair color. □ Provide art media such as crayons and colored pencils in different skin tones. □ Post pictures of children of many racial and ethnic backgrounds, including photos of the families of the children in your classroom. □ Post pictures of people with different abilities. Explain that a child has trouble walking and therefore uses a walker. □ Determine if your program celebrates holidays and if so, make sure that the holidays include those of your children's families and are celebrated in authentic ways. This includes religious holidays. |

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| PREFERENCES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide a variety of materials to accommodate the different interests and abilities of the children in your classroom. ◆ Encourage children to make choices about the area of the classroom in which they want to play, select materials that are of interest to them, and decide how long to stay in an area. ◆ Involve children in discussing their preferences. ◆ Include graphing experiences in which children state their preference. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Have conversations regarding children’s preferences of certain times of the day such as outdoors or center time, or why they select certain learning centers in which to become involved. □ Graph with children their preferences for a certain color or vegetable. Encourage them to explain why they chose red as their favorite color or carrots as their favorite vegetable. |
| SE3.2 DEMONSTRATES COMPETENCE AND CONFIDENCE | | |
| SENSE OF AUTONOMY | <p><i>This Strand is Birth through 36 Months</i></p> | |
| SELF-CONFIDENCE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s increasing sense of confidence and competence in their growing abilities. ◆ View each child as a capable and competent learner. ◆ Respond to children in ways that nurture their confidence and sense of competence by validating their efforts and accomplishments rather than using empty praise. ◆ Support children in developing the ability to perform self-care activities without adult assistance. ◆ Provide materials and activities that allow children to be successful at different levels. ◆ Provide materials and activities that allow children to label and identify their own physical characteristics, behavior, abilities, gender, and ethnic identity positively. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Give children feedback that is positive and specific. “You figured out how to keep that block structure from tumbling down.” <p><u>Self-care activities</u></p> <ul style="list-style-type: none"> □ Dressing self □ Taking care of own bathroom needs □ Washing and drying hands □ Brushing teeth □ Pouring own milk or water <p><u>Materials to promote self-confidence</u></p> <ul style="list-style-type: none"> □ Puzzles with increasing number of pieces □ Unit blocks with a variety of shapes □ Art materials such as markers, crayons, clay, finger painting, easel painting, water colors, collage materials, and items for creating three-dimensional structures □ Mirrors □ Picture and word files □ Face pictures □ Community helpers with non-stereotypical roles □ Real modern-day objects and styles of dress in the Dramatic Play Center of diverse cultures |

RESOURCES

Social and Emotional Development

SE2. EMOTIONAL EXPRESSION AND UNDERSTANDING

SE2.1 EXPERIENCES, EXPRESSES AND REGULATES A RANGE OF EMOTIONS

Strand: Emotion Expression

Social Emotional Training and Curricula

- Free social emotional resources are available on the Center on the Social and Emotional Foundations for Early Learning (CSEFEL) website.
- Photo sets of real people can be purchased from school supply companies that focus on feelings and emotions.
- Some curricula have topics of study that focus on emotions. Consider including these topics as part of your curriculum. However, it is important that children's social and emotional development be integrated into everything you do in your classroom.
- Consider participating in training that focuses on children's social and emotional development.
- *Kindness Curriculum* by the University of Wisconsin – Madison, Center for Healthy Minds. A link is available on the *ECEP For the Provider* webpage under *Kindness Curriculum*.

*Training:

- Conscious Discipline
- *Pre-K Social-Emotional Learning* [Pre-K SEL]

*Training opportunities can be found on the Arkansas Professional Development Registry website.



Cognitive Development


A child's brain has been called "the most powerful learning machine in the universe."¹ Cognitive development refers to the way in which a child takes in, stores, processes, and uses information. Early childhood researchers have made major advances in this area in recent years, and now better understand both what supports and hinders successful cognitive development. This area is particularly important to other areas of development and learning because of what researchers call executive function—the way the brain helps children to plan, focus attention, remember instructions, and juggle multiple tasks successfully.² These skills are vital to a child's future success because learning requires that a child focus on specific tasks to take in information, connect different pieces of information, and use information to solve problems or build new knowledge. Equally important, cognitive development is critical to social and emotional development in that it helps children understand and appropriately respond to the feelings and behaviors of others as well as adjust their behavior depending on the context of social situations. Positive relationships with adults, secure environments, and developmentally appropriate learning opportunities foster cognitive development. Arkansas's early childhood professionals must understand and support all of the different dimensions of cognitive development to promote school readiness and later success.

Potential Warning Signs of Behavioral Issues or Developmental Delay

- **By 4 years old (48 months)**, a child has trouble scribbling, shows no interest in interactive games or make believe, doesn't follow three-part directions, can't retell a favorite story, or loses the skills that he or she once had.
- **By 5 years old (60 months)**, a child is easily distracted or has trouble focusing on one activity for more than 5 minutes; can't tell what is real and what is make believe, can't give his or her first and last name, doesn't draw pictures, or loses skills he or she once had.

¹Gopnik, A., Meltzoff, A., & Kuhl, P.K. (1999). *The scientist in the crib: Minds, brains, and how children learn*. New York, NY: William Morrow.


²Center on the Developing Child. (2012). *Executive function (InBrief)*. Retrieved from www.developingchild.harvard.edu.

| CD1. APPROACHES TO LEARNING | | |
|---|--|---|
| CD1.1 SHOWS CURIOSITY AND A WILLINGNESS TO TRY NEW THINGS | | |
| EXPLORATION AND INVESTIGATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Create an environment that encourages and supports all children as they explore, investigate, and learn. ♦ Begin with an understanding that children differ in their approaches to learning in these ways: <ul style="list-style-type: none"> • Children differ in their learning styles, with no one style being better than another. While children have preferred learning styles, they also use other learning styles as well. • Children differ in their pacing or timing. Some children do well in a fast-paced learning environment while other children need more time to explore and investigate. • Acknowledge children's explorations and discoveries with enthusiasm and encouragement. <div style="background-color: #e6f2ff; padding: 10px; margin-top: 10px;">  <p>For more information on learning styles and materials to include in learning centers for exploration and investigation see the Resources section (p. 17).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Offer interesting materials and experiences in learning centers and outdoors which appeal to all of the senses and invite children to explore and investigate. □ Model curiosity with a "Let's find out about..." and "I wonder what will happen if..." attitude. For example: <ul style="list-style-type: none"> ○ "Let's find out which of these items will hold water and which will not." ○ "I wonder what would happen if we mixed blue and yellow paint?" □ Invite children to explain their thinking. Allow time for children to process and respond. For example, ask: <ul style="list-style-type: none"> ○ "What do you think would happen if you used this block as the foundation for your building?" ○ "Tell me how you got that box to attach to the wooden base." □ Add props to learning centers such as blocks and dramatic play that support children's interactions. |

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| INTEREST IN NEW EXPERIENCES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Add new materials to the environment to attract and sustain children’s interest. ♦ Introduce new materials to children during group time. Involve them in discussing what the materials are and how they plan to use them in their play. Avoid telling children how to play with the materials. ♦ Let children know that the new materials will be available for an extended period of time and that all children will have an opportunity to play with them. ♦ Encourage, but never force children to explore new materials. Avoid external rewards such as stickers to entice children to explore new materials. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Have a variety of paint colors available at all times for children to explore. Allow children to choose the same color of paint each day until they decide they are ready to paint with different colors. □ Add materials such as blueprints and unit blocks with more shapes to the Block Center. □ Create new settings for the Dramatic Play Center. For example, suggest setting up a medical clinic and involve children in deciding what to include. □ Suggest to children that a campsite be set up outdoors and involve children in deciding what to include at the site. □ Help children set up a carwash or an auto repair shop outdoors so they can take care of their tricycles and wagons. |
| CD1.2 SHOWS PERSISTENCE IN APPROACHING TASKS | | |
| DETERMINATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Keep some familiar materials in a learning center while adding new ones. ♦ Allow children to stay with their chosen activity as long as possible and decide when they are ready to move on to something else. ♦ Avoid scheduling special activities during free choice time so that children do not have to leave an activity in which they are engaged. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Add more challenging and inviting materials and activities for children when you have observed that they are ready for this. For example: <ul style="list-style-type: none"> ○ If they have worked all of the puzzles on the shelf, add a large floor puzzle or cardboard puzzles with more pieces. ○ If they seem to lose interest in drawing, painting and making collages, add materials for 3-dimensional art. |
| TASK COMPLETION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Allow children time to engage in tasks from start to finish. ♦ Schedule long choice times of at least 60 minutes in learning centers so children know they have time to complete a task. ♦ Notice and acknowledge children’s completed project. ♦ Allow children to return to an activity if the activity is interrupted. ♦ Provide a “Work in Progress” sign for an ongoing project such as a three-dimensional structure in the art center. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ After a child has completed a project say, “Monique, you have many different colors of paint in your painting. Are you finished? Would you like to hang in on the wall?” □ For a child who has started to build a tower in the block center, allow the structure to stand and the child to complete it after returning to the classroom from a speech therapy session. |
| ACCEPTANCE OF CHALLENGES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide encouragement and support when children face challenges. ♦ Give children specific and positive feedback while encouraging them to come up with a solution to a challenging task. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Suggest that children try something different if what they are doing isn’t working. <ul style="list-style-type: none"> ○ “Keep turning the puzzle piece to figure out how it fits.” ○ “Can you think of something else that you can use to attach the craft sticks and wooden spools to the cardboard base?” |

| CD2. EXECUTIVE FUNCTION | | |
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| CD2.1 FOCUSES AND SUSTAINS ATTENTION | | |
| ATTENTION & ENGAGEMENT | Teaching Strategies <ul style="list-style-type: none"> ◆ Involve children in activities that are both adult-guided and child-selected. ◆ Plan large group time in which children are encouraged to participate. ◆ Plan small group time with four to six children. ◆ Schedule large blocks of time, at least 60 minutes, in which children select learning centers. ◆ Schedule large blocks of time outdoors for unstructured play. ◆ Provide opportunities for active play indoors when children are unable to go outdoors because of weather conditions. | Examples and Activities <ul style="list-style-type: none"> □ Keep group time brief, no more than 10 minutes to begin with, then gradually expanding the time to no longer than 20 minutes. □ Include activities that keep the children active and involved; activities such as saying finger plays, and participating in music and movement experiences. □ Read books that have lots of pictures and repetitive phrases that encourage children to join in the reading. Gradually include books with more text. □ Involve the children in games such as <i>Bingo</i>, <i>Lotto</i>, or <i>Concentration</i>. |
| SELECTIVE ATTENTION | Teaching Strategies <ul style="list-style-type: none"> ◆ Support children's ability to focus on something specific while ignoring irrelevant information and to shift attention from a desired object, activity, or person. ◆ Establish a quiet area in the classroom where a child can go to be alone after experiencing a difficult situation such as separation from a family member. ◆ Eliminate unnecessary noise such as the constant playing of music. ◆ Provide a wide variety of interesting and inviting materials in each of the learning centers for children to explore, discover, and learn. ◆ Provide duplicates of materials that you know are of interest to children. ◆ Show interest in and interact with children in all of the learning centers. | Examples and Activities <ul style="list-style-type: none"> □ Involve children in activities that guide them to focus on something specific such as counting only the yellow bears while ignoring the bears of other colors in the group. □ Provide materials such as counting bears, shape buttons, shells, or rocks. □ Include soft toys and books such as <i>The Kissing Hand</i> by Audrey Penn, illustrated by Ruth E. Harper. |
| CD2.2 SHOWS FLEXIBILITY IN ADJUSTING THINKING AND BEHAVIOR TO DIFFERENT CONTEXTS | | |
| FLEXIBLE THINKING | Teaching Strategies <ul style="list-style-type: none"> ◆ Provide open ended props and materials for children to decide how to use them in multiple ways. ◆ Involve children in the retelling of stories through child-focused drama in which children decide who will play the different characters and what props they will need. | Examples and Activities <ul style="list-style-type: none"> □ Notice and comment on children's use of props and/or materials in different and unusual ways. "Kalali, I saw that you were using that paper plate as a steering wheel and now you are using it as a bus driver's hat." □ Allow children to combine unrelated materials in play. For example, stirring stringing beads in a pot and saying "I'm cooking big noodles." |
| ADJUSTING BEHAVIOR TO MATCH CONTEXT | Teaching Strategies <ul style="list-style-type: none"> ◆ Help children to transition from one activity to another with minimum stress. ◆ Recognize that times of transition and changes in routine are much more stressful for some children than others and plan accordingly. | Examples and Activities <ul style="list-style-type: none"> □ Help children understand that different rules apply in different situations. <ul style="list-style-type: none"> ○ They can take their shoes off at home but not in the center. ○ They can run and use <i>outside voices</i> on the playground, but use <i>walking feet</i> and <i>inside voices</i> in the classroom. □ Plan games, such as <i>Simon Says</i>, which requires children to perform actions at appropriate times. |

| CD2.3 REGULATES IMPULSES AND BEHAVIORS | | |
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| IMPULSE CONTROL | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children in thinking of alternative ways to control their impulsive actions, words and behavior. ◆ Set realistic expectations for children by providing an environment that supports cooperation and collaboration. ◆ Use terms such as <i>working together</i> or <i>turn-taking</i>. ◆ Set clear expectations for unacceptable behavior with rational explanations in a climate of mutual respect and caring. ◆ Reduce waiting time for children. ◆ Provide sufficient toys and materials for the children in your group, including duplicates of those that children seem to enjoy the most. <p>Teacher Note: <i>As children are developing impulse control there will need to be adult-guided verbal supports to help children control impulses that could harm others (kicking, hitting, pushing) or destroying property.</i></p> | <p>Examples and Activities</p> <p><u>Verbal support for impulse control</u></p> <ul style="list-style-type: none"> □ “Stop, take a deep breath and count to five (or ten).” □ “Go to the quiet area until you are ready to rejoin the group.” □ “Sarah, if you would like a turn looking at the shells, ask Norah for the magnifying glass using your words.” <p><u>Indirect support for impulse control</u></p> <ul style="list-style-type: none"> □ Plan so children do not have too much waiting time in situations, such as: <ul style="list-style-type: none"> ○ Standing in line to go outdoors. ○ Sitting at the tables waiting for lunch to be served. ○ Sitting in a circle with nothing to do while you collect the book and props for story time. □ Add props to learning centers, such as Dramatic Play and Blocks, which encourage children’s involvement in social pretend play. □ Involve children in determining reasonable expectations for how they treat others and the environment—they share and take turns with toys, they listen when others are talking, they call each other by name, they take good care of the toys and materials in the classroom and on the playground. |
| | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children comply with requests that involve waiting for things such as an activity or for a turn. ◆ Follow through with commitments you make to children; commitments about what they will be able to do at a later time such as going into learning centers after they have eaten their snack. ◆ Post the names of children who will be performing certain tasks that day. ◆ Give each child a turn to be heard during activities such as small group time. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Model for children to say to a peer, “May I have the fire truck when you are done playing?” □ Provide a timer for children who do not voluntarily give other children an opportunity to use limited equipment such as a computer or tricycles. □ Use phrases such as, “After snack we will go to the playground” during times of waiting. |

| CD2.4 HOLDS AND MANIPULATES INFORMATION IN MEMORY | | |
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| SHORT-TERM & WORKING MEMORY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide opportunities for children to develop short-term and working memory. ◆ Involve children in recalling at the end of the day some of the things that happened earlier in the day. Record what children say and read it back to them. ◆ Involve children in recalling what happened in a story you just read to them. <p>Definition: Working memory — The capacity to hold and manipulate information in our heads over short periods of time.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Give children two-step directions. “Put the puzzle on the shelf and wash your hands for snack” and later multi-step directions such as “Push in your chair, put your plate in the tub, and then join us for circle time.” □ Play memory games such as <i>What’s Missing</i> and matching games such as <i>Concentration</i>. <div>  <p>For more directions for playing these games, see the Resources section (p. 17).</p> </div> |
| LONG-TERM MEMORY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Plan activities that give children opportunities to remember and connect information and experiences. ◆ Repeat activities, such as favorite songs and rhymes, so that children can learn and recall them. ◆ Invite children to recall details and retell in sequence something special they did with their family. ◆ Give children time to think, pausing before expecting an answer to questions you ask them. ◆ Read an informational book and a picture book that have a similar focus and then involve children in remembering the events from each book that connect. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in “Remember when...” games and discussion. For example, say “Remember when the fire fighters were here last week. Why did they tell us they use the siren when they are going to a fire?” □ Ask families to send photos or bring an item that represents something they like to do together as a family. This could be a favorite book they read together, rocks from the creek they visit by their house, or a family game they play together. Invite children to discuss what they remember about the event. □ If fire fighters came to the center in a fire truck, make a class book with photos and with the children’s drawings about the visit. Review the book with the children. □ Read the picture book <i>Owl Babies</i> by Martin Waddell, and then read the informational book <i>Owls</i> by Gail Gibbons. Say to children, “In this book, <i>Owls</i>, we learned that baby owls are called owlets. Remember Sarah, Percy, and Bill from the book <i>Owl Babies</i>? Sarah, Percy, and Bill are owlets.” |

CD3. LOGIC AND REASONING

CD3.1 USES REASONING AND PLANNING AHEAD TO SOLVE PROBLEMS AND REACH GOALS

PROBLEM SOLVING

Teaching Strategies

- ◆ Encourage children to solve problems that occur as they carry out their play ideas while being sensitive to times when assistance is needed to prevent frustration.
- ◆ Support children to solve problems through scaffolding.
- ◆ Encourage children to describe what they are doing and to discuss a problem they are encountering during play. This may help them analyze the problem and try to find solutions.
- ◆ State the problem for children who are not yet verbal. This helps children realize what is wrong and encourages them and try to fix the problem on their own.
- ◆ Allow children time to come up with solutions to their problems rather than rushing in to tell the children how to fix the problem.
- ◆ Talk with the children about what is working and not working. This can help them see cause and effect and may help them when they later encounter similar problems
- ◆ Discuss with children the number of children a center can accommodate if crowding issues arise.


Teacher Note: *This Strand, Problem Solving, refers to the problems children have with materials. Problems that arise between children are addressed in the Social and Emotional Development Domain. Solution Kit Cue cards are available for download on the CSEFEL website. A link may be found on the ECEP for the Provider webpage under Center on the Social and Emotional Foundations for Early Learning.*

Definition:

Scaffolding — A balance between supporting children at their current level of understanding and then gently extending their learning.

Examples and Activities

- Provide assistance to children who are unable to move forward with their activities. However, do not solve the problem for them, but instead give them enough assistance so they can continue solving problems on their own.
 - To a child building a tower with blocks that keeps falling over, ask her “What do you think is causing your tower to fall?”
 - If a child cannot come up with a reason for why her tower keeps falling, suggest that she start with a larger block instead of a small one.
 - Follow up by asking the child to describe the strategies she used to build a stable tower.
- Pose problem-solving situations to children and encourage them to generate solutions.
 - “We need to get water from the sink to the water table. How many different ways can we do that?”
- Follow up the reading of a story, such as *The Three Bears*, by posing a problem solving situation related to the story and giving children an opportunity to put their problem solving ideas into practice.
 - Recall with children that Goldilocks sat in Baby Bear’s chair and broke it.
 - Ask children how they think the three bears will fix Baby Bear’s chair. What tools and materials will they need? Have they ever seen anyone fixing something that broke at home?
 - Add to the Block or Art Center reusable materials such as boxes, pieces of cardboard, cardboard tubes and craft sticks, plus things to use to connect materials (masking and duct tape, glue, glue sticks, string, yarn, twine, clothespins, and rubber bands).
- When arguing occurs in a center due to not having enough materials, determine and establish with children the number of children a learning center can safely accommodate. If necessary, consider a visual reminder that illustrates for children how many children can play in that area.

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| PLANNING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide opportunities for children to make independent and collaborative choices and to plan what they will be doing during the day. ◆ Introduce new materials to children before placing them in learning centers and guide them to discuss ideas for their use. ◆ Discuss with children what they plan to do when they go outdoors. <p>Teacher Note: <i>Some children may not be ready to make specific plans.</i></p> <div data-bbox="199 454 1060 544">  <p>For more information on how to appropriately plan with children, see the Resources section (p. 18).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide dramatic play props that correspond to stories which have been read or told to children. □ Collect materials children can use when creating a collage. (Note that their plans may change during the course of play.) □ Recognize that children demonstrate planning by talking out loud (self-talk) during play. A child who is playing alone in the Dramatic Play Center says, “I’m the mommy, so I’m going to feed the baby, then go to work.” |
| CD3.2 ENGAGES IN SYMBOLIC AND ABSTRACT THINKING | | |
| PRETEND PLAY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Encourage children’s pretend play by including lots of child-initiated, free-choice activities supported by a variety of materials and equipment for them. ◆ Schedule large blocks of time, 60 minutes or more, for children to be involved in activities of their choosing. ◆ Extend children’s ability to engage in pretend play by encouraging children to pretend without props. <p>Teacher Note: <i>Refer to the Strand Drama in the Creativity and Aesthetics Domain of Development and Learning for expanded strategies and activities for pretend play.</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Create an environment for Dramatic Play; an area where children can enter and immediately take on a role and pretend. □ Create new settings for pretend play by collecting props for different themes or topics. □ Let children see you pretend to rock a doll to sleep, or pretend to buy a ticket for the pretend train you and the children have created by lining up chairs one behind the other. □ Provide open-ended props, such as blocks and boxes, which can be used in a variety of ways. □ Pretend without props such as calling someone on the phone, licking an ice cream cone, or swimming. |
| SYMBOLIC REPRESENTATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s awareness that symbols such as signs have meaning; that print carries a message; and that drawing, writing of numbers and letters, and movement represent ideas or feelings. ◆ Introduce children to symbols in the environment. ◆ Let children see you use print in meaningful ways. ◆ Provide a variety of materials for drawing and encourage children to use them. ◆ Help children become aware that their drawings represent ideas and feelings. ◆ Model writing of numbers each day. ◆ Involve children in movement activities that represent ideas and feelings. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Show children the lighted EXIT signs in the building and explain that this means the doors through which we leave the building. □ Place a set of traffic signs in the Block Center and discuss with children the meaning of each sign. Suggest that they look for these signs when they are in the car with their family. □ Share with children a collection of logos from familiar stores and restaurants in the area. Involve children in recognizing and saying the names of the stores and restaurants. <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| SYMBOLIC REPRESENTATION, CONTINUED | | <p><u>Meaningful print</u></p> <ul style="list-style-type: none"> □ With children's permission, write their name on their art work. □ Write notes to families. □ Write a thank you note to a classroom visitor. □ Make and post signs in the classroom. □ Make a name card for each child. <p><u>Drawings representing ideas and feelings</u></p> <ul style="list-style-type: none"> □ Ask a question about the drawing. "Will you tell me about your picture?" □ With children's permission, write their description of their work directly on their drawing or on an accompanying index card or sentence strip. <p><u>Writing numbers</u></p> <ul style="list-style-type: none"> □ Take attendance and write on a chalk or marker board: "There are 8 boys and 4 girls present today." □ Involve children in helping you make a grocery list that includes numbers to represent how many of an item is needed. For example: 10 apples, 3 loaves of bread, 1 gallon of milk. <p><u>Movement activities</u></p> <ul style="list-style-type: none"> □ Walk on tiptoes so that they do not wake up the sleeping baby. □ Jump up and down because they are excited about getting a new puppy. □ Walk like they are so tired after running a race. □ Dance a happy dance as you play a lively tune. |
| ABSTRACT THINKING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children's ability to engage in thinking that goes beyond the here and now. ◆ Use stories to introduce events to children they may not have directly experienced. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Read to the children the story <i>The Little Mouse, the Red Ripe Strawberry, and the Big Hungry Bear</i> by Audrey and Don Wood. Follow up the reading by: <ul style="list-style-type: none"> ○ Asking children to recall what the big hungry bear in the story looked like. Did they ever see the bear? ○ If children cannot remember seeing the bear, show the pages and ask them to look for the bear. ○ Guide them to conclude that there is no bear in the story and to discuss why. Accept all answers. □ Read the story <i>The Berenstain Bears Visit the Dentist</i> by Stan and Jan Berenstain. Ask children questions such as, "What will going to the dentist be like? What will you see there?" |

RESOURCES

Cognitive Development

CD1. APPROACHES TO LEARNING

CD1.1 SHOWS CURIOSITY AND A WILLINGNESS TO TRY NEW THINGS

Strand: Exploration and Investigation

Learning Styles:

- Some children are **visual learners**. They learn best through seeing. They may think in pictures. For the visual learner, include books with lots of pictures, puzzles, and art materials and plan graphing experiences.
- Some children are **auditory learners**. They learn best through listening. For the auditory learner include opportunities to hear songs, rhymes and poems, to be involved in read-alouds, and to listen to books on electronic devices.
- Some children are **kinesthetic learners**. They learn best by touching, moving, and doing. For the kinesthetic/tactile learner have textured materials, sand and water play, manipulatives, playdough and clay, and opportunities to move to music.

Materials to include in Learning Centers:

- In the Discovery Center include basic tools such as magnifying glasses, balance scales, magnets, tweezers, and materials such as shells, discovery bottles, nontoxic plants, x-rays, collections of leaves, feathers, and pinecones.
- In the Art Center invite children to explore the feel of finger paints and to discover what happens when two colors mix.
- In the Water Center, invite children to determine which items sink and which items float or which items hold water and which do not.
- In the Sand Center add water and molds so that children can explore and investigate the difference in how dry and wet sand feels and discover that wet sand can be molded while dry sand cannot.
- In the Music Center children can experiment with different musical instruments to find out the different sounds they make.

- In the outdoor environment children can explore nature firsthand as they see bugs, butterflies and clouds in the sky, touch the bark of a tree, and hear birds and crickets.

CD2. EXECUTIVE FUNCTION

CD2.4 HOLDS AND MANIPULATES INFORMATION IN MEMORY

Strand: Short-term and Working Memory

Directions for playing *What's Missing?*

- Display a few items that are familiar to children.
- Ask children to close their eyes while you remove one item from the group.
- Invite children to open their eyes and tell you which item is missing.

Directions for playing *Concentration*

- Make pairs of farm animal cards (horses, cows, sheep, goats, pigs, chickens, ducks and geese).
- Gather a small group of children to play the game.
- Consider beginning with four pairs of cards, then expanding to more for children who need a challenge.
- Place the cards face up and involve children in naming the animals.
- Turn the cards over and mix them up.
- Give each child a turn to turn over a card, name the animal and try to find a matching card by turning over only one card.
- Create a stack of cards as matches are found.
- Continue the game as long as children remain interested.
- Remember that there are no winners or losers, and that the purpose of the game is to help children use memory strategies.



CD3. LOGIC AND REASONING

CD3.1 USES REASONING AND PLANNING AHEAD TO SOLVE PROBLEMS AND REACH GOALS

Strand: Planning

How to Appropriately Plan with Children

- Decide if they want to look at books or work on a puzzle when they arrive or when they wake from a nap.
- Choose the center in which they will play and decide how long they want to stay in that center.
- Decide on the materials they will use in that center and make plans for how they will use them:
 - Discuss what they plan to do when they go outdoors.
 - Plan for play scenarios with others by assigning roles and deciding on the props to be used. For example, deciding who will be the cook, the server, and the people to be served in the restaurant they have created.
 - Plan with others how they will retell a story, such as *The Three Little Pigs*, and decide who will play which character and which props they will use.




Physical Development and Health



A child's mind and body develop together in an interrelated way.¹ From the time they are born, children use their bodies to learn, making physical development and health vitally important to all areas of child development and learning. Children begin exploring the world by using their hands and mouths immediately after birth. As they grow older, the ability to crawl and walk provides new possibilities for exploration and discovery. Although physical development will largely happen on its own, there are ways in which early childhood professionals can encourage physical growth and coordination to help children play confidently, engage in fun physical activities, and develop a strong foundation for a healthy, active lifestyle that carries into adulthood.




Potential Warning Signs of Physical Developmental Delay

- **By 4 years old (48 months)**, a child can't jump in place; has trouble scribbling; resists dressing, sleeping, and using the toilet; or loses skills he or she once had.
- **By 5 years old (60 months)**, a child doesn't draw pictures, can't brush teeth, wash and dry hands, or get undressed without help, or loses skills he or she once had.

¹Sanders, S. & Courson, D. (2004). *Helping young children become physically active for life*. Little Rock: Arkansas Department of Human Services Division of Child Care and Early Childhood Education Little Rock, Arkansas.

| PH1. GROSS MOTOR | | |
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| PH1.1 DEMONSTRATES LOCOMOTOR SKILLS | | |
| BODY MOVEMENT | This Strand is Birth through 36 Months | |
| TRAVELING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide time, space and child-guided opportunities each day for children to practice and refine traveling skills: walking, running, moving and stopping with control. ◆ Provide time each day for outside play (weather permitting). ◆ Encourage children's free exploration and practice of traveling skills, especially outdoors. ◆ Model different movements for the children and encourage them to follow along. ◆ Make sure there is sufficient indoor and outdoor space for children to safely practice and refine their traveling skills. ◆ Establish with children rules when teacher-guided traveling activities are offered. ◆ Consider creating an illustrated rules chart with the children and review as needed. ◆ Plan indoor activities that involve children in walking and moving and stopping with control. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Ask children to think about different ways to move about the day. "Show me how you would like to get to the table today." (Hop, skip, crawl, jump) □ When children are moving, "I see you are taking small steps. Can you take big steps?" <p>Teacher Notes:</p> <ul style="list-style-type: none"> • Plan alternative ways children with mobility or vision difficulties can meet movement challenges. • Some of the Rules for Safe Traveling may apply to other locomotor skills. • Although most younger children have mastered the traveling skill, crawling, consider including opportunities for preschool children to crawl in some of the obstacle courses created on the playground and in the classroom. Children can travel through a tunnel or through an appliance box with both ends open. <div>  <p>Additional indoor and outdoor traveling activities are available in the Resources section. A sample chart of Rules for Safe Traveling is also provided (pp.31-32).</p> </div> |



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| CLIMBING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Refer to information related to safety standards for climbing equipment in the following publications: <ul style="list-style-type: none"> • Consumer Product Safety Commission (CPSC) – Public Playground Safety Handbook. In this handbook, the playgrounds of child care facilities are considered as public playgrounds. • <i>Minimum Licensing Requirements for Child Care Centers</i> (Rev. 01/01/2015) for requirements for climbing equipment and protective surfacing. ◆ Consult the Licensing Specialist in your area regarding licensing requirements for climbing equipment. ◆ Provide children opportunities for climbing indoors and outdoors. | <p>Examples and Activities</p> <p><u>Additional resources on introducing climbing into the early childhood environment</u></p> <p>Why Children Climb: Motivation, Process and Child Development by Dr. Joe Frost. <i>Play and Playground Magazine</i>, Volume 13, No 2. www.playgroundprofessionals.com/magazine/issues/2013/07/why-children-climb107</p> <p><i>The Developmental Benefits of Playgrounds</i>. By Dr. Joe Frost, Pei-San Brown, Candra Thornton, & John Sutterby. Association for Childhood Education International (acei.org)</p> <p>Teacher Note: <i>Climbing is a very important gross motor skill that children should have an opportunity to experience. However, it is recommended that the references in this strand be consulted as to the requirements for approved climbing equipment.</i></p> |
| COMPLEX MOVEMENT | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Involve children in activities that focus on the more complex locomotor skills: galloping, sliding, hopping and later skipping. ◆ Introduce complex movements to the children by modeling how to gallop, slide, hop, and skip. <div data-bbox="184 708 1058 821">  <p>Considerations for helping children engage in activities involving complex movements and suggestions on how to connect literacy and physical development can be found in the Resources section (pp. 32-33).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Play the song “She’ll Be Coming Round the Mountain” as children are galloping. □ Consider adding the old fashioned stick horses to the playground as a way to encourage children to gallop. □ Play the song “Skip to My Lou” as children skip around the room. |
| PH1.2 SHOWS STABILITY AND BALANCE | | |
| CORE STABILITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide appropriate guidance, time to practice, and safe materials and equipment to help children improve their core stability and balancing skills: <ul style="list-style-type: none"> • Balancing activities • Balance beams • Balancing with beanbags ◆ Offer opportunities that challenge stability. <p>Teacher Notes:</p> <ul style="list-style-type: none"> • <i>Balance beams can be ordered from equipment companies or from school supply companies.</i> • <i>Beanbag activity CDs can be ordered online or from school supply companies.</i> • <i>Refer to Minimum Licensing Requirements for Child Care Centers (Rev. 01/01/2015) – 903 Balance Beams for requirements.</i> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Place masking tape on the floor for children to walk on the line. □ Create zig-zag patterns for children to walk around. □ Demonstrate rocking back and forth. “Rock back and forth with your legs against your chest.” Encourage children to come up with their own movements. □ Use words such as squat and freeze when moving positions or changing directions. <div data-bbox="1100 1122 1974 1219">  <p>Information regarding balance beam and beanbag activities can be found in the Resources section (pp. 33-34).</p> </div> |




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| JUMPING, HOPPING, AND LEAPING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Involve children in jumping and leaping and in practicing hopping forward on one foot without losing balance. ◆ Explain to children that leaping is different from jumping. When you leap you take off on one foot and land on the other. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Create a circle in the middle of the floor and invite children to jump in and out of the circle. □ Create a river by placing two pieces of rope a couple of inches further apart than the children have been able to jump. Explain to children that the river is too wide for them to jump over, so they will have to leap over it. Demonstrate leaping. Invite children to leap over the river. <p> An explanation of the steps in jumping and additional suggestions on guiding children through various types of jumping activities are available in the Resources section (p. 34).</p> |
| PH1.3 DEMONSTRATES GROSS-MOTOR MANIPULATIVE SKILLS | | |
| CATCHING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide equipment and materials that enhance children's manipulative skills. ◆ Provide balls of various sizes and textures for children to practice catching as well as other objects such as yarn balls, beanbags and scarves. ◆ Model catching appropriately using hands with bent arms and positioning of the feet. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in catching scarves which move slowly and give children time to adjust themselves for a catch. □ Involve children in catching beanbags or balls thrown underhand by you. <p> See the Resources section for additional activities on catching (pp.35-36).</p> |
| THROWING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Involve children in throwing objects to each other and at a variety of targets. <p>Teacher Note: Be sure other children are not standing near the target when throwing balls. Monitor these activities to keep children safe.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in throwing beanbags into a bucket or basket. □ Involve children in throwing beanbags into a hoop that represents a pond of water. □ Involve children in throwing balls at a target. □ Involve children in throwing balls through a hoop. □ Involve children in throwing a ball in order to knock over objects. <p> For instructions for throwing beanbags and balls, see the Resources section (p. 36).</p> |


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| STRIKING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Include safe ways children can develop the ability to strike a stationary ball or other objects with increasing follow through and accurate aim. ◆ Establish a safe area for children to practice striking skills. ◆ Allow only one child at a time in the area and stay nearby to supervise the activity. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Consider providing short-handled foam paddles or bats for children to use to practice striking. Foam bats have a larger head and make connecting with the ball easier, plus they are safer than a wooden or plastic bat. □ Model the correct way to grip the bat. □ Have children practice striking a beach ball. |
| KICKING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Plan activities that provide children opportunities to develop and practice kicking skills. ◆ Use a smaller, softer ball for kicking. ◆ Make sure children are wearing close-toed shoes for kicking activities. <p>Teacher Notes: (for all of the preceding activities that support gross motor manipulative skills)</p> <ul style="list-style-type: none"> • <i>Avoid activities that encourage competition or that eliminate children from participating.</i> • <i>Make modifications for children with disabilities or who have less developed skills so that each child can be successful.</i> • <i>Demonstrate and involve yourself in all of these activities.</i> • <i>A grassy area is best for some of the activities, especially the kicking activities.</i> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Line up cones or empty two-liter bottles and invite children to kick the ball and knock over the cones. □ Use two pieces of 6 foot long rope to create two lines about 36 inches apart and invite children to kick a ball between the two rope lines. □ Create a goal with two cones or weighted two-liter bottles and invite children to step or run up and kick the ball into the goal. □ Demonstrate kicking a moving ball. Invite children who seem to be ready for this to practice this skill. |
| PH2. FINE MOTOR | | |
| PH2.1 DEMONSTRATES FINE-MOTOR STRENGTH, CONTROL, AND COORDINATION | | |
| HAND-EYE COORDINATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Include materials and activities that support increasing refinement in hand-eye coordination. | <p>Examples and Activities</p> <p><u>Hand-eye coordination activities</u></p> <ul style="list-style-type: none"> □ Stringing beads with laces □ Inserting laces in and out of holes on lacing cards □ Picking up objects such as cotton balls with tongs or large tweezers □ Placing various size pegs in the holes in pegboards □ Folding paper □ Pouring juice or milk □ Pouring water from a small plastic pitcher into a container in the Sensory Center □ Tracking words across a page with finger with adult modeling and support |

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| GRASP AND MANIPULATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s increasing ability to grasp and manipulate objects and a variety of fasteners. ◆ Give simple, clear, and verbal instructions and physically guide them to perform fine-motor tasks successfully. ◆ Notice and make supportive and specific comments when you see children attempting to perform a task. ◆ Be patient as you allow children to perform tasks. | <p>Examples and Activities</p> <p><u>Materials and activities for grasping and manipulation</u></p> <ul style="list-style-type: none"> □ Legos® and smaller blocks □ Smaller interlinking blocks or connecting blocks □ Puzzles with more and smaller pieces □ Smaller beads to string □ Squirt bottles in water table □ Snap clothespins to attach to clotheslines □ Play dough and clay to roll and squeeze and shape □ Paint brushes with smaller handles (for example, water color brushes) □ Magnetic alphabet letters and storytelling figures and magnetic boards □ Tying shoe laces □ Buttoning and zipping or working a more difficult puzzle □ Clothing and accessories in the home living area with a variety of fasteners: large buttons, zippers, and buckles □ Clothing such as a pair of slacks with loops and a belt to thread through the loops □ Shoes with laces for typing □ Dressing boards either purchased or made |
| PH2.2 ADJUSTS GRASP AND COORDINATES MOVEMENTS TO USE TOOLS | | |
| UTENSILS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Model and support children’s use of utensils during snack and meal times. ◆ Sit with the children at snack and meal times, eating the same food and using the same eating utensils they are using. | <p>Examples and Activities</p> <p><u>Include foods that involve the use of a variety of utensils</u></p> <ul style="list-style-type: none"> □ Cereal or yogurt to be eaten with a spoon □ Pasta or small pieces of fruit to be eaten with a fork □ Toast or bagels on which to spread butter or cream cheese with a butter knife |
| WRITING & DRAWING TOOLS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide a variety of writing and drawing tools that children can use to develop and refine their writing skills. ◆ Begin by demonstrating and guiding children to use a three-point finger grip and to use their other hand to hold the paper while drawing and writing. ◆ Make available paper and a variety of writing and drawing tools. | <p>Examples and Activities</p> <ul style="list-style-type: none"> ○ Add materials such as: <ul style="list-style-type: none"> ○ Crayons, both large and small sizes ○ Non-toxic washable markers ○ Pencils ○ Colored pencils ○ Sidewalk chalk |

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| SCISSORS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Guide children to safely and successfully use scissors for cutting. ♦ Provide safety scissors for children to use. ♦ Discuss and decide on safety rules for using scissors. ♦ Consider developing a cutting box for safe and successful cutting. <p>Teacher Notes:</p> <ul style="list-style-type: none"> • <i>Always supervise while children are using scissors.</i> • <i>For children with limited fine-motor skills encourage children to tear paper. This will help strengthen their fine-motor skills.</i> • <i>Some children may have limited core-stability which makes sitting and trying to engage fine-motor more challenging. Invite children to lay on the floor and practice cutting.</i> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Show children how to use scissors as follows: <ul style="list-style-type: none"> ○ Model and explain to children how to hold the scissors. ○ Have children practice opening and closing scissors several times before trying to cut paper. ○ Show children how to hold the paper in one hand and the scissors in the other. ○ Guide children to open the scissors and slip the paper between the blades, close the blades, then open them. ○ Let children practice snipping small pieces of paper. Newspaper is easy to snip. ○ Stay seated when using scissors. ○ Use scissors to cut items as determined by the teacher. □ Gather cutting supplies for cutting box: <ul style="list-style-type: none"> ○ Scissors, newspaper, scraps of construction paper, ends of wrapping paper, discarded stationery, junk mail and greeting cards, magazine, catalogs. ○ Clean out the cutting box as needed and restock. |
| VARIETY OF TOOLS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Add tools that serve different purposes to both the indoor and outdoor learning environment. | <p>Examples and Activities</p> <ul style="list-style-type: none"> ○ Add materials such as: <ul style="list-style-type: none"> ○ Shovels and scoops to the sandbox. ○ A turkey baster to the water table. ○ A folding ruler to the Block Center. ○ A one-hole punch and tape dispensers to the art center. ○ Sifters and scoops during food experiences and add them to the Dramatic Play Center. ○ Painter's brushes for children to use outdoors to paint the building with water. ○ Rubber or plastic hammers for children to practice hammering golf tees into a foam brick. ○ Wrenches for children to use in repairing their tricycles and sponges for washing the tricycles. |

| PH3.HEALTH AND WELL-BEING | | |
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| PH3.1 DEMONSTRATES INTEREST IN ENGAGING IN HEALTHY EATING HABITS AND MAKING NUTRITIOUS FOOD CHOICES | | |
| COMMUNICATING NEEDS | This Strand is Birth through 36 Months | |
| EXPLORATION OF FOOD EXPERIENCES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Involve children in basic cooking tasks during food experiences and in dramatic play scenarios. ◆ Involve children in food experiences that focus on foods that are nutritious and that support children's independent use of utensils. ◆ Provide opportunities for children to take turns to set the table for snack and meals. <p>Teacher Notes:</p> <ul style="list-style-type: none"> • Be aware of children's food allergies and avoid using those foods in food experiences. • Be aware of foods that can be choking hazards. Examples include: <ul style="list-style-type: none"> ○ Round foods such as whole grapes or hard candy ○ Firm foods such as hot dogs, nuts, and seeds, chunks of meat, and raw carrots ○ Stringy foods such as celery sticks or citrus fruits ○ Sticky foods such as marshmallows, raisins, or caramels ○ Food such as popcorn, pretzels, or chips that are likely to be eaten by the handfuls • Ways to make foods that are choking hazards safe for children: <ul style="list-style-type: none"> ○ Slice hot dogs and grapes lengthwise ○ Cut meat into small pieces ○ Pit fruits and remove the pith from citrus fruits ○ Shred hard vegetables <p> For considerations of safety rules when involving children in food experiences, see the Resources section (pp. 36-37).</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Add cooking and eating utensils and dishes to the Dramatic Play Center. □ Add to the Dramatic Play Center place mats that have outlines for the placement of dishes, glasses and eating utensils. □ Add scoops, sifters, and measuring cups to the sand and water table or tub. <p><u>Involving children in food experiences</u></p> <ul style="list-style-type: none"> □ Using a butter knife to spread soft foods such as cream cheese on a bagel or softened butter on a piece of toast. □ Using a table knife to cut soft foods such as slicing a banana. □ Using a spoon to mix ingredients for a tuna, chicken or egg salad. □ Stirring low-fat milk into a mix to make instant pudding. □ Using serving spoons when spooning fruit pieces into an individual bowl to create own fruit salad or a variety of whole grain cereals to make own trail mix. <p> For examples of kitchen props to add to the Dramatic Play Center, refer to the Resources section (pp. 36-37).</p> |

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| FOOD KNOWLEDGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children acquire knowledge about food: where it comes from, categories of food, how food is grown, and which foods are nutritious and help the body grow and be healthy. ◆ Involve children in planting (foods that grow below and above the ground), growing, harvesting, preparing and tasting foods. ◆ Label food you and the children are eating during snack, lunch or the food they use as they participate in food experiences. ◆ Plan tasting experiences and involve children in graphing which food they like best. Label the foods they are tasting. ◆ Discuss with children that the foods used in the tasting experiences and the exploration of different fruits and vegetable are nutritious and help the body grow and be healthy. ◆ Share with families' information about foods that are nutritious and help children grow and be healthy. <p> For more information on Food Groups, see the Resources section (p. 37).</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in exploring different fruits and vegetables and discussing which is a fruit or a vegetable, the characteristics of each: their color, how they feel, how they are grown. □ Collect pictures of fruits and vegetables, including photos of fruits and vegetables as they are growing. Use the photos for children to classify by food groups. □ Label foods as healthy or less healthy. For example, "Candy and oranges are both sweet, but oranges are healthy for our bodies." □ Collect photos of foods and involve children in classifying them into categories such as <i>healthy</i> and <i>less healthy</i>. □ Suggest healthy snacks, such as fruit instead of cupcakes, which they can bring for celebrations. □ Compile a recipe book of children's favorite healthy snacks and send home to families. □ Serve healthy snacks for family events. □ Include books about food for reading and discussing with children and to place in the Library, Dramatic Play and Discovery Centers. <p> For children's books regarding food, see the Resources section (p. 37).</p> |
| PH3.2 SHOWS AWARENESS OF SAFE BEHAVIOR | | |
| AWARENESS OF SAFE BEHAVIOR AND SIGNALS OF DANGER | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children to identify, avoid and alert others to danger and to accept the help of adults in potentially dangerous situations. ◆ Take children on a safety walk around the classroom, the building, and the playground to look for things that help keep them and the other children in the building safe. Make a list of all things observed. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Take the children on a safety walk around the classroom, building, and playground. Point out safety guidelines such as: safety plugs, wearing helmets when riding tricycles, cleaning up spills, and sweeping debris from paths. □ Discuss with children that they are to let the teacher know if they see something that is unsafe in the classroom or on the playground. For example, if a safety plug is missing from one of the electrical outlets or a section of the fence is broken. <p> Refer to the Resources section (pp. 37-38) for important things to consider when conducting a safety walk around the facility.</p> |

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| UNDERSTANDING OF SAFETY RULES AND PRACTICES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s ability to follow basic safety rules, practices, and routines with increased independence. ◆ Involve children in establishing both indoor and outdoor safety rules and practices and discussing the reasons for the rules. <p>Emergency Drills</p> <ul style="list-style-type: none"> ◆ Refer to <i>Minimum Licensing Requirements for Child Care Centers</i> (Rev. 01/01/2015) – 1201 Safety Requirements for information on planning for and conducting emergency drills. ◆ Involve children in emergency drills as required. ◆ Consider posting illustrated safety rules in learning centers where appropriate. ◆ Review safety rules with children and remind them of the rules when necessary. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Return blocks to the shelf when play is over. □ Cover the floor to prevent children from slipping and explain to children why you are doing this. □ Explain to children to sweep up sand as soon as it spills on the floor. □ Stay seated while riding a wheel toy. <div data-bbox="1094 407 1974 501">  <p>Refer to the Resources section (pp. 38-39) for specific safety considerations for each area of the classroom and playground.</p> </div> |
| PH3.3 ENGAGES IN A VARIETY OF DEVELOPMENTALLY APPROPRIATE PHYSICAL ACTIVITIES | | |
| PARTICIPATION IN PHYSICAL ACTIVITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Plan a variety of developmentally appropriate physical activities both indoors and outdoors in which all children can succeed; activities that require participation for longer periods of time without tiring and that are increasingly more complex. ◆ Refer to the PH.1 Gross Motor Learning Goals and Strands for activities that range from basic to more complex. ◆ Observe your children and document their progress in mastering gross-motor skills. ◆ Involve children in more complex skills in which you have observed they are ready to try. ◆ Keep physical activities inviting so that all children want to participate in them. ◆ Be involved in all of the physical activities you plan for children. ◆ Plan structured physical activities for increasing periods of time. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include music movement activities that encourage children to become involved. □ Play songs from children’s recording artists and involve children in the suggested movement activities. Consider these recording artists: <ul style="list-style-type: none"> ○ Steve and Greg – <i>Kids in Motion, Bounce and Boogie</i>, and <i>Ready, Set, Move!</i> ○ The Learning Station – <i>Action! Fun! Dance! for Kids</i> and <i>Here We Go Loopty Loo</i> ○ Red Grammar – <i>Circle of Light</i> □ Include materials such as hula hoops, tricycles, helmets, and items for obstacle courses. <p>Teacher Note: <i>The National Association of Sport and Physical Education recommends that toddlers and preschoolers should engage in at least 60 minutes total (and up to several hours) of unstructured physical activity each day and should not be sedentary for more than 60 minutes at a time except when sleeping. In addition, preschoolers should engage in at least 60 minutes of structured play (physical activity in which an adult is providing activities, instruction, and feedback with skill development) (AR CDELS, p. 43).</i></p> <p><i>However, this does not mean that preschool children are to be engaged in 60 minutes of structured play at one time, but in several periods of about 15 minutes each.</i></p> |

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| KNOWLEDGE OF BENEFITS OF PHYSICAL ACTIVITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children understand the benefits of physical activity. ◆ Join in active exercise yourself and convey a positive attitude by expressing pleasure in actively using your body. ◆ Comment positively when you observe children engaged in physical activity. | <p>Examples and Activities</p> <p><u>Talk with children about benefits of physical activities</u></p> <ul style="list-style-type: none"> □ “I really enjoy it when we move and dance to music.” □ “When you run your leg muscles are getting stronger.” □ Respond to a child who shows you her arm muscles by saying, “I saw you and Josh throwing the ball to each other. That helps you develop those strong arm muscles.” |
| PH3.4 TAKES APPROPRIATE ACTIONS TO MEET BASIC NEEDS | | |
| COMMUNICATING NEEDS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Be a keen observer of your children so that you know each child well in order to detect when a child may have a health need or needs help with toileting or reaching the soap for handwashing. ◆ Discuss with children that you are always there to listen to them and to help them when needed. ◆ Respond to their needs in a way that communicates to them that you are there to help them. ◆ Learn and use words from the child’s home language for personal care needs such as toileting. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Talk with children regarding their basic needs of things such as: sleeping, toileting, hunger, allergies, and overall wellness. “I see you closing your eyes a lot. Are you tired?” |
| PERSONAL CARE ROUTINES | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Guide children to assume increasing responsibility for personal self-care routines and to understand how, when, and why personal care routines are completed: <ul style="list-style-type: none"> • Handwashing • Toileting • Tooth Brushing • Dressing/Undressing <p><u>Handwashing</u></p> <ul style="list-style-type: none"> ◆ Involve children in discussing when they should wash their hands. ◆ Create a “When Should We Wash Our Hands?” chart, add illustrations, post on the wall at child’s eye level, and review it with children from time to time, especially when they seem to be forgetting to wash hands. ◆ Post the handwashing chart on the wall above the sink where children wash hands. ◆ Model and guide children through the handwashing steps. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Use songs such as “Happy Birthday to You” or counting while children are washing their hands. □ Sing to children “This Is the Way We Brush Our Teeth” as children brush their teeth after lunch. □ Read books such as <i>Everyone Poops</i> by Taro Gomi to children who are learning toileting skills. □ Let children take off and put on their coats or jackets, assisting only as needed. □ Allow sufficient time for children to put on coats or jackets and gloves before going outdoors. □ Add dress up clothes to the Dramatic Play Center for children to put on and take off, and to button, snap, zip, and tie. □ Have doll clothes that children can put on and take off the dolls. <p style="text-align: right;"><i>(continued on next page)</i></p> |

Teacher Note: Refer to Minimum Licensing Requirements for Child Care Centers (Rev. 01/01/2015) – **1102 Hand Washing**. Licensing Requirements state: A liquid soap shall be accessible in the hand washing area and used by caregivers and children.

Tooth Brushing

Teacher Note: If your program plans to implement a tooth brushing program, here are some things to consider:

- Provide information about the tooth brushing policy
- Provide information about the importance of tooth brushing in the prevention of tooth decay

Toileting

- ◆ Know where each child is in personal responsibility for toileting through observation, talking with child's previous teacher (if in your program); and discussing with parent/caregiver. Learn words that families use for toileting, especially for children from homes where English is not the home language.
- ◆ Discuss with children proper toileting procedures, including handwashing after toileting.
- ◆ Assist children as needed, while supporting their increasing independence in toileting.
- ◆ Suggest that families dress children in clothing that makes it easier for them to develop independence in toileting.
- ◆ Include in your parent handbook and discussion with parents as children are enrolled that their child is to have a change of clothes at the center.
- ◆ Have extra clothing in the classroom or in a designated storage space in the center for emergency situations.

Teacher Note: Refer to Minimum Licensing Requirements for Child Care Centers (Rev. 01/01/2015) – **1108 Toilet Learning**.


Dressing/Undressing

- ◆ Provide time, opportunities, and appropriate materials for children to practice dressing and undressing.
- ◆ Suggest that families dress their children in clothes that are easy for children to put on and take off.
- ◆ Encourage families to allow their children to take off their coats when they enter the classroom and to put them on when they are ready to leave.

Teacher Note: Children may show variation in these personal care routines based on whether early self-help skills are expected and taught in their family and culture.



Refer to the Resources section (pp. 39-40) for more information on personal care routines (handwashing, tooth brushing, toileting, and dressing). An illustrated handwashing chart and handwashing steps can be accessed on the Centers for Disease Control and Prevention website.

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| HEALTH HABITS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children engage in health habits with a decreasing need for adult support, guidance, and modeling. ◆ Begin by modeling health habits and describing and explaining to children what you are doing. Good health habits help prevent the spread of germs which can make us sick. <p>Teacher Note: <i>Although the Arkansas Child Development and Early Learning Standards (CDELS): Birth through 60 Months does not address daily supervised rest periods, this is a health habit that is important to include and is a licensing requirement.</i></p> <div>  <p>For more information on rest periods, see the Resources section (p. 40).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Model for children and remind as needed: <ul style="list-style-type: none"> ○ Blowing nose, throwing away tissue, and washing hands to prevent spread of germs. ○ Covering mouth with arm when coughing and washing hands. ○ Using drinking fountain without touching mouth to spout. □ Prepare children for rest period: <ul style="list-style-type: none"> ○ Play soft and soothing music if this seems to help children rest better. ○ Spend time helping individual children settle down on their cot or mat. ○ Plan a quiet and calming activity such as reading or telling a story to the children at rest time. ○ Read stories, such as the <i>Napping House</i> by Audrey and Don Wood, as children begin to lay down for rest time. ○ Introduce storytelling with children as they prepare to rest. “Now close your eyes, I want you to picture what is happening in the story. Once upon a time...” pause and say, “Can you see the horse?” ○ Have available books or small puzzles for children who do not fall asleep during rest time. |
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RESOURCES

Physical Development and Health

PH1. GROSS MOTOR

PH1.1 DEMONSTRATES LOCOMOTOR SKILLS

Strand: Traveling

Indoor and Outdoor Traveling Activities

- Plan indoor activities that involve children in walking and moving and stopping with control.
 - Explain to children that they will now take a walk around the room.
 - Review the Rules for Safe Traveling with the children and remind them of the rules as needed during the activity.
 - Give children directions as to how they are to travel.

“Walk around the room and stay as far from other children as you can.”

Sound the stop signal and then say, “Walk sideways without bumping into others.”

Sound the stop signal and then say, “Walk backwards without bumping into others.”

Sound the stop signal and then say, “Walk very slowly to your carpet square and sit down.”
- Create an outdoor obstacle course with traffic cones or two-liter soda bottles weighted with sand or gravel. (Glue and tape the caps on the bottles to avoid spills).
 - Invite children to pretend the cones are trees and to take a walk through the pretend woods.
 - Follow the same procedures as in the preceding indoor activity.
 - Add directions such as “Walk slowly” or “Walk faster.”

- Involve children in running activities as follows:
 - Provide enough space so children can run without touching other children.
 - Explain and demonstrate to children how different parts of their body work when they are running:

Say, “Bend your elbows and swing your arms when running.”

Say, “Pick up your feet and run forward as fast as you can.”
- Involve children in running through the pretend woods which is the obstacle course that was used for walking.

Additional Traveling Activities

- Introduce the term “freeze” to children, explaining that when they hear you say “freeze” or when the music stops they are to stop moving, or freeze in place.
- Play a lively tune and invite children to dance around the room without bumping into each other until the music stops and then they are to freeze until the music starts again.
- Read with children books that include ways of traveling and follow up by involving them in the traveling skill featured in the book. Examples of books include:
 - *I Went Walking* by Sue Williams
 - *Rosie’s Walk* by Pat Hutchins
 - *We’re Going on a Picnic* by Pat Hutchins
 - *The Gingerbread Man* retold by Jim Aylesworth
 - *The Gingerbread Boy* by Paul Galdone
 - *Ask Mr. Bear* by Marjorie Flack



Creating a Sample Chart of Rules for Safe Traveling

- Establish with children rules for teacher-guided traveling activities that include the following:
 - How children are to enter and leave the space used for the activities
 - Space children are to stay within during traveling activities (boundaries)
 - Stop and go signal such as clapping hands, striking a drum, striking two rhythm sticks together, or blowing a whistle (children freeze when they hear the signal)
 - Self-space, which is the space that immediately surrounds each child's body (carpet squares or personal marker spots help define self-space)
 - Safe ways to move during activities such as walking and running (moving without touching anyone else or getting too close to others)
- The following is a sample of a chart (illustrations to be added by teacher):

Rules for Safe Traveling

- ✓ Walk into the activity area and sit on your carpet square.
- ✓ Respect everyone's self-space.
- ✓ Stop when you hear the drum beat.
- ✓ Move around the room without touching anyone.
- ✓ Stay in the boundaries.

Strand: Complex Movement

Activities Involving Complex Movement:

Galloping

- Invite children to think of an animal that gallops. Supply the answer if children do not say that horses gallop.
- Explain to children that they are going to gallop like a horse.
- Remind children to move safely and not get too close to other children.
- Allow children to practice galloping.
- Observe children and assist those who are having difficulty galloping.

- Introduce children to galloping as follows:

- "Start with a step and slide the other foot behind the lead foot. The lead foot is the leader and the other foot never goes in front of it."
- Reinforce the stop and go signal you have established: clapping hands, striking a drum, striking two sticks together, or blowing a whistle are examples. When children hear this signal they are to freeze like a statue.
- "Pretend you're riding a horse, so hold on to the reins."
- You're going to gallop in a straight line.
- Start with a step on the leader foot and slide the other foot behind it. Now go faster." (When children increase speed it will automatically become a gallop.)

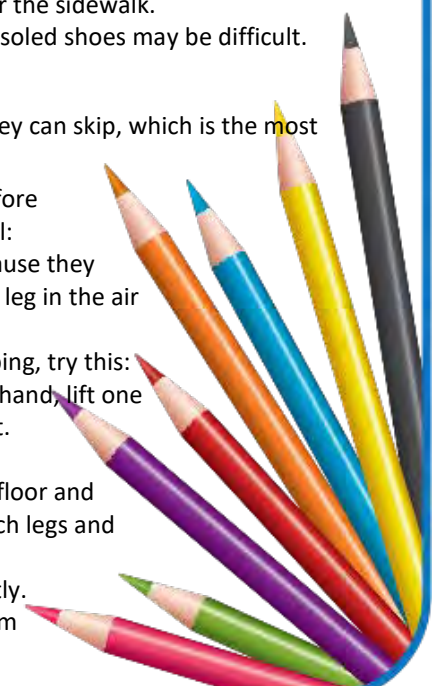
Sliding

- Explain to children that sliding is like walking but without lifting the feet.
- Involve children in sliding across the floor or the sidewalk.
- Be aware that sliding while wearing rubber soled shoes may be difficult.

Hopping

Note: Children must be able to hop before they can skip, which is the most difficult gross motor skill to develop.

- Understand these things about hopping before introducing children to this gross motor skill:
 - Children may have difficulty hopping because they lack the strength and balance to hold one leg in the air while hopping on the other.
 - If children are having a difficult time hopping, try this:
 - ♦ Have them lean against a wall with one hand, lift one foot in the air and hop on the other foot.
- Introduce hopping to children as follows:
 - "When you hop, you hold one leg off the floor and hop up and down on the other. Now switch legs and hop on that one."
- Allow children to practice hopping frequently.
- Practice hopping in place, then hopping from one spot to another.



Skipping

- Understand these things about skipping before introducing children to this gross motor skill:
 - Remember that children must be able to hop before they can skip and that skipping is the most difficult gross motor skill to develop. Only introduce skipping if you think children are ready for this.
 - Avoid frustrating children if they are unable to skip. Some four and five year olds will be able to skip while others will not develop this skill until later.
- Introduce skipping to children as follows:
 - “Take a step forward and hop on that foot.”
 - “Now take a step forward on the other foot and hop on it.”
 - “Continue to step and hop on one foot, then the other.”
 - Allow children to practice skipping regularly.

Connect Literacy and Physical Development

Consider reading a story such as *Ask Mr. Bear* by Marjorie Flack to the children.

- Review with them the ways that Danny and the animals in the story traveled: walking, running, galloping, hopping, and skipping.
- Explain to children that they will move around the room like Danny and the animals.
- Remind children to move safely and not get too close to others.
- Reinforce the stop and go signal you have established: clapping hands, striking a drum, striking two rhythm sticks together, or blowing a whistle are examples. When they hear the signal they are to freeze like statues.
- Say, “Walk around the room without bumping into others.”
- Sound the stop signal.
- Say, “Hop on one foot. Now hop on the other foot.”
- Sound the stop signal.
- Say, “Now skip around the room without bumping into others.”
- Sound the stop signal.
- Say, “Walk safely back to your place on the carpet.”

PH1.2 SHOWS STABILITY AND BALANCE

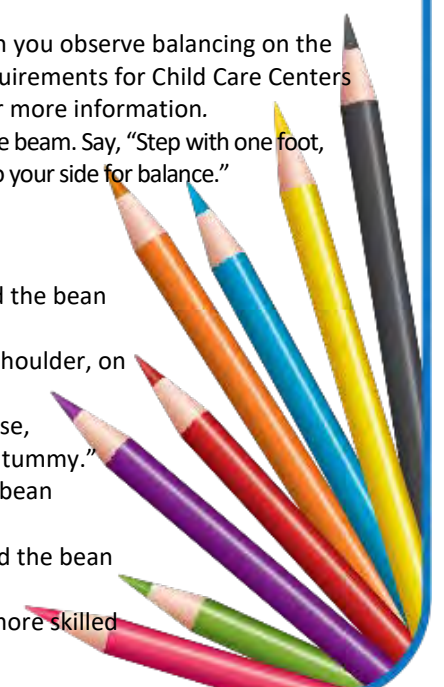
Strand: Core Stability

Balance Beam Activities

- Allow only one child at a time to walk on the beam.
- Have children begin by stepping up on one end of the balance beam.
- Give children verbal directions for walking on the beam. Say, “Step with one foot, now step with the other. Hold your hands out to your side for balance.”
- Hold the hands of a child who may need support.
- Allow children many opportunities to practice walking across the board until they have gained competence in their ability to balance on the beam.
- Vary the difficulty of the skill according to the development of individual children. For example, some children may be able to walk sideways or backwards on the beam.
- Notice and offer encouragement to children you observe balancing on the beam. Refer to the Minimum Licensing Requirements for Child Care Centers (Rev. 01/01/2015) – **903 Balance Beams** for more information.
- Give children verbal directions for walking on the beam. Say, “Step with one foot, now step with the other. Hold your hands out to your side for balance.”

Balancing with Beanbags

- Invite children to:
 - “Hold the beanbag in one hand. Now hold the bean bag in the other hand.”
 - “Put the beanbag on your head, on your shoulder, on your knee, and on your foot.”
 - “Put the beanbag on your ear, on your nose, on your chin, on your elbow, and on your tummy.”
 - “Hold the beanbag way up high, hold the bean bag way down low.”
- Play a marching song and have children hold the bean bag on their head while marching.
- Increase the difficulty as children become more skilled at balancing beanbags.



Additional Instructions for Balancing Beanbags

- See if children can stand in place without moving as they balance the beanbag on their head.
- Some children may be able to balance the beanbag on their head while marching.
- Find a way for each child to be successful. For example, a child with a walker or a child in a wheelchair may be able to follow directions about what to do with a beanbag or can join in the beanbag parade.
- Purchase or make enough beanbags for each child in your group.
- Give each child a beanbag.
- Involve children in following directions that tell them the different things they can do with their beanbag. The directions can come from you or from a song on a beanbag activity CD you have purchased.

Strand: Jumping, Hopping, and Leaping

Jumping

- Begin by inviting children to join you in the designated area and to stand and hold hands to form a circle.
- Ask children to drop hands and take three steps back so that each child has room to move without touching others. Explain to children that they are going to practice jumping. They will jump off two feet and land on two feet.
- Stand in the middle of the circle and demonstrate.

Steps in Jumping:

Step 1 – Take off

- Bend knees and crouch body, ready to jump.
- Swing arms forward and upward to take off from the floor or ground.

Step 2 – Flight

- Extend arms into the air as feet leave the floor.

Step 3 – Landing

- Land on both feet. Land with feet apart and body over feet.
- Demonstrate for children the steps of jumping.
- Observe children to determine those that need additional help with jumping.
- Notice when children are becoming tired and invite them to sit down and relax.

Jumping Activities

- Place two pieces of rope parallel on the floor or ground.
- Explain to children that this is a creek and they are to jump over it to get to the other side of the creek.
- Stress taking off from two feet and landing on two feet.
- Invite children one at a time to jump over the creek.
- Vary the difficulty by stretching two pieces of rope or string along the floor that start close together and get farther apart.
- Have children jump over them beginning at the narrow end and progressing as far as they can go toward the wider end.

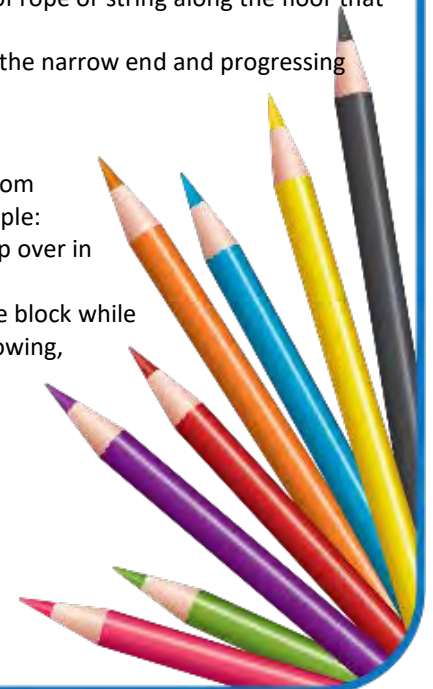
Jack Be Nimble

- Include this activity as a transition activity from circle time to learning center time, for example:
 - Place a block that children can safely jump over in the center of the circle.
 - Invite one child at a time to jump over the block while you and the other children chant the following, substituting each child's name for "Jack":

Joanna be nimble,

Joanna be quick.

Joanna jump over the candlestick.



PH1.3 DEMONSTRATES GROSS MOTOR MANIPULATIVE SKILLS

Strand: Catching

Activities on Catching:

Tossing and Catching Scarves and Beanbags

- Begin by involving children in catching scarves which move slowly and give children time to adjust themselves for a catch.
 - Make sure there is enough space for children to practice catching scarves.
 - Have enough scarves for each child in the group.
 - Guide children by saying, "Throw the scarf in the air, follow it with your eyes and catch it with both hands".
 - ♦ Consider having children throw a beanbag in the air and catch it if you think they can do this in a safe way. Model and explain that beanbags are heavier than scarves so "toss them gently into the air". This may also be an outdoor activity.

Catching Beanbags

- Involve children in catching beanbags thrown underhand by you.
 - Have children stand in a circle with you in the middle or do one-on-one with a child.
 - Say, "Javier, I'm tossing the beanbag to you. Hold your hands out and catch the beanbag with both hands". Continue this activity, giving each child a turn to catch the beanbag.

Catching Beanbags

- Involve children in catching beanbags tossed to them by another child.
 - Have the children form two lines with each child directly facing another child.
 - Start off having children who are facing each other stand close to each other (about three feet apart), then increase the distance between children as they become more skilled in tossing and catching.
 - Make sure there is space between the children in each line so they can adjust themselves to catch the beanbag.
 - Say to children, "The person across from you is your partner. You and your partner are to practice tossing and catching the beanbag".

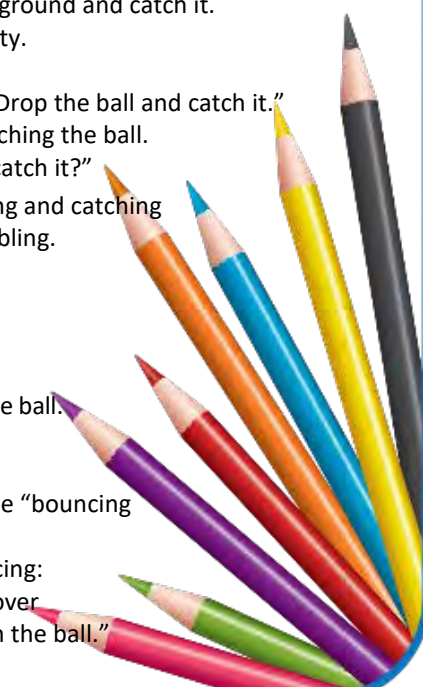
- Give each child in one line a beanbag
- Demonstrate tossing to a child.
- Say to children, "Toss the beanbag to your partner. Partner, catch the beanbag and toss it back to your partner".

Catching Balls

- Involve children in catching balls thrown by you.
 - Provide large rubber or beach balls for catching.
 - Have children stand in a circle with you in the middle or one on one with a child.
 - Say, "Josie, I'm throwing the ball to you. Watch the ball with your eyes. Bring the ball toward your body and catch it".
 - Progress to guiding children to catch with both hands as they become ready for this.
- Have children bounce a ball on the floor or ground and catch it.
 - Provide 10-inch rubber balls for this activity.
 - Give a child the following instructions:
"Hold the ball out in front of your body. Drop the ball and catch it."
- Allow children to practice dropping and catching the ball.
Say, "Can you bounce the ball hard and catch it?"

Note: Children need lots of practice dropping and catching the ball before they are ready to begin dribbling.

- Demonstrate bouncing a ball to a child.
 - Stand about eight feet from the child.
 - Give children the following instructions:
"Watch the ball.
Get your hands and arms ready to catch the ball.
Reach for the ball as it bounces to you.
Now bounce the ball back to me."
- Provide one ball for two children who will be "bouncing buddies".
- Give the following instructions about bouncing:
"One good bounce to your buddy, but not over his/her head. You want your buddy to catch the ball."



Catching Beanbags from a Beanbag Launch Board

- Involve children in using a beanbag launch board to practice catching. In this activity children are practicing manipulative skills with hands and feet, and they are tracking with their eyes the beanbag as it is being launched from the board into the air.

Strand: Throwing

Throwing Beanbags (Instructions):

Into a Basket:

- Establish a line on which children are to stand.
- Give children turns throwing three or four beanbags.
- Invite children to stand on the line and toss the beanbags into the basket.
- Make sure that each child is successful in this activity.
- Move the line forward for children who seem to need this and backward for children who need more challenge. A child in a wheelchair will be able to throw the beanbags while sitting.

Into a Hoop:

- Join children in sitting on the floor in a circle and give each child a beanbag.
- Chant the following: "Freddie the Frog tried to jump on a log and SPLASH he fell into the pond."
- Explain that each child, in turn, will throw his/her beanbag into the pond when you say the word "SPLASH!"
- Repeat the chant, giving each child a turn to throw a beanbag into the pond.

Throwing Balls (Instructions)

At a Target:

- Tape a target on a wall or on a tree.
- Invite children to throw a ball and hit the target.
- Suggest that children move closer to the target if they are having difficulty hitting it.

Through a Hoop:

- Suspend a hoop so that it is low enough for children to throw a ball through it.
- Invite children to throw a ball through the hoop.

Knock Over Objects:

- Create targets with cones or empty two-liter bottles weighted down with sand or rocks.
- Place the targets on a low bench.
- Invite children to throw a ball and knock over the targets.

PH3. HEALTH AND WELL-BEING

PH3.1 DEMONSTRATES INTEREST IN ENGAGING IN HEALTHY EATING HABITS AND MAKING NUTRITIOUS FOOD CHOICES

Strand: Exploration of Food Experiences

Kitchen Props for the Dramatic Play Center

- Skillet
- Small pots with lids
- Tortilla press
- Wok
- Wooden spoons
- Kettle
- Plastic plates, bowls and glasses
- Spoons and forks
- Chop sticks
- Measuring cups and spoons
- Thick pot holders
- Sifters



Considerations of Safety Rules When Involving Children in Food Experiences

- Decide with the director and co-workers if food experiences using electrical appliances can be safely conducted in your room and with your children.
- Consider planning food experiences that involve electrical appliances when there is sufficient staff so that one person can involve a small group of three to four children at a time in the activity, while the second adult and children are participating in other classroom experiences.
- Keep potentially dangerous equipment such as knives, corer, graters, and all electrical appliances out of reach of children.
- Use electrical appliances and other potentially dangerous equipment with care, protecting children from them at all times.
- Discuss with and model for children safety practices while participating in the planned food experience.

Strand: Food Knowledge

Food Groups

- Dairy Group: milk, yogurt, cheese, cottage cheese
- Grain Group: bread, English muffins, hamburger buns, cereal, pasta, rice, grits, tortilla, roll, muffin, pita bread
- Fruit Group: raw, cooked or canned fruit (apples, bananas, peaches, oranges, pears, cantaloupe, grapefruit)
- Vegetable Group: raw vegetables, raw leafy vegetables, cooked vegetables, vegetable juice (carrots, potatoes, green beans, cauliflower, broccoli, cucumbers)
- Protein/Meat Group: cooked meat, cooked poultry (chicken/turkey) fish, eggs

Fruit or Vegetables

- Apples are a fruit, are different colors, are smooth, grow on trees, can be eaten in many ways (raw, apple juice, apple pie, apple butter)
- Carrots are a vegetable, grow underground, can be eaten raw or cooked
- Potatoes are a vegetable, grow underground, can be eaten in many ways (mashed, baked, French fries)
- Corn is a vegetable, grows on a stalk, can be eaten on the cob or off the cob
- Peaches are a fruit, feel fuzzy, grow on a tree, can be eaten raw or cooked
- Cucumbers are a vegetable, feel bumpy, grow on a vine, are usually eaten raw

Children's Books about Food

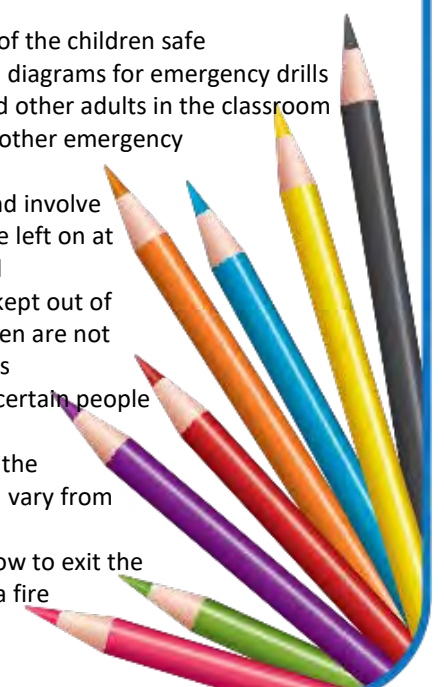
- *Bread, Bread, Bread* by Ann Morris, photos by Ken Heyman
- *Apples and Pumpkins* by Anne Rockwell
- *Pumpkin, Pumpkin* by Jeanne Titherington
- *Growing Vegetable Soup* by Lois Elhert
- *Stone Soup* by Marcia Brown
- *Tops and Bottoms* by Janet Stevens
- *Feast for Ten* by Cathryn Falwell

PH3.2 SHOWS AWARENESS OF SAFE BEHAVIOR

Strand: Awareness of Safe Behavior and Signals of Danger

Safety Walk

- Begin in the classroom. For example:
 - Teachers are in the classroom to keep all of the children safe
 - Show children the posted procedures and diagrams for emergency drills and explain that this tells the teachers and other adults in the classroom what to do in case of a fire, a tornado, or other emergency
 - Record of when drills were held
 - Point out the covered electrical outlets and involve children in discussing that covers are to be left on at all times except when outlet is being used
 - Explain to children that your scissors are kept out of their reach and are only used when children are not present or are asleep on their cots or mats
 - Sign-in and out sheets to make sure only certain people can pick up the children
- Continue your safety walk to other parts of the building. The safety measures observed will vary from one facility to another. Examples include:
 - Lighted or posted EXIT signs that tell us how to exit the building in case of an emergency such as a fire
 - Fire extinguishers



- Panic bars on doors that can be pushed down for quick exit from building
- Smoke detectors
- Closed doors or safety gates so infants and toddlers do not get out of classroom
- Security system for entering the building or the children's section
- Continue your safety walk to the playground. Here are some things that might be observed:
 - Fence (in good condition) around the playground to keep children in and strangers (people we do not know) out
 - Use zones and protective surfacing under playground to protect children should they fall from the equipment
 - Teacher carrying roll book (attendance roster) to the playground to make sure all children safely return to their classroom
 - Teacher with playground safety checklist that is used to make sure that everything on the playground is safe for children to use
- Return to the classroom and read the safety observations and involve children in discussing them.

Note: This activity should be adapted for your particular program. Its primary purpose is to help children become aware of all that is done to keep them safe and how they are involved in the safety practices. Consider conducting this activity on more than one day. For example, take the safety walk inside your classroom one day, a safety walk to other parts of the building and to the playground on separate days.

Strand: Understanding of safety rules and practices

Safety Considerations:

Safety in the Block Center

- Blocks are for building, not throwing or hitting others (so that no one gets hurt)
- Build only as high as your waist, or however high you and the children decide they can safely build with blocks (tall structures might fall and hurt someone)
- Put blocks on the shelf when play is over (so on one trips and falls over blocks)

Safety in the Dramatic Play Center

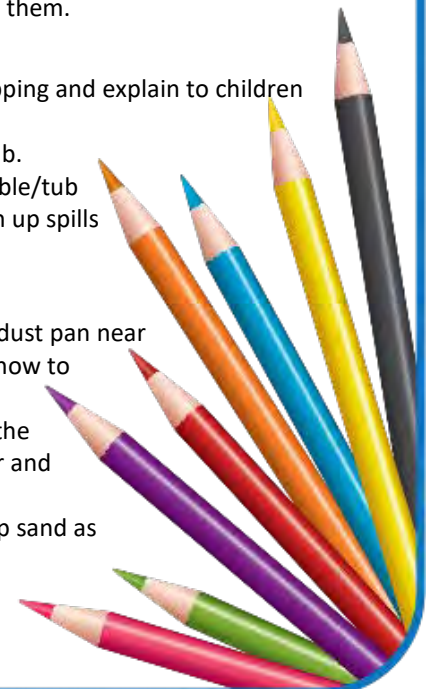
- Join children as they play in the home living area and discuss with them safety measures their family members should take in the kitchen when cooking. For example:
 - Use thick and dry pot holders to remove cooked foods from oven.
 - Use only wooden spoons or heat-resistant silicone spatulas to stir or turn contents in hot pots and pans because metal utensils get very hot. Show children the difference in the types of utensils.
 - Turn pot handles toward the center or back of the stove so the handles do not overheat and are not accidentally pushed or bumped.
 - Add thick pot holders and wooden spoons and heat-resistant silicone spatulas to the home living area.
- Observe children and comment if you notice that they are putting into practice some of the safety measures discussed with them.

Safety in the Water Center

- Cover the floor to prevent children from slipping and explain to children why you are doing this.
- Children are to keep water in the table or tub.
- Locate sponges and mops near the water table/tub and explain that they are to use this to clean up spills quickly so no one slips on a wet floor.

Safety in the Sand Center

- Provide a whisk broom or small broom and dust pan near the sand area and demonstrate to children how to sweep up the sand.
- Discuss with children that sand is to stay in the table/tub so that it does not get on the floor and cause someone to fall.
- Explain to children that they are to sweep up sand as soon as it spills on the floor.



Safety in the Art Center

- Discuss with children that they are to stay seated when using scissors so they do not fall on them or accidentally hurt someone else with them.

Safety on the Playground

- Involve children in developing some simple safety rules for the playground; rules that are based on your playground and the children in the group. Here are some examples:
 - Sit on your bottom when going down the slide
 - Go down the slide one person at a time
 - Ride the tricycle one person at a time
 - Stay seated while riding a wheel toy
 - Ride the wheel toys on the designated path
 - Keep sand in the sand box
 - Sit in the swing and hold on while swinging
 - Wait until the swing has stopped before getting off the swing seat
- Take your roll book/attendance sheets to the playground (or any other time you take children to another location outside of their classroom), establish a routine for using it to make sure all children return to the classroom with you, and explain to children the procedures. For example:
 - What children are to do when they are on the playground and you signal that it is time to go indoors. Line up against the fence or the wall, for example.
 - Call each child's name and ask that children say "here" or "present."
 - Children are to walk to the classroom and go to a designated area such as the carpet or to tables.
- Consider posting illustrated safety rules in learning centers where appropriate.
- Review safety rules with children and remind them of the rules when necessary.

PH3.4 TAKES APPROPRIATE ACTIONS TO MEET BASIC NEEDS

Strand: Personal care routines

Handwashing

- Download and print the illustrated Handwashing 0-5 years chart from the Arkansas Department of Health (ADH) website or create your own illustrated chart. Laminate or cover with self-adhesive paper for durability.
- Introduce handwashing to children by showing them the chart, reviewing, and modeling the steps.
- Discuss with children that we wash our hands to get rid of germs on them that can cause us to get sick. Call attention to what is happening to the germs in the first four steps on the ADH chart.

Handwashing Steps

- The six steps include:
 - Step 1 – Wet hands with warm water
 - Step 2 – Use soap
 - Step 3 – Rub hands together
 - Step 4 – Wash soap off hands
 - Step 5 – Dry hands with paper towel
 - Step 6 – Turn off water (with paper towel)

When to Wash Hands

- When we come into our classroom each day
- Before snack and meals
- After using the toilet
- After blowing our nose
- After messy activities such as finger painting and using glue
- Before and after water and sand play
- After outdoor play
- After handling the classroom pet



Tooth Brushing

Supplies needed (recommend that supplies be purchased by your program):

- Soft toothbrushes that should be replaced every three months
- Fluoride toothpaste (stored in a locked cabinet out of children's reach)
- Toothbrush labels
- Storage system (open to the air, labeled, keeps toothbrushes from touching each other, and out of the reach of children)
- Disposable cups for rinsing

Tooth Brushing Procedures

- One child at a time brushes teeth at the sink
- Teacher puts a small amount of toothpaste (pea-sized) on tooth brush
- Guide children to brush in small circles, making sure to get all teeth surfaces
- Make sure child spits out all of the toothpaste in his or her mouth
- Child rinses mouth with small amount of water from paper cup after spitting
- Child rinses toothbrush and hands to teacher for storage. Contact the Health Department or a Licensing Specialist for suggestions for storage
- Child throws away paper cup

Staff Involvement and Supervision of Children

- Schedule a time each day when children brush teeth; a time after one activity has wound down and before another begins
- Demonstrate and describe in simple terms and as often as needed proper tooth brushing procedures
- Discuss with children why tooth brushing is important
- Supervise tooth brushing

Strand: Health Habits

Rest Periods

Teachers can lessen the stress that sometimes occurs at this time by:

- Establishing with children rituals and routines that encourage them to rest for the required period of time.

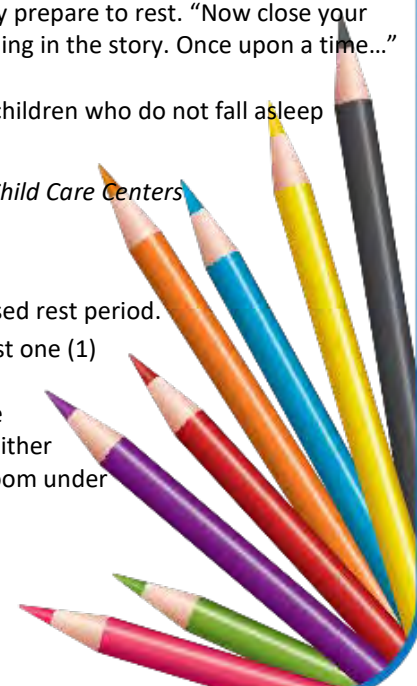
- Discussing with families that children will have a supervised rest time of at least an hour each day and suggest that they discuss this with their child.
- Explaining to children that they will have a time to rest each day, that their bodies need rest to be healthy and grow strong. Tell them when this time will be (after lunch, for example).
 - Establish a system for toileting before rest time.
 - Play soft and soothing music if this seems to help children rest better.
 - Spend time helping individual children settle down on their cot or mat.
 - Plan a quiet and calming activity, such as reading or telling a story, to the children at rest time.
 - Read stories, such as the *Napping House* by Audrey and Don Wood, as children begin to lay down for rest time.
 - Introduce storytelling with children as they prepare to rest. "Now close your eyes, I want you to picture what is happening in the story. Once upon a time..." Pause and say, "Can you see the horse?"
 - Have available books or small puzzles for children who do not fall asleep during rest time.

Refer to *Minimum Licensing Requirements for Child Care Centers* (Rev. 01/01/2015) for the following notes:

401 Program Requirements for All Ages

- 8.** There shall be an opportunity for a supervised rest period.
 - a.** The supervised rest period shall be at least one (1) hour, but shall not exceed two (2) hours.
 - b.** If children do not fall asleep, they shall be allowed to participate in a quiet activity either on their cots, in the area, or in another room under direct supervision.

1002 Sleeping Requirements for Preschool



Language Development

Early childhood researchers refer to young children as linguistic geniuses.¹ From a very young age children have the capacity to learn language. Research shows that children are processing the sounds of language even before they are born and engage in an immense amount of language learning long before they learn to speak.² Children's language learning is largely driven by the language environment to which they are exposed. For example, at birth children can discriminate the sounds of any language, but this ability quickly becomes specific to the language or languages to which they are most exposed.³ Furthermore, a child's "language nutrition"—the quantity and quality of language children experience—is as critical to a young child's brain development as healthy food is to physical growth. Unfortunately, too many children are "linguistically malnourished." For example, by age 3, children from lower in-come homes hear an estimated 30 million fewer words than their peers in higher income homes. Children also experience disparities in the quality of language exposure, in terms of the richness and variety of vocabulary words they hear, the types of questions that are asked of them that encourage thinking skills, and encouraging versus discouraging conversations ("What does that feel like?" versus "Don't touch that," for example).⁴ However, research shows that high-quality, language-rich interactions in early childhood classrooms can have a profound impact on children's language abilities, and that these effects can overcome the word gap. Language is essential to all areas of development and learning.⁵ It is important to social interaction, with skilled communicators more likely to demonstrate social competence, and is a key foundational component of a child's emergent literacy skills.

Potential Warning Signs of Developmental Delay

- **By 4 years old (48 months)**, a child doesn't follow 3-part commands, doesn't understand *same* and *different*, doesn't use *me* and *you* correctly, or doesn't speak clearly.
- **By 5 years old (60 months)**, a child can't give his first and last name, doesn't use plurals or past tense properly, or doesn't talk about daily activities or experiences.

¹Kuhl, P. (2010) "The linguistic genius of babies." Ted talk. Retrieved from: https://www.ted.com/talks/patricia_kuhl_the_linguistic_genius_of_babies?language=en

²Moon, C., Lagercrantz, H., & Kuhl, P. K. (2013). Language experienced in utero affects vowel perception after birth: A two-country study. *Acta Paediatrica*, 102(2), 156 – 160.

³Kuhl, P. K. (2010). Brain mechanisms in early language acquisition. *Neuron*, 67(5), 713–727.

⁴Hart, B. & Risley, T. R. (1995). Meaningful differences in the everyday experiences of young American children. Baltimore, MD: Brookes Publishing.

⁵Dickinson, D. K., & Porche, M. V. (2011). Relation between language experiences in preschool classrooms and children's kindergarten and fourth- grade language and reading abilities. *Child Development*, 82, 870–886.

| LD1. RECEPTIVE LANGUAGE | | |
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| LD1.1 UNDERSTANDS AND RESPONDS TO LANGUAGE (IN CHILD'S HOME LANGUAGE) | | |
| VOCABULARY & LANGUAGE COMPREHENSION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide daily opportunities for children to comprehend language and to increase their vocabulary. ♦ Talk with children during routines and during play. ♦ Use open-ended questions with children; questions that encourage them to expand their thinking more fully. ♦ Include “Who,” “What,” “Why,” and “Where” questions as you interact with the children. ♦ Introduce and label new materials you are adding to the learning environment. ♦ Use children’s interests to introduce new words. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Talk with children about what they are doing in learning centers. □ Instead of asking a child “What color is this ball?” ask “How many different things can you do with this ball?” □ When adding new items such as colanders, funnels, and a turkey baster to the water table, involve children in learning the names of the items and discussing how they might be used. □ Include books, finger plays, rhymes, poetry, songs, and language games to increase vocabulary. □ Read books with children that have rich vocabulary; books such as <i>Listen to the Rain</i> by Bill Martin, Jr. and John Archambault, illustrated by James Endicott. □ Read books with children that have words that may not be familiar to them; words such as squabble and trample in the book <i>Mr. Gumpy’s Outing</i> by John Burningham. Explain to children the meaning of unfamiliar words. □ Repeat and reinforce new words that have been introduced to children. After reading to children <i>The Enormous Turnip</i> by Aleksei Tolstoy, illustrated by Niamh Sharkey, talk about the enormous tree on the playground, the enormous clouds in the sky, or the enormous apple you ate. |
| FOLLOWS DIRECTIONS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Give children clear directions for everyday activities and routines. ♦ Begin with one- or two-step directions and progress to three-step directions. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ One-step directions: “Put your coat in your cubby.” □ Two-step directions: “Come to the sink and wash your hands.” □ Three-step directions: “Come to the sink, wash and dry your hands, and sit at the table for lunch.” □ Play games, such as <i>Red Light, Green Light</i>, which require children to listen to and follow directions. □ Play music and allow children to dance around the room until the music stops, then they are to freeze in place. □ Include songs that give directions; songs such as “If You’re Happy and You Know It” and “The Hokey Pokey”. □ Plan physical activities that include following directions. For example, place a hoop on the floor and ask children to step inside the hoop, step outside the hoop, and walk around the hoop. |

| LD2. EXPRESSIVE LANGUAGE | | |
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| LD2.1 USES INCREASINGLY COMPLEX VOCABULARY, GRAMMAR, AND SENTENCE STRUCTURE (IN CHILD’S HOME LANGUAGE) | | |
| EXPRESSIVE VOCABULARY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Support children in using increasingly complex and varied vocabulary words to express needs and to describe objects, emotions, and actions. ♦ Model using feeling words such as disappointed, happy, surprised, proud, and embarrassed. ♦ Introduce children to discussion pictures that show people expressing different feelings and emotions. Invite them to discuss how they think the person is feeling, why they think the person is feeling that way, and times when they have felt that way. ♦ Introduce children to wordless picture books which are books that tell a story through illustrations only. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Add new items such as a magnifying glass to the Discovery Center and include items from nature such as bark and leaves. Encourage children to use the magnifying glass to look at the bark and leaves and describe what they see. Introduce the word “magnify” and explain that it means to make things look bigger. □ Invite children to describe or tell a story about their three-dimensional art creations. □ Invite children to read the pictures in the wordless book <i>Pancakes for Breakfast</i> by Tomie dePaola and create their own narratives. □ Place items such as a pine cone, a sponge, and a plastic egg in a feely box; invite children one at a time to reach in the box and retrieve one of the objects; and describe how it feels and what you might do with it. |
| GRAMMAR & SENTENCE STRUCTURE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Model the Standard English language, use more complex sentences, and plan activities that encourage children to follow your example. ♦ Use complete sentences when talking with children. ♦ Discuss with children things that happened yesterday, last week, or might happen in the future. ♦ Encourage children to use their imagination or pretend to be in another situation. ♦ Recognize that children sometimes make errors in their effort to learn a rule of English such as the “ed” of past tense. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ If a child at the lunch table pushes his chair back and says “All done,” expand it into a longer sentence: “You’ve finished your lunch and want to leave the table.” □ Ask children to recall some things the fire fighter showed them when he visited the classroom last week. □ Ask children what animals they think they might see if they visited the zoo. □ Say to children, “Pretend you are in a toy store and can choose one new toy to buy. What would that toy be and why would you choose it?” <ul style="list-style-type: none"> ○ After reading <i>A Rainbow of My Own</i> by Don Freeman, invite children to tell you what they would do if they had a rainbow of their own. ○ Pose this question to children when you are learning about animals that live in the jungle: “If you could be an animal in the jungle, what animal would you be? What would you do?” □ When the child says “We goed on a trip to Disney World,” without correcting the child say, “Yes, you and your family went on a trip to Disney World.” |

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| CLARITY OF COMMUNICATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Be familiar with the stages of language and speech development for children so that you can document their development and be aware of resources for referring children who may need an evaluation and possible speech and/or language therapy. ♦ Listen to children as they talk and document objectively what may be an articulation problem and/or language delay. ♦ Be familiar with resources in your area for referral of children with articulation problems and/or language delays. ♦ Know and follow the procedures for referral of children, including program policies and parent's role in the process. ♦ Coordinate with therapists by implementing suggestions for working with a child in the classroom who is having therapy. <p>Definitions: Articulation — The production of speech sounds. Language — The words we use to express ourselves orally.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ When speaking to children: <ul style="list-style-type: none"> ○ Get down on the child's level when they are speaking. ○ Clarify with child when a word is mispronounced or unclear. |
| LD3. COMMUNICATION SKILLS | | |
| LD3.1 COMMUNICATES USING SOCIAL AND CONVERSATIONAL RULES | | |
| CONVERSATIONS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Involve yourself in conversation with children and encourage them to converse with each other. ♦ Take advantage of natural opportunities for conversation through the day. ♦ Have conversations with children in which there are back-and-forth exchanges. This means actively listening to and responding to what the child says. ♦ Allow children plenty of time to express their thoughts and to respond to questions and comments. ♦ Provide interesting props and materials in the learning centers to encourage conversations among children. ♦ Join in children's play if they seem to need support in talking with each other. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ During greetings and departures and during meals and snacks are excellent opportunities for conversation with children. □ Adding restaurant props such as menus, order pads, pencils, and a cash register will encourage conversation and interactions among children in that center. □ Join children in the Dramatic Play Center that has been set up as a restaurant and pretend to be a customer. Say, "Could I see a menu please. I'd like to order dinner. Can you tell me what your favorite thing is on this menu?" |

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| SOCIAL RULES OF LANGUAGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Help children learn and use the social rules of language through modeling, reminders, and through adult-guided activities. ◆ Begin by having realistic expectations of children in the area of the social rules of language. ◆ Model all of the things you expect of children. ◆ Plan some small group activities with no more than six children so that each child can have an opportunity to be heard. ◆ Gently remind a child who is wanting to dominate a group discussion that we are to listen when others are talking and each child who wants to talk will be given that opportunity. ◆ Plan and use scenarios with children that give them opportunities to practice the social rules of language. <p>Teacher Note: <i>Keep in mind conversational exchanges and social rules of language can vary by culture (Arkansas CDELS, p. 49). This may require asking families to share about their cultural norms.</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Actively listen when children talk with you. □ Go near the child who is speaking to you rather than speaking loudly to her from across the classroom. □ Avoid getting in a child's personal space when talking with him. □ Say, "Excuse me" if talking to a child when you are needed in another area of the classroom. □ Consider using a "talking stick" or "stone" during group time. Only the child who is holding the object may talk, everyone else must listen. <p><u>Discuss social rules of language</u></p> <ul style="list-style-type: none"> □ "Becca is sitting too close to you during lunch. What would you say to Becca to let her know you need more space?" □ "A friend tells you that he is leaving the Computer Center and that you can now have a turn. What would you say to your friend?" □ "What could you say to a child who is talking to you in a very loud voice?" |
| LD4. ENGLISH LANGUAGE DEVELOPMENT OF DUAL LANGUAGE LEARNERS | | |
| LD4.1 DEMONSTRATES PROGRESS IN ATTENDING TO, UNDERSTANDING, AND RESPONDING TO ENGLISH | | |
| LD4.2 DEMONSTRATES PROGRESS IN SPEAKING AND EXPRESSING SELF IN ENGLISH | | |
| ENGLISH LANGUAGE DEVELOPMENT & HOME LANGUAGE DEVELOPMENT | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Treat all children's home language as equally important. ◆ Understand and accept that English language learners may <i>code switch</i> (mix the two languages). ◆ Learn and use key words in each child's home language. ◆ Integrate key words and phrases of the child's home language into daily and group-time routines such as greeting, singing, counting, story time, and transitions. If done for one language, do for all languages spoken in the classroom. ◆ Keep your language simple. Avoid jargon, slang, and idioms (example: "raining cats and dogs"). ◆ Maintain eye contact so children can see how words are formed. ◆ Talk through what you are seeing and doing. | <p>Examples and Activities</p> <p><u>Learn words for:</u></p> <ul style="list-style-type: none"> □ Greetings and goodbyes □ Food □ Toileting □ Clothing □ Family members <p><u>Include printed materials that reflect children's home language and culture</u></p> <ul style="list-style-type: none"> □ Children's books that are written in both English and the child's home language. Share the books with families. □ Empty and clean food containers that are labeled in children's home language, as well as in English. □ Learning center labels □ Menus □ Illustrated handwashing chart <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| <p>ENGLISH LANGUAGE DEVELOPMENT & HOME LANGUAGE DEVELOPMENT, CONTINUED</p> | <ul style="list-style-type: none"> ◆ Provide non-verbal supports to encourage dual language learners to learn the meaning of new words, such as gestures, pointing to objects or pictured objects, and letting children hold objects. ◆ Label materials in English and child's home language and add picture cues. If done for one language do for all languages spoken in the classroom. If this is not feasible for one secondary language, include only English. ◆ Encourage all children to work and play together so that children who speak a language other than English play with English-speaking children. Children who speak a language other than English may be motivated to communicate without the help of a teacher and both groups will learn language from each other. ◆ Utilize teaching assistants, volunteers, or other members of the community who may speak the child's home language to read books, tell stories, and sing songs in the child's home language. ◆ Support children as they progress in attending to, understanding, speaking, and expressing themselves in English while maintaining knowledge of their first language. <p>Teacher Notes:</p> <ul style="list-style-type: none"> • <i>Begin by reviewing English Language Development on pages 50 and 51 of the Arkansas Child Development and Early Learning Standards: Birth through 60 months (2016). You will find expectations for English language development outlined in three stages.</i> • <i>Use the indicators in these stages as a guide for planning appropriate experiences for the children in your classroom as they are learning English as a second language. The indicators can help you have reasonable expectations for children to become fluent in English. It is important to note that there is no set time for how long it will take a child to progress through these stages.</i> | <ul style="list-style-type: none"> □ Choose books, music, and other materials that reflect the range of cultures and languages of participating families so all children can see images and hear words and music with which they are familiar. □ Read predictable books that encourage children to join in the reading by repeating key phrases. □ Repeat familiar songs and rhymes with motions. This helps children feel comfortable about participating and gives them an opportunity to practice the language. □ Encourage pretend play in which children use actions and props as well as words. English-speaking children will often fill in the words, thus providing a natural opportunity for learning English. □ Pair two children, one who speaks English and one who is learning English, to work together on an activity such as using a magnifying glass to explore a new collection of sea shells in the Discovery Center. □ Encourage teamwork on an art activity such as creating a collage of things that grow. This activity will encourage children to communicate as they share the materials and plan where to place the items. □ Observe to see if English language learners may be hesitant to explore new and possibly unfamiliar materials such as play dough that has been added to the Art Center. Sit next to the child and explore the play dough by rolling it into a ball and then using the rolling pin to flatten it. This will say to the child that it is okay to explore the materials independently. □ Include books on CD in the home language of the children in the class. Share these with families to encourage continued development of the home language. □ Find creative ways to communicate with families about current topics of study and encourage them to talk with their children about the topics in their home language. |
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Emergent Literacy

The most important predictor of high school graduation is a child's ability to read by the third grade.¹ Yet, by age 3, there are already dramatic differences in the development of emergent literacy skills between children from low- and higher-income families. It is very difficult for a child who starts behind to catch up after entering school.² These facts make achieving the goal of reading by the third grade more challenging for children from low-income families.


Potential Warning Signs of Reading Difficulties or Delay

- **By 4 years old (48 months)**, a child has trouble scribbling, can't retell a favorite story, doesn't follow 3-part commands, doesn't understand *same* and *different* or *he* and *she*, doesn't use *me* and *you* correctly, or speaks unclearly.
- **By 5 years old (60 months)**, a child can't give his or her first and last name, doesn't use plurals or past tense properly, or doesn't talk about daily activities or experiences.

¹The Annie E. Casey Foundation. (2012). *Double jeopardy: How third-grade reading skills and poverty influence school graduation*. Baltimore, MD Retrieved from <http://www.aecf.org/m/resourcedoc/AECF-DoubleJeopardy-2012-Full.pdf>.

²See, for example, National Early Literacy Panel. (2008). *Developing early literacy; Report of the national early literacy panel*. Washington DC: National Institute for Literacy and National Center on Family Literacy.

| EL1. ENGAGEMENT IN LITERACY EXPERIENCES AND UNDERSTANDING OF STORIES AND BOOKS | | |
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| EL1.1 SHOWS INTEREST IN LITERACY EXPERIENCES | | |
| ENGAGEMENT IN LITERACY EXPERIENCES | Teaching Strategies <ul style="list-style-type: none"> ♦ Create an environment and plan daily activities that invite children to participate in and actively seek out a variety of literacy experiences. ♦ Give children daily opportunities to be actively engaged in read-alouds and conversations about books and stories. ♦ Read books daily using these guidelines for read-aloud: <ul style="list-style-type: none"> • Be familiar with the story. • Use a transition activity, such as a finger play or song, to prepare children for the story and to have them sitting comfortably and ready to listen. • Introduce the title, author and illustrator. • Ask children to predict what the story is about. • Hold the book in one hand, turn pages with the other hand. • Show the pictures to children as you read. • Vary your voice to match the characters, mood, and action. • Encourage participation such as saying repetitious phrases with you. | Examples and Activities <p><u>Include daily opportunities for children to participate in literacy experiences</u></p> <ul style="list-style-type: none"> □ Listening to and telling stories □ Singing □ Saying poetry and rhymes □ Engaging with writing materials □ Post rhymes, poems, songs, and finger plays at child's eye level □ Create a literacy-rich environment by incorporating books and other print into play □ Ask children questions about stories. "What did you like best about the story?" <p><u>Create a literacy-rich environment</u></p> <ul style="list-style-type: none"> □ Include print that is meaningful to children and serves a purpose. □ Use print and pictures to identify learning centers. □ Develop a Library Center that is attractive and inviting. <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| ENGAGEMENT IN LITERACY EXPERIENCES, CONTINUED | <ul style="list-style-type: none"> • Pause at end the of the story to allow for children’s honest reaction. • Invite discussion at the end of story with open-ended questions that encourage children to communicate their ideas; questions that require more than a “yes” or “no” or single word answer. • Gradually increase the length and complexity of stories you read. <p>Teacher Note: <i>Arrange for children with visual impairment or hearing loss to sit close to the reader during story time so they can see the pictures or hear the words as the book is read.</i></p> | <ul style="list-style-type: none"> □ Display a daily schedule that includes both pictures and words. Introduce the schedule to children and refer to it throughout the day. □ Display the alphabet at children’s eye level and have small alphabet cards for children to refer to as they write. □ Post illustrated procedures for washing hands. □ Post and review with children menus for meals and snacks. □ Remove print when it is no longer meaningful to children or no longer serves a purpose. <div data-bbox="1108 370 1982 467">  <p>For more information on adding books and other literacy materials to learning centers, see the Resources section (p. 56).</p> </div> |
| VARIETY OF INTERESTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Have available and read with children a variety of types of books to meet their many interests and developmental levels. ♦ Make a wide selection of books accessible to children for a substantial portion of the day for independent reading. ♦ Include books in many areas of the classroom. ♦ Read to children several times a day—regular sized books as well as big books. ♦ Share books with children in large and small group settings and with individual children. ♦ Have criteria for choosing the books you read to children. <ul style="list-style-type: none"> • Does the book relate to current classroom activities or topics of study? • Does the book present through text and illustrations new information and ideas that are important for children to know? • Is the book a good match for children’s developmental levels? • Does the story relate to children’s experiences? • Is the book relevant to children’s families and cultures? • Is the book written by a familiar or favorite author? | <p>Examples and Activities</p> <p><u>Include the following types of books:</u></p> <ul style="list-style-type: none"> □ Picture books, including wordless books □ Informational books □ Books that relate to current classroom activities, topics of study, or themes □ Mother Goose books □ Books of poetry □ Folk and fairy tales □ Illustrated biographies □ Books that reflect diversity □ Books that reflect different abilities □ Books in children’s primary language and dual language books □ Books with large print for children with visual impairments □ Books that are made by teachers and children |
| EL1.2 ENGAGES IN READ-ALOUDS AND CONVERSATIONS ABOUT BOOKS AND STORIES | | |
| ENGAGEMENT WITH BOOKS AND STORIES | <p><i>This Strand is Birth through 36 Months</i></p> | |

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| STORY COMPREHENSION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Use a variety of strategies to support children’s comprehension of the stories that have been read to them. ◆ Consider reading to small groups of children, thus making it easier for children to talk about the story. ◆ Show the pictures in the book as you read the story and talk about them to support children’s comprehension of the narrative. ◆ Read a book more than one time to children. Consider having a different focus for each reading. ◆ Encourage children to ask questions, make predictions, talk about the story, and connect new ideas with what they already know. ◆ Help children think about whether or not their predictions were correct. ◆ Define words and phrases during the reading of the story to support story comprehension. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Using the book <i>The Seasons of Arnold’s Apple Tree</i> by Gail Gibbons, discuss the meaning of seasons during the first reading of the book. Then during the second reading, discuss changes to apple trees during seasons and during the third reading, discuss what Arnold does during each season. □ Present stories in different ways: <ul style="list-style-type: none"> ○ Read and discuss <i>Caps for Sale</i> by Esphyr Slobodkina. ○ Invite the children to act out the story as you read it and help with as much of the language as they can. ○ Place the story board and story board characters (felt, flannel, Velcro®, or magnetic), along with the book, in the Library Center. |
| STORY STRUCTURE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Model story retelling and give children a variety of opportunities to retell stories from favorite books, as well as from their personal experiences. ◆ Select stories that are appropriate for children to retell that include simple plots, familiar characters, phrases, and sequences. ◆ Involve children in retelling stories they have heard to discover how well they remember the characters, setting, and sequence of events. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Use props to retell a story you have already read to the children. For example: <ul style="list-style-type: none"> ○ Use objects from the story <i>Ask Mr. Bear</i> by Marjorie Flack. You might use a hen, goose, goat, sheep, cow, and bear to tell the story (plush animals or beanbag toys can also be used). ○ Use clothesline story props from the story <i>The Three Bears</i> by Paul Galdone. You might use pictures of the three bears, Goldilocks, three different sized bowls of porridge, three different sized chairs, and three different sized beds. ○ Use picture props from the story <i>The Napping House</i> by Audrey Wood, illustrated by Don Wood. You might use a bed, granny, boy, dog, cat, mouse, and flea. ○ Use puppets from the story <i>The Little Red Hen</i> by Paul Galdone. You might use hand, stick or body puppets made or purchased for the hen, dog, cat, and mouse. □ Suggested stories for children to retell: <ul style="list-style-type: none"> ○ <i>The Very Busy Spider</i> by Eric Carle ○ <i>Who Sank the Boat</i> by Pamela Allen ○ <i>The Three Billy Goats Gruff</i> by Paul Galdone ○ <i>Brown Bear, Brown Bear, What do You See?</i> By Bill Martin, Jr. illustrated by Eric Carle ○ <i>The Very Hungry Caterpillar</i> by Eric Carle <p>Teacher Note: See Story-A-Month for storytelling figures on the Arkansas Better Beginnings website to be made into characters to use with felt, flannel, Velcro®, and magnetic boards and puppets.</p> |


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| INFORMATIONAL TEXTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Include informational books in your classroom environment and in your selection of books for reading aloud with children. ◆ Consider these criteria for determining if a book can be classified as informational: <ul style="list-style-type: none"> • Is written in simple language with realistic illustrations that support the text. • Is visually attractive to children. • May have a table of contents, an index, and a glossary. • May contain technical words with clear explanations. • Has a focus on factual content or a process that pertains to the physical, biological, or social world. <p>Teacher Note: <i>Informational books are not intended to replace other types of books. They are intended to be an addition to and expansion of your curriculum.</i></p> <p>Definition: Informational books — A type of non-fiction that uses both text and illustrations to convey meaning about the natural and social world. Informational books provide both facts and explain processes. Illustrations are realistic and can include photographs, diagrams, charts, graphs, labels, and captions.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Pair informational books with story books to help children better understand the content of the story book or in response to something children asked during the reading of a story book. For example, pair the informational book <i>Owls</i> by Gail Gibbons, with the story books <i>Owl Babies</i> by Martin Waddell and/or <i>Goodnight, Owl</i> by Pat Hutchins. □ Include an informational book in response to something in which a child or children show an interest and express curiosity and a desire to learn more. □ Know your children’s attention span and their level of understanding and decide whether to read the informational book in its entirety, read only selected parts, or show the pictures and read limited text. □ Place informational books throughout the classroom. For example, place <i>How a House is Built</i> by Gail Gibbons in the Block Center and <i>Bread, Bread, Bread</i> by Ann Morris in the Dramatic Play Center. <p><u>Informational books should focus on the following topics:</u></p> <ul style="list-style-type: none"> □ Living things □ Nature and the environment □ Physical objects □ Tools and engineering practices □ Family and culture □ Geography |
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| EL2. PHONOLOGICAL AWARENESS | | |
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| EL2.1 NOTICES AND MANIPULATES THE SOUNDS OF LANGUAGE | | |
| EXPLORATION OF SOUNDS OF LANGUAGE | This Strand is Birth through 36 Months | |
| RHYME | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Give children opportunities to hear, identify, and generate rhyming words. ♦ Engage children in a variety of rhyming activities. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Use rhyming fingerplays, chants, and songs with children. □ Read nursery rhymes, poems, and stories with rhyming texts with children. □ Tell children to fill in rhyming words of a song, fingerplay, or story. □ Provide opportunities for children to decide whether two words rhyme. □ Ask children to generate or create nonsense words that rhyme with a word presented to them. For example, they might create words like “featza” or “beatza” when presented with the word pizza. □ Substitute words and children’s names in nursery rhymes or familiar phrases such as “Luis be nimble, Luis be quick, Luis jump over the candlestick.” □ Read the book <i>Down by the Bay</i> by Raffi, illustrated by Nadine Bernard Westcott and allow children to help you fill in the blanks of the song lines, “Have you ever seen a ____ eating a ____?” They can use real or generated words. |
| ALLITERATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Include activities that help children understand that some words begin with the same sound. ♦ Read alliterative story books to children. ♦ Use letter sounds during transitions. <p>Definition: Alliteration — Similar initial sounds of words that begin the same way, such as in big beautiful buttons.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Alliterative books such as <i>Silly Sally</i> by Audrey Wood and <i>A My Name Is Alice</i> by Jane Bayer. □ Say nursery rhymes, such as “Jack and Jill” and “Peter, Peter, Pumpkin Eater”, with children. □ Ask, “There are two children in the group whose name begins with the /b/ sound. Who do you think they are?” □ Ask children to think of words that begin with the same sound. “What word begins with /d/ like duck, /b/ like ball, /m/ like mouse, and /p/ like pumpkin?” □ Letter sounds: “Everyone whose name starts with the same sound as baby and balloon, go to the circle for story time.” □ Repeat chants, nursery rhymes, tongue twisters, poems, and songs with repeating beginning sounds with children. □ Play name games with children such as, “Cantrell likes carrots, Ben likes bunnies, and Jack likes juice.” |

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| MANIPULATING UNITS OF LANGUAGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Make phonological awareness part of the everyday classroom environment. ◆ Clap out each word in a sentence with children. ◆ Clap out syllables of words with children or tap with rhythm sticks, such as their name or other familiar words. ◆ Use phonological awareness activities during transitions and routines. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Put phonological awareness games, activities, and rhyming books in learning centers around the room. □ When shown a toy (football), children can clap the syllables of the word as they move to centers. |
| EL3. KNOWLEDGE AND USE OF BOOKS, PRINT, AND LETTERS | | |
| EL.3.1 RESPONDS TO FEATURES OF BOOKS AND PRINT | | |
| BOOK KNOWLEDGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Promote children’s understandings of books through modeling and daily experiences with books. ◆ Introduce the parts of a book: cover, title page, pages, title, author, and illustrator. ◆ Model and discuss with children how to use and care for books. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Demonstrate holding the book right-side up. □ Demonstrate starting at the beginning and turning pages one at a time from front to back. □ Demonstrate how to turn the pages gently. □ Demonstrate how to return books to the display area. |
| PRINT KNOWLEDGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Include daily opportunities for children to acquire knowledge of print concepts. ◆ These are print concepts that children begin to acquire: <ul style="list-style-type: none"> • Print carries a message such as labels for materials and lists throughout the room. • Print represents spoken language. • Words are made up of letters. • Print is read from left to right and top to bottom. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Encourage children to become authors and illustrators through writing about a class visitor and drawing a picture to illustrate the visit. □ Use children’s attempts at writing to engage them in trying to sound out words and help draw their attention to words they know that begin with the same sound. For example, when a child asks, “How do you spell mom?” tell him, “It starts like Marishka’s name.” <ul style="list-style-type: none"> ○ Take children’s dictation and focus on the sounds in the child’s words rather than the names of letters, saying the sounds in an elongated manner as you write. ○ Say the letters of a word as you write it on a chart. ○ Run your hand under each line on a nursery rhyme as the children say the rhyme. |

EL3.2 SHOWS KNOWLEDGE OF THE SHAPES, NAMES, AND SOUNDS OF LETTERS

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| ALPHABET KNOWLEDGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide materials and plan activities that foster children’s awareness of print in their environment and to recognize and name an increasing number of letters correctly. ◆ Post the alphabet at children’s eye level. ◆ Display children’s names next to the classroom jobs for the week. Children can begin to recognize the letters in their own names and those of friends, as well as other important words. ◆ Use read alouds to reinforce letter-name knowledge. <p>Definition:</p> <p>Environmental Print — The print found in the natural environment of the child; including print on food containers and other kinds of product boxes, store and restaurant signs, road, street and traffic signs, commercial signs, billboards, advertisements, and the logos of products we use every day. It is the print we recognize not so much because of the letters or words, but because of the colors, pictures, and shapes surrounding the print.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Place small alphabet cards in the Library Center or Writing Center. □ Use pictures and words on recipe cards or charts for use in nutrition experiences. □ Read alphabet books such as <i>Chicka, Chicka, Boom Boom</i> by Bill Martin, Jr. and John Archambault to the children. <ul style="list-style-type: none"> ○ Make sure the pictures in an alphabet book begin with a single letter sound rather than a blend. For example, <i>book</i> instead of <i>block</i>. ○ Choose books that use upper and lower case letters correctly. □ Use letters as they come up in real situations: <ul style="list-style-type: none"> ○ Write children’s names on their art work and to label their cubbies. ○ Make and laminate a name card for each child and use for activities such as roll call or for placing on the helper’s chart. ○ Write signs upon request by children. A child may want a <i>Work In Progress</i> sign for his block structure. ○ Use appropriate upper and lower case letters when writing. ○ When reading with children the stories they have dictated, call attention to words that begin with the same letters of the alphabet. ○ Let them pick out the letters in their names. □ Provide multi-sensory experiences such as writing letters in sand and other approved media; shaping letters out of play dough, chenille sticks, or Wikky-Stix®. □ Provide environmental print activities and materials: <ul style="list-style-type: none"> ○ Ask children to bring in the label of their favorite cereal and make these into a class book. ○ Cut the front of the box of snack crackers into puzzle pieces for children to put together. ○ Make an <i>I Can Read</i> book by gluing assorted labels onto cardstock and binding them together for children to read. Include popular labels of toys and stores where children visit. |
| LETTER-SOUND CONNECTIONS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Focus on letter-sound connections by planning meaningful activities and experiences for children. ◆ When reading with children the Language Experience Approach (LEA) to stories they have dictated, call attention to words that begin with the same letters of the alphabet and have the same sound. ◆ As children are learning to recognize letters of the alphabet, also share the letter-sound connections. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide a teacher made or purchased set of objects that begin with the same sound (letter). Label a container with a beginning letter-sound such as /b/ and a picture of a ball. <ul style="list-style-type: none"> ○ Add a second letter-sound container (such as /m/ and a picture of a mouse) and add others as children are ready. ○ Encourage children to place the objects in the correct container. |

| EL3.3 DEMONSTRATES EMERGENT WRITING SKILLS | | |
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| PRE-WRITING EXPLORATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ This Strand is birth through 36 months but children will continue to benefit from a variety of pre-writing opportunities. ♦ Recognize that some children may be in the pre-writing stage and give them opportunities to develop fine motor skills, including exploration of writing tools. | <p>Examples and Activities</p> <p><u>Activities to help children develop fine motor skills</u></p> <ul style="list-style-type: none"> □ Working with play dough □ Stringing beads □ Working simple three-to-four piece puzzles □ Engaging in water and sand play □ Participating in finger plays □ Painting with a brush □ Finger painting □ Drawing with crayons and markers <p><u>Writing tools for children to explore</u></p> <ul style="list-style-type: none"> □ Crayons □ Markers □ Sidewalk chalk |
| LETTER AND PRINT WRITING CONCEPTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Intentionally model writing in meaningful, purposeful ways and provide opportunities for children to progress from scribbles to writing a number of letters correctly. ♦ Model writing for different purposes and call it to children's attention. ♦ Write down children's dictation and read it back to them, then ask them to read back the words you have written for them. ♦ Have available a supply of writing materials in a writing center and/or in other areas of the classroom. ♦ Give children daily opportunities to write. ♦ Help children learn an efficient pencil grip. <div>  <p>Refer to the Resources section for suggested writing materials and information on helping children learn an efficient pencil grip (pp. 56-57).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Let children see you write their names, attendance records, and notes to parents (modeled writing). □ Write, with children's input, a thank you note to a classroom visitor such as the librarian who told them stories with puppets. □ Spell words aloud as you write children's dictation. □ Call attention to how letters are formed. "When you make the letter A, notice how the line goes up, down, and across." □ As you write with children, call attention to the punctuation marks used in writing. For example, periods, question marks, and quotation marks. "I better put a period here so others will know to stop when they are reading it." □ Have children dictate a story that you write down for them after an experience such as a listening walk on the playground or a field trip to a point of local interest. □ Invite children to dictate stories to go with their artwork and write what they say. □ Involve children in writing their names each day. For example, signing in at arrival and writing their name on their art work. □ Have children write for a purpose such as a greeting card to a family member or to one another. □ Encourage journal writing where children are given a personal journal (a small notebook or several pages stapled together to form a book) in which they draw, dictate, or write about a self-selected topic. Have journals available for children to write in independently as they choose. |

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| EARLY WORD WRITING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children who have progressed to the early word writing stage. ◆ Have word cards available for children who are interested in writing words. ◆ Support children who have begun to use invented spelling when they begin to write words independently. ◆ Support children by responding to their request for help in spelling a word correctly. <p>Definition: Invented (developmental) spelling — Spellings that result from a beginning writer’s initial attempts to associate sounds with letters. (p. 123, <i>Learning to Read and Write</i> by Susan B. Neuman, Carol Copple, and Sue Bredecamp, NAEYC [1999]).</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Help the child by saying the word slowly, producing the sounds of the letters in the word, while encouraging the child to listen to the sounds. □ Encourage the child to write what they hear. During this stage of writing children are beginning to make the letter and sound connection. □ Display their writing attempts as proudly as you do their pictures. Children learn about print by using it. They need encouragement: “You wrote me such an interesting note!” □ Let children write whenever they are interested, while never forcing them to practice writing. □ Comment on the child’s attempts to write. “You made a whole row of C’s, then a row of M’s.” <div>  <p>Refer to the Resources section (p. 57) for information on stages in early word writing.</p> </div> |
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RESOURCES

Emergent Literacy

EL1. ENGAGEMENT IN LITERACY EXPERIENCES AND UNDERSTANDING OF STORIES AND BOOKS

EL1.1 SHOWS INTEREST IN LITERACY EXPERIENCES

Strand: Engagement in Literacy Experiences

Adding Books and Other Literacy Materials to Learning Centers:

- **Library Center:** soft homelike touches such as rugs, pillows and beanbag chairs; a variety of books; materials such as felt or magnetic board and figures for story retelling; puppets; materials for listening such as a CD player, earphones, and a variety of recordings of familiar stories
- **Dramatic Play Center:** a recipe book and a telephone directory developed by the teacher and children; a phone and pad and paper for taking messages; magazines; empty food containers; grocery store ads
- **Discovery Center:** story books and informational books related to the items in the center; science magazines
- **Block Center:** children's books about construction and tools; blue prints; repair manuals; traffic signs; memo pads and pencils or markers for making signs and labels
- **Sand and Water Centers:** alphabet cookie cutters; posters of sand castles and boats; sink-or-float sorting charts; sponge or foam letters
- **Art center:** children's books about art; books with art by famous artists; alphabet cookie cutters; alphabet stamps; alphabet sponges; chalk; colored pens and pencils; greeting cards; lined and unlined paper
- **Manipulative Center:** alphabet bingo; alphabet puzzles; alphabet blocks; magnet letters and board
- **Music Center:** alphabet songs on CDs; labeled posters of musical instruments; song charts

- **Technology Center:** technology tools and mobile digital devices such as computers and tablets; appropriate literacy-related apps, games and computer programs; name cards for children to refer to; picture dictionaries for reference when typing; illustrated signs of rules for using and caring for equipment in the area
- **Outdoor environment:** labels for garden plants; sidewalk chalk; traffic signs; laminated environmental print signs such as "Sudsy Car Wash", pad and pencil for recording birds observed or sounds heard

Teacher Note: *The Listening Center and Writing Center are sometimes part of the Library Center and sometimes stand-alone centers.*

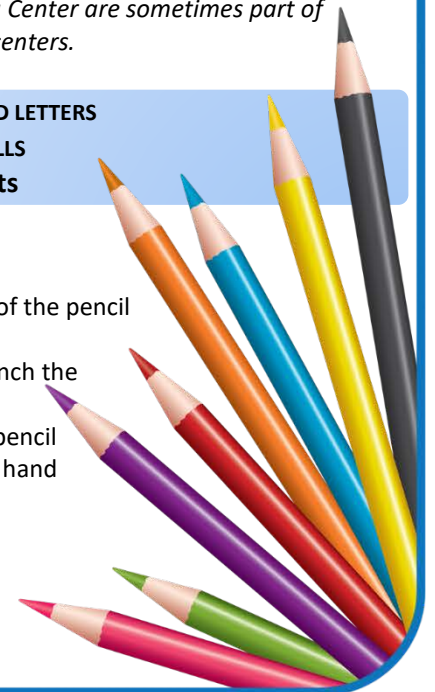
EL3. KNOWLEDGE AND USE OF BOOKS, PRINT, AND LETTERS

EL3.1 DEMONSTRATES EMERGENT WRITING SKILLS

Strand: Letter and print writing concepts

Efficient Pencil Grip

- Model and say to children:
 - Lay the pencil on the table with the point of the pencil facing your tummy.
 - Use your thumb and first two fingers to pinch the pencil close to the point.
 - With your other hand take the top of the pencil and push it back where it will rest on your hand between your thumb and first finger.



Writing Materials

- Crayons
- Dry erase markers and dry erase boards
- Markers (thick and thin)
- Envelopes/postcards/stationery
- Tactile letters
- Magnetic letters
- Letter stencils
- Glue
- Rubber stamps
- Picture dictionary
- Chalk (colored and white) and chalkboard
- Pencils/pens (including colored pencils)
- Stickers
- Blank books (lined and unlined)
- Magic slates
- Index cards
- Note pads
- Different types of paper (construction, lined, unlined, newsprint, computer)

Strand: Early Word Writing

Stages in Early Word Writing:

- As they are interested, some children may begin to go through stages in early word writing. For example:
 - They may begin just writing the first letter of a word.
 - Next they may add the ending letter sound.
 - Finally, the middle letter sounds and vowels come later.



Mathematical Thinking

Young children love to think mathematically. They enjoy building block towers, comparing quantities, and creating patterns. Children have an inherent interest in mathematics and can learn mathematical concepts at a very young age. The years before a child enters school are called the “years of promise” for mathematics because they are particularly important for mathematics development.¹ Children who demonstrate strong prekindergarten math skills are more advanced in mathematics achievement in 10th grade.² Furthermore, the complexity of children’s block play in preschool has been linked to future success in junior high and high school, predicting the number of mathematics courses taken, the number of honors classes taken, the grades received in mathematics, and mathematics achievement scores.³ Children’s mathematical abilities as they enter kindergarten predict their mathematics achievement throughout school and are even related to later reading achievement.⁴

Potential Warning Signs of Developmental Delay

- For older preschool children (4–5 years old), difficulty learning to associate specific numbers to a small group of items (i.e., fewer than four), sorting items in logical ways, remembering numbers, and sensing time accurately (e.g., wants to know soon after arriving at school why it’s not lunchtime already).
- Five-year-old children who do not recognize numbers, have difficulty counting, and have problems recognizing patterns, sizes, shapes, or colors.

¹Clements, D. H., & Sarama, J. (2014). *Learning and teaching early math: The learning trajectories approach* (2nd ed.). New York, NY: Routledge.

²Stevenson, H., & Newman, R. (1986). Long-term prediction of achievement and attitudes in mathematics and reading. *Child Development*, 57, 646-59.

³Wolfgang, C., Stannard, L., & Jones, I. (2001). Block play performance among preschoolers as a predictor of later school achievement in mathematics. *Journal of Research in Childhood Education*, 15(2).

⁴Duncan, G.J., et al. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6).

| MT1. NUMBER CONCEPTS AND OPERATION | | |
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| MT1.1 DEMONSTRATES NUMBER SENSE AND AN UNDERSTANDING OF QUANTITY | | |
| NUMBER NAMES & COUNT SEQUENCE | Teaching Strategies | Examples and Activities |
| | <ul style="list-style-type: none"> ♦ Involve children in activities that support their ability to say number names in order as they count and to name what number comes after another with decreasing need of counting up from one. ♦ Use number names in daily routines such as counting the children in attendance, counting three crackers for each child for snack, and counting the number of children in a learning center. ♦ Combine counting with actions such as clapping five times or jumping up and down three times. | <ul style="list-style-type: none"> □ Sing songs such as “This Old Man” and say rhymes such as “One, Two, Buckle My Shoe”, in which children say number names in order. □ Teach children finger plays such as “One, two three, four, five. Once I caught a fish alive. Six, seven, eight, nine, ten. Then I let it go again.” Repeat the rhyme, stop after four and ask children “What comes next?”, then stop after nine and ask children “What comes next?” Note that children may say “five” and “ten” without prompting. |

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| COMPARISON OF QUANTITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children in their understanding and use of ordinal words and in their ability to compare two or more sets of objects to determine which has more or less. ◆ Use ordinal number words in everyday communication with children. <p>Definition: Ordinal numbers — 1st, 2nd, and 3rd indicate sequence such as where someone is in line, the position of items in a row of objects, or the steps in an activity such as brushing teeth.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Remind children that the first thing they are to do when they enter the classroom each morning is to wash their hands. □ Say, “Miguel, since you are the last one in line, please turn off the lights as we leave the classroom.” □ Review the chart with children that lists in numerical order the steps they are to follow as they wash their hands, and then post the chart on the wall near the handwashing sink where they can see it. □ Create a recipe chart using written numerals to indicate the steps to take when participating in a food experience. □ Read a book such as <i>The Three Billy Goats</i> by Paul Galdone and discuss with children what the first Billy Goat did, what the second Billy Goat did, and what the third or last Billy Goat did. □ Count the number of boys and the number of girls in attendance and decide which group has the most and which has the least. □ Involve children in a graphing activity in which they select their favorite of three farm animals, count the number selected for each choice, and determine which animal received the most votes. Write a summary story describing the results. Five children liked the horse the best. Three children liked the pig the best. Two children liked the rooster the best. More children liked the horse the best. □ Give each child in a group of five children a different number of items such as counting bears or bottle caps. Involve children in counting the number of items each has and determining which child has the most and which has the least of the items. □ Ask a child, “Which two dominoes have the same number of dots?” |
| CONNECTION OF NUMBER, NUMERAL, & QUANTITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Give children daily opportunities to understand concepts of one-to-one correspondence, cardinality, subitizing, numeral/quantity relationship, and the concept of zero by having available for them materials to explore and by involving them in adult-guided experiences that support these concepts. <p>Teacher Note: <i>Involve children in putting the number/numeral two piece puzzles in order from 1 to 5, then from 1 to 10.</i></p> <p>Definitions: One-to-one correspondence — Matching one number word to each object in a group being counted. Cardinality — The last number counted represents how many objects in a group.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Create meaningful displays that highlight the use of numbers and numerals; displays posted at child’s eye level: <ul style="list-style-type: none"> ○ Birthday charts ○ Attendance charts ○ Daily schedule ○ Class-made charts and graphs ○ Counting rhymes and songs □ Add to the learning environment materials such as magnetic, wood or cardboard numerals; number stamps; calculators; spinner games with numbers; rulers; cloth measuring tapes; dominoes with dots; and number cubes (dice). <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| <p>CONNECTION OF NUMBER, NUMERAL, & QUANTITY, CONTINUED</p> | <p>Subitize — Instantly recognizing without counting how many objects in sets of one to four objects.</p> <p>Number/quantity relationship — Understanding that a written numeral such as 3 represents three objects.</p> <p>Zero — Understanding that zero means <i>none</i>.</p> | <ul style="list-style-type: none"> □ Add items children can count: beads, blocks, shells, bottle caps, plastic chips. □ Play games such as number bingo and dominoes with the children. □ Provide materials that show one-to-one correspondence: <ul style="list-style-type: none"> ○ Pegs and pegboards where children put one peg in each hole. ○ An equal number of nuts and bolts that fit together. ○ Colored markers with matching tops. ○ One napkin and one spoon for each child at the snack table. ○ One scarf for each child to use for dancing. ○ Counting the number of chairs around a table or the number of steps on the outdoor climber. ○ Read books such as <i>Ten Red Apples</i> by Pat Hutchins and invite children to count the number of apples on each tree. ○ Role play <i>The Three Bears</i> where each bear has a bowl, a chair, and a bed (towels). ○ Read to children the story of <i>The Three Little Pigs</i> and talk about a house for each pig. Model storytelling by using felt or magnetic figures of the three pigs and the three houses. Then provide children opportunities to retell the story by using the figures. □ Cardinality <ul style="list-style-type: none"> ○ Count objects in a collection and then ask children how many there are. After counting boys and then counting girls in attendance, ask “How many boys are here today? How many girls?” After counting the pine cones that were collected on the playground, ask “How many pine cones are we adding to the science table?” □ Subitizing <ul style="list-style-type: none"> ○ Ask children to watch you put four small cars under a towel and then close their eyes while you remove one. Take the towel off the cars and invite children to tell you without counting how many cars they see. Repeat this activity with the number of items ranging from two to five. □ Number/quantity relationship <ul style="list-style-type: none"> ○ Include commercial or teacher-made number/numeral two-piece puzzles from 1 to 10. Each puzzle contains one piece with a numeral and the other piece contains a corresponding number of objects. □ Zero <ul style="list-style-type: none"> ○ Involve children in saying rhymes such as Five Little Monkeys Jumping on the Bed. After saying the last line, “No more monkeys jumping on the bed,” ask children how many monkeys are now jumping on the bed. ○ Ask a child, who had three crackers for snack and has eaten all of them, how many crackers he had and how many he now has. |
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| MT1.2 EXPLORES COMBINING AND SEPARATING GROUPS (NUMERICAL OPERATIONS) | | |
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| CHANGES IN QUANTITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide materials and plan activities that help children understand that adding to or taking away objects from a group increases or decreases the number of objects in the set. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Make available materials that can be added or taken away: unit blocks, colored blocks, beads, small animal figures, plastic chips (poker chips). □ Encourage children to ask for or give up materials that will increase or decrease the number they have. Suggest that Maria ask Stanley for two more unit blocks so she can complete her garage. □ Play games that involve adding objects and taking away objects to help children understand changes in quantity: <ul style="list-style-type: none"> ○ Give Juan seven bears, ask him to give Naomi four of the bears, and then ask him how many bears he now has. ○ Reverse the game by asking Naomi, who received four bears from Juan, to give him back two of the bears. ○ Ask each child how many bears she or he now has. |
| ADDITION & SUBTRACTION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Involve children in solving simple addition and subtraction problems. ◆ Talk with children during routines and play, bringing attention to when things are added or subtracted in the environment. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide materials that children can use for addition and subtraction: beads, blocks, shells, bottle caps, small animal figures, plastic chips (poker chips). <ul style="list-style-type: none"> ○ Two children are drawing at the art table when another child joins them. Say to the children, “There were two children at the art table. Now Ramona has joined you and that makes three. So we need one more piece of paper for her.” ○ Jesse has set the table for lunch for six children who usually sit at the table. Say to him, “Remember that Kia sits at that table and she is not here today.” ○ A child is lining up small plastic dinosaurs in a row. Ask him how many dinosaurs there would be if he added two more to make the row longer. □ Read books such as <i>The Gingerbread Boy</i> by Paul Galdone in which characters are added to the story one at a time, and <i>Quack & Count</i> by Kevin Baker in which ducks are added in different groupings. □ Introduce children to subtraction through songs and finger plays such as “Six Little Ducks” and “Five Little Speckled Frogs.” Model and encourage them to use their fingers so they can visually see the results of subtraction. |

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| EARLY DIVISION AND FRACTIONS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Introduce the concepts of division and fractions to children with hands-on experiences and with discussion and questions. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Take a basket of plastic eggs that separate and give each child one egg at group time. Encourage children to open the eggs. Discuss with them that they had a whole egg and now they have two halves. □ Invite children to think of other things that can be divided into halves (apples, oranges, sandwiches, a sheet of paper). □ Pose this question to children: “Two children have one apple to share for a snack. What can be done so that each child has a fair share or equal amounts of the apple?” □ Read to children the book <i>The Little Mouse, The Red Ripe Strawberry and The Big Hungry Bear</i> by Audrey and Don Wood. Involve children in discussing what happened to the strawberry at the end of the story (it was cut in half and eaten). |
| MT2. ALGEBRAIC THINKING | | |
| MT2.1 USES CLASSIFICATION AND PATTERNING SKILLS | | |
| CLASSIFICATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Encourage children to sort and classify by one, and then by more than one attribute as they explore materials in the environment. ♦ Engage children in activities that focus on classification and to explain why they classified items as they did. ♦ Provide materials that children can sort and classify by color, by size, and by shape. | <p>Examples and Activities</p> <p><u>Sorting and classifying</u></p> <ul style="list-style-type: none"> □ Blocks □ Balls □ Beads in different shapes and colors □ Small cars □ Discuss with children objects such as beads that are red and not red. □ Provide containers such as bowls, boxes, and baskets for sorting and classifying items. □ Encourage children to make collections of items such as pine cones and leaves found in nature. □ Play <i>I Spy</i> with children, inviting them to locate all of the materials in the classroom that are green or that are round. □ Introduce the concept of sorting by more than one attribute. Ask “Can you find all of the small red balls and put them in this basket?” <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| CLASSIFICATION, CONTINUED | | <ul style="list-style-type: none"> □ Play classification games such as <i>Things That Go Together</i>. Gather a group of items that include pairs of objects that go together; items such as shoe and sock, comb and brush, hammer and nail, pencil and paper, fork and spoon, and flower and vase. Separate the pairs, place the items in front of the children and ask children one at a time to select two items that go together and explain their choice. □ Play classification games with photos or pictures of items that go together after children have had lots of experience with real items. □ Provide commercial or teacher-made two-piece puzzles of paired items. □ Involve children in classifying foods that are healthy and not healthy, or sounds that are loud and not loud. |
| PATTERNING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide materials in the learning environment and plan activities that encourage children to recognize, create, and copy patterns; including visual, auditory, and movement patterns. ◆ Call children's attention to patterns. ◆ Involve children in patterning activities. ◆ Introduce pattern cards. ◆ Acknowledge patterns made by children. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Add items to the environment for children to explore: manipulatives such as stringing beads, small multi-colored blocks, pegs and pegboards, interlocking cubes of different colors, pattern/parquetry blocks, pattern cards, and items such as shells and other patterned items from nature. □ Add patterned wall paper samples or gift wrap to the art center, call attention to the patterns in the paper, and allow children to use the paper in their creations. □ Start a pattern with small colored blocks and say to children, "Can you make a pattern like this. It starts out red, green, red, green? What color block comes next?" Introduce more complex patterns as children are ready for them. □ Sing with children songs such as "Bingo" and invite them to clap the pattern as they spell the word B I N G O. □ Read books such as <i>Brown Bear, Brown Bear, What Do You See?</i> by Bill Martin, Jr. and Eric Carle, and then say to children, "Now that you know the pattern, read with me, "Brown Bear, Brown Bear, what do you see? I see a. . ." □ Invite children to follow your lead in movement patterns such as stomp, clap, clap, stomp, clap, clap, or slide, slide, hop, slide, slide, hop. □ Include patterning in music activities with instruments such as drums or rhythm sticks. Ask children to follow your lead as you beat out two loud and one soft, two loud and one soft. □ Encourage children to create their own patterns in movement or with the musical instruments. |

| MT3. MEASUREMENT AND COMPARISON | | |
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| MT3.1 PARTICIPATES IN EXPLORATORY MEASUREMENT ACTIVITIES AND COMPARES OBJECTS | | |
| MEASUREMENT | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Involve children in measuring and comparing objects using both standard and non-standard measuring tools. ♦ Explain to children what you are doing as you measure. ♦ Encourage children to use the measuring tools as they choose. ♦ Include opportunities for measuring as you involve children in food experiences. ♦ Present measurement problems to children that will motivate them to solve. ♦ Measure each child's height and weight and tell the child what it is as you record it on her individual health chart. ♦ Involve children in using balance scales to determine which object is the heaviest. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide standard measuring tools that are accessible for children to use such as rulers and cloth measuring tapes in the Block Center, balance scales in the Discovery Center, marked measuring cups in the Sand and Water Centers, marked measuring spoons and cups in the Dramatic Play Center, and thermometers both indoors and outdoors. □ While measuring tell children you are measuring a ½ cup of cereal into a bowl and one cup of milk into a glass for each child's morning snack. □ Introduce non-standard measuring tools such as yarn, ribbon, blocks, paper towel tubes, and shoes and involve children in using these tools to measure things such as the length of a table, the circumference of a watermelon, or the height of a block structure. |
| COMPARISON | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Introduce children to different strategies for comparing objects by attributes such as length and weight. ♦ Make comments and ask questions using comparison words. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Comment that it is colder outside than it is inside. Ask which straw is longer or which ball is smaller. □ Ask questions such as "How can you we find out which cup of sand is the heaviest; the one with wet sand or the one with dry sand?" |
| SERiation | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Involve children in organizing a small set of objects in an increasing or decreasing order. <p>Definition: Seriation — Child's ability to order objects according to an attribute such as height.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Provide materials such as measuring cups that fit one inside the other, measuring spoons, nesting dolls, cars and animals of different sizes. □ Invite children to put objects such as measuring spoons, three straws of different lengths, or three cars of different sizes in order, from smallest to largest or largest to smallest. □ Read the story <i>The Three Bears</i> by Paul Galdone to the children. Follow up the reading by involving children in role playing the story with three sizes of bears. □ Involve children in a fishing game where they use a fishing pole (dowel rod) that has a magnet tied to the end of the string. Children catch fish of different sizes and put them in order from smallest to largest. |


| MT4. GEOMETRY AND SPATIAL SENSE | | |
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| MT4.1 EXPLORES AND DESCRIBES SHAPES AND SPATIAL RELATIONSHIPS | | |
| SHAPE KNOWLEDGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Make time each day for children to explore and build with blocks. ♦ Store all blocks of the same shape and size together. Have a system for labeling where each shape and size of block is to be placed so that children have a visual reminder when returning the blocks to the correct place on the shelf. ♦ Label shapes with correct names when introducing them to children and when talking with them about the blocks they are using. ♦ Involve children in exploring shapes to determine how they are alike and different. ♦ Encourage children to use recyclable materials to create 3-D structures. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Have available a set of unit blocks that includes half unit, unit, double, and quadruple unit, plus triangles, columns/cylinders, ramps, arches, half circles, and other available shapes. □ Give a small group of children three shapes such as a half unit, a triangle, and a half circle to explore, and discuss how they are different. Place blocks in a feely bag and ask a child to reach in the bag and pull out the triangle. Ask the child how he knew it was a triangle. Give each child a turn. □ Add other types of blocks to the learning environment: nature blocks, tabletop building blocks, and jumbo cardboard blocks. □ Add magnetic tiles/builders that encourage children to build 3-D constructions. □ Add recyclable materials such as paper towel rolls, mailing tubes, tissue boxes, Quaker Oats® containers, and Pringles® cans to the Art Center. Label the paper towel roll, mailing tubes, Quaker Oats® containers, and Pringles® cans as cylinders and the tissue boxes as cubes. □ Have moldable materials, such as playdough or clay, available for children to create three-dimensional shapes. □ Give children yarn, chenille stems, or Wikki Stix® and ask if they can make two-dimensional shapes with them: square, rectangle, triangle, and circle. □ Make or purchase geoboards and add rubber bands. Encourage children to use the rubber bands to make and to name the various shapes. <p>Teacher Note: <i>Unit block sets can be ordered from school supply companies.</i></p> |
| SPATIAL SENSE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide opportunities for children to follow directions related to directionality, order, and position in space, and to mentally turn an object to perform simple tasks. ♦ Introduce the idea of a child's personal or self-space; space where they can move without touching anyone else, as they are involved in music and movement activities. ♦ Use spatial vocabulary when talking with children. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include materials (climbing equipment, large empty boxes, and tunnels) in which children can explore spatial concepts such as over/under, up/down, and in/out. □ Introduce spatial vocabulary to children through chants such as "Going on a Bear Hunt"; a chant that includes words such as over, under, through, around, up, and down. Add gestures as you say the words. <p style="text-align: right;"><i>(continued on next page)</i></p> |


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| SPATIAL SENSE, CONTINUED | | <ul style="list-style-type: none"> □ Play a game using hula hoops. Say to the children: “Walk around the circle”, “Jump inside the circle”, “Put one foot inside the circle”, “Stand inside the circle”, and “Stand outside the circle”. □ Sing with children songs such as “Hokey Pokey” and “Loopty Loo”; songs which direct children’s movements in space. □ Include CDs such as Hap Palmer’s <i>Learning Basic Skills through Music</i> that includes circle games in which children are directed to assume positions in space. □ Create indoor and outdoor obstacle courses where children can travel in/out, over/under, around/through objects such as furniture, climbers, and cones. □ For spatial vocabulary, tell a child to stand next to or behind another child, or to put the puzzle on top of the shelf. □ Interact with children as they are working on puzzles. Use terms such as turn, flip, or slide as you describe what the child is doing or what you are doing as you try to fit the pieces into the right space. |
| SHAPE MANIPULATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Give children materials and opportunities to build increasingly complex designs, pictures, and structures using two- and three-dimensional shapes and opportunities to manipulate shapes. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Cut out shapes of various sizes and colors and explain to children that you are adding circles, rectangles, squares, and triangles to the Art Center. □ Read the book <i>Changes, Changes</i> by Pat Hutchins to children. In this story, a little wooden couple transforms building blocks into a variety of structures. Discuss with children all of the things that the couple made as they manipulated the blocks. Ask children if they think they can build different structures like the wooden couple did. □ Place the book <i>Changes, Changes</i> in a book basket and add it to the block center. □ Notice and comment when you observe children building a structure with blocks, and then using the same blocks to build a different structure. □ Post pictures of different types of structures in the Block Center at child’s eye level. |

Science and Technology


Every young child is a natural scientist and engineer. Children strive to understand “the great mystery into which they are born” by observing the world around them and by experimenting. Even if a child doesn’t grow up to be a scientist, the process of identifying problems, thinking critically, observing, analyzing information, noticing patterns, and forming conclusions is important for success in adulthood. Researchers have identified three broad areas of science knowledge and skills that are important for future learning and success. The first is knowledge of scientific practices. These practices include asking questions, making predictions, and conducting investigations. The second area is an understanding of the big concepts of science like understanding parts of a whole, how structure relates to how something functions, and change over time. The final area is science content, which includes knowing about living things, the earth, space, and man-made objects.¹


¹NGSS Lead States. (2013). Next generation science standards. For states, by states. Washington, DC: The National Academies Press.


| ST1. SCIENTIFIC PRACTICES | | |
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| ST1.1 ENGAGES IN THE SCIENTIFIC PROCESS TO COLLECT, ANALYZE, AND COMMUNICATE INFORMATION | | |
| OBSERVATIONS, QUESTIONS, & PREDICTIONS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Encourage children to make observations, ask questions, and make predictions. ♦ Serve as a model for children by making observations and asking questions. ♦ Prepare to add materials to the learning environment and invite children to predict what might happen when you do this. <p>Teacher Note: Use these science related words: <i>observe, predict, and check</i>, to describe children’s actions as they are involved in the preceding activities.</p> <p>Definition:</p> <p>Prediction — A statement about what will happen or might happen in the future.</p> <div>  <p>A list of informational and picture books that relate to observing, questioning, and predicting is available in the Resources section (p. 79).</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Ask <i>I wonder</i> questions to model for children observations: “I noticed that there were no shadows on the playground today. I wonder why?” □ Say to Zach who is repeating rolling a truck down a block ramp, “Zach, I noticed that when you tilted the ramp, the truck went down the ramp faster. What do you think would happen if we used a longer ramp?” □ Add liquid detergent and egg beater to the water table and invite children to predict what will happen when they use the egg beater in the water (bubbles will form). □ Add a bucket, water, and a large paint brush for children to paint the side of the building or the sidewalk. Invite children to predict what will happen when the sun shines on the water. If children say water is gone or disappeared, explain that water has evaporated. □ Add blue and yellow play dough and invite children to predict what might happen when they mix two small balls of each color together. □ Ask children as they are playing in the Sand Center with molds and measuring cups, “What do you think will happen if we add water to the sand?” □ Involve children in exploring and describing a fruit such as an apple, predicting what is inside the apple, which the teacher writes down, and cutting it open to check their predictions against what they find. □ Read informational books and picture books with children and encourage them to observe, ask questions, and make predictions as you read the story and follow up with activities related to the story. |


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| INVESTIGATION & HYPOTHESIS TESTING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Engage children in exploring cause and effect relationships, in investigations, and in forming and testing hypothesis. ♦ Involve children in stating hypotheses and testing them through investigating and experimenting. <p>Definition: Hypothesis — An idea or explanation that you test through study and experimentation.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Investigation experiments <ul style="list-style-type: none"> ○ Some objects will sink and some will float ○ Some objects will hold water and some will not ○ Some objects are attracted to magnets and some are not ○ Some materials absorb water and some do not (wax paper, aluminum foil, paper towel, sponge) □ Involve children in investigating what happens when: <ul style="list-style-type: none"> ○ We mix cornstarch and water ○ We shake heavy whipping cream in a jar (butter) ○ We put a bottle of water in the freezer and ice cubes in the Discovery Center (freezing and thawing) <div data-bbox="1108 505 1982 621">  <p>Refer to the Resources section (pp. 79-80) for instructions on how to conduct experiments such as sink or float, freezing and thawing, mixing cornstarch and water, and making butter.</p> </div> |
| DATA ANALYSIS & COMMUNICATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Assist children in analyzing, interpreting, and communicating data. ♦ Involve children in comparing their predictions about experiments with actual results. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Collect and record information about the weather for a week and write a summary story. Include a pocket chart or Velcro® file folder in the Science or Discovery Center depicting the days of the week. Suggest children add the appropriate weather symbol for each day. <ul style="list-style-type: none"> ○ Involve children in analyzing the data that has been collected. ○ Invite them to dictate to you their analysis. Record what they say and read it back to them. ○ Make a graph with the children recording how many days were sunny, how many days it rained, and how many days were cloudy. □ Involve children in discussing and dictating to you what happened in the experiments conducted. Record what they say and read it back to them. They may say, “We put a bowl of ice cubes on the table and they melted” or “Ms. Annalese put the bottle of water in the freezer in the kitchen. The water froze in the bottle.” |



| ST2. KNOWLEDGE OF SCIENCE CONCEPTS | | |
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| ST2.1 DEMONSTRATES KNOWLEDGE OF CORE SCIENCE IDEAS AND CONCEPTS | | |
| SYSTEM PARTS & WHOLE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Help children identify that gears and parts are what make a toy or more complex systems function. ♦ Discuss with children the roles each family member plays to make the family function as a whole. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in creating a car from a large appliance box. Add chairs for seats. <ul style="list-style-type: none"> ○ Have children explore a real car if possible and identify various parts before beginning this project. If this is not possible, have them explore a toy car. ○ Guide them to decide which parts we need to add to the car and discuss how these parts make the car run. For example: <ul style="list-style-type: none"> △ Doors are needed so we can get in and out of the car. △ Tires are needed for the car to roll on. △ Steering wheel is needed so the driver can take us where we need to go. △ Headlights are needed so we can see where to go at night. ○ Observe children as they pretend to drive the car to determine if they are talking about the different parts of the car and their functions. □ Involve children in identifying the different parts of a tricycle and describe their functions. □ Discuss with children the different roles of the members of their family: <ul style="list-style-type: none"> ○ Who prepares the meals? ○ Who does the laundry? ○ Who cares for the younger children who are home while other family members are in school or are at work? ○ What tasks do family members do together? |
| STRUCTURE & FUNCTION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Involve children in activities that encourage them to observe and describe the basic features and functions of living things, objects, and materials. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Plan a topic of study that focuses on children's bodies and all the things their bodies can do. □ Include songs and fingerplays that introduce body parts and their functions: <ul style="list-style-type: none"> ○ <i>Head, Shoulders, Knees, and Toes</i> ○ <i>Hokey Pokey</i> ○ <i>Loopty Loo</i> □ Play parts of the body guessing game with children by beginning sentences and inviting children to finish each one. <ul style="list-style-type: none"> ○ "I can see with my _____ (eyes)" ○ "I can smell with my _____ (nose)" ○ "I can chew with my _____ (teeth)" ○ "I can hear with my _____ (ears)" <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| STRUCTURE & FUNCTION, CONTINUED | | <ul style="list-style-type: none"> □ Read books with children about parts of their body and what they can do. <ul style="list-style-type: none"> ○ <i>Here Are My Hands</i> by Bill Martin, Jr. and John Archambault ○ <i>From Head to Toe</i> by Eric Carle ○ <i>My Hands</i> by Alike ○ <i>My Feet</i> by Alike |
| STABILITY & CHANGE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide opportunities for children to develop an understanding of how things change. ♦ Discuss and document with children weather conditions and how they change. ♦ Involve children in learning about how they have grown and changed. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include in your topic of study of animals discussion, examples of how animals grow and change. The children's story book <i>Clifford the Small Red Puppy</i> by Norman Bridwell demonstrates this growth and change with both words and illustrations. <div style="background-color: #e6f2ff; padding: 10px; margin-top: 10px;">  <p>Examples on how to help children learn about how they have grown are available in the Resources section (p. 80).</p> </div> |
| ST3. KNOWLEDGE OF SCIENCE CONTENT | | |
| ST3.1 DEMONSTRATES KNOWLEDGE OF THE CHARACTERISTICS OF LIVING THINGS, THE EARTH'S ENVIRONMENT, AND PHYSICAL OBJECTS AND MATERIALS | | |
| LIVING THINGS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Support children's curiosity about and understanding of living things in their environment. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include in your curriculum topics of study that focus on animals and their habitats. Begin with the animals that are most familiar to children in your program: <ul style="list-style-type: none"> ○ Family pets ○ Animals on a farm ○ Animals in the woods ○ Animals in the water ○ Insects and spiders ○ Birds □ Include informational books that support topics of study that focus on animals and their habits, or to help children recognize what is alive and will grow: <ul style="list-style-type: none"> ○ <i>Owls</i> by Gail Gibbons ○ <i>Babies in the Bayou</i> by Jim Arnosky ○ <i>My Farm Friends</i> by Wendell Minor ○ The informational book, <i>Do You Know Which Ones Will Grow?</i> by Susan A. Shea, paintings by Tom Slaughter ○ Children's picture books: <i>Peter's Chair</i> by Ezra Jack Keats and <i>Clifford the Small Red Puppy</i> by Norman Bridwell <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| LIVING THINGS, CONTINUED | | <ul style="list-style-type: none"> ❑ Include in your curriculum activities that focus on trees, and on planting and caring for flowers and vegetables. ❑ Prepare a Yes or No Sorting Mat and involve children in sorting pictures of things that grow and do not grow. ❑ Include living things, such as a pet or a plant, in your classroom environment so that children can gain firsthand experience and learn responsibility. ❑ Involve children in taking responsibility for their care. ❑ Provide drawing and writing materials so children can document their observations. <div style="background-color: #e1f5fe; padding: 10px; margin-top: 10px;">  <p>Refer to Resources section for additional activities about trees, flowers, and vegetables (p. 81).</p> </div> |
| NATURE & THE ENVIRONMENT | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Encourage children to investigate natural elements in the environment and to have respect for the environment. Take advantage of the outdoor environment. ◆ Talk about the weather each day and make it relevant to children’s experiences. ◆ Relate day and night to children’s experiences. ◆ Encourage children to take care of the indoor classroom and indoor environment. <p>Teacher Note: Avoid giving children information that is not scientifically correct. For example, rather than saying the sun comes out during the daytime and moon and stars come out at night, say “We see the sun during the day and the moon and stars at night”.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> ❑ Take magnifying glasses and binoculars outdoors. ❑ Hang windsocks and wind chimes on the playground so that children can see and hear what happens when the wind blows. ❑ Read and discuss picture books about the wind: <ul style="list-style-type: none"> ○ <i>The Wind Blew</i> by Pat Hutchins ○ <i>Gilberto and the Wind</i> by Marie Hall Ets ❑ Read the book <i>It Looked Like Spilt Milk</i> by Charles G. Shaw on a cloudy day, and take a blanket outdoors for children to observe the clouds as they move across the sky. ❑ Plant a butterfly garden and involve children in observing and discussing the butterflies that visit the garden. ❑ Attract birds to the playground by: <ul style="list-style-type: none"> ○ Hanging bird feeders ○ Putting up birdhouses ○ Adding a birdbath ○ Putting out materials that birds can use to build nests: twigs, straw, string, and shiny ribbon <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| NATURE & THE ENVIRONMENT, CONTINUED | | <ul style="list-style-type: none"> □ Involve children in learning about shadows. <ul style="list-style-type: none"> ○ Begin by reading the informational book <i>Guess Whose Shadow?</i> by Stephen R. Swinburne, and/or the picture book <i>Moonbear's Shadow</i> by Frank Asch. ○ Take children outdoors on a bright and sunny day and invite them to look for shadows and notice where they see the shadows (on the ground, sidewalk, or wall of the building). ○ Return to the classroom and discuss with children their observations of shadows, then record and read back to them what they said. |
| PHYSICAL OBJECTS & MATERIALS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide opportunities for children to describe and categorize physical objects and materials. ◆ Identify similarities and differences in the environment with children. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include materials in learning centers that are different textures: <ul style="list-style-type: none"> ○ Sea shells and smooth river rocks in the Discovery Center. ○ Corrugated cardboard and aluminum foil in Art Center. ○ Clothing of different textures in the Dramatic Play Center: corduroy, leather, fur, and net. ○ Metal and wooden vehicles in the Block Center. □ Plan a texture sorting activity as follows: <ul style="list-style-type: none"> ○ Set out two sheets of paper to be used for sorting. On one sheet write the word Rough and on the other write Smooth. ○ Read the words with children and ask them to think of objects that are rough and objects that are smooth. ○ Place two objects on the table, one rough and one smooth. Invite children to decide which object to place on which sheet of paper. Guide them to be successful. □ Place an assortment of objects in a mystery bag; some that are rough, some that are smooth, or objects that are soft or hard: <ul style="list-style-type: none"> ○ Sea shell, pine cone, sandpaper, corrugated cardboard, aluminum foil, smooth river rock, piece of satin, piece of tree bark, piece of fur fabric, flower petal, rock, wooden bead, small block, pencil, feather, fur, piece of velvet fabric, cotton ball. ○ Invite children, one at a time, to remove a textured object from the bag and place on the correct sheet of paper. □ Introduce magnets to children in a variety of ways. <div style="background-color: #e6f2ff; padding: 10px; margin-top: 10px;">  <p>Refer to the Resources section for magnet activities (p. 81).</p> </div> |

| ST3.2 USES TOOLS AND ENGINEERING PRACTICES TO EXPLORE AND SOLVE PROBLEMS | | |
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| KNOWLEDGE & USE OF TOOLS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Offer a variety of tools for children to explore. ♦ Introduce children to tools in the classroom and how they are used. ♦ Involve children in discussing the tools that their families use in the home and at work. ♦ Invite children to discuss the tools they use in the classroom. ♦ Read books with children that show community helpers using their tools as they perform their jobs. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Collect tools for children to explore such as a magnifying glass, wooden spoon, funnel, children’s scissors, measuring cup, ruler, trowel, and pencil. □ Use the children’s informational book <i>Tools</i> by Ann Morris with photos by Ken Heyman to introduce the concept of tools and how they are used around the world. □ Consider reading the children’s picture book <i>Tool Box</i> by Anne and Harlow Rockwell to introduce tools that are used by a carpenter to children, followed by discussion. □ Develop community helpers prop boxes and include tools they use in their profession. □ Develop a set of cards with tools to match with the person using them. <div>  <p>For information on tools to add to learning centers and the outdoor environment, see the Resources section (p. 82). Community helper books, prop box materials, and a community helper card game are also included.</p> </div> |
| ENGINEERING PRACTICES & THINKING | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Provide opportunities for children to use engineering practices to solve problems. ♦ Provide children time each day to play in the learning centers with building materials. ♦ Involve children in building ramps and experimenting with rolling different objects down them. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include the following in the Block Center: <ul style="list-style-type: none"> ○ Provide hardwood unit blocks in a variety of shapes and sizes ○ Provide hollow blocks and cardboard blocks ○ Add small cars, trucks, and boats ○ Add blueprints and maps ○ Post pictures and include books, magazines, or postcards with pictures of buildings, roads, and bridges <p style="text-align: right;"><i>(continued on next page)</i></p> |

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| ENGINEERING PRACTICES & THINKING, CONTINUED | <div data-bbox="205 126 289 240">  </div> <p data-bbox="304 126 1050 240"><i>Refer to the Resources section (pp. 82-83) for an extension activity using the book <i>Three Billy Goats Gruff</i>. Examples of reusable objects and other resources to inspire bridge building and suggestions to help children with this project are also included.</i></p> <div data-bbox="205 280 289 370">  </div> <p data-bbox="304 313 1050 337"><i>Refer to the Resources section (pp. 82-83) for ideas to create and use ramps.</i></p> | <ul style="list-style-type: none"> □ Use children’s books as the springboard to introduce engineering practices and thinking to children. Read the book <i>Not a Box</i> by Antoinette Portis to children: <ul style="list-style-type: none"> ○ Follow up by discussing with them the different things the rabbit imagines the box becomes. ○ Invite children to think of things they might make with boxes. ○ Explain to children that you have collected a variety of items that they might use to make their own box creations. ○ Suggest that children work together on the project. ○ Allow children to work on their creations for several days. ○ Invite children to dictate to you what they made with boxes, the materials they used, and any problems they encountered. Ask if they have a name for their creation. ○ Suggest that children draw a picture of their creation. ○ Display the creations for other children and for families to see. ○ Add materials such as: <ul style="list-style-type: none"> △ Boxes of different sizes and shapes, cardboard, paper plates and cups, and bottle caps △ Rulers △ Connectors such as glue, tape, clothespins, and reusable zip ties △ Scissors △ Items for decorating: yarn, fabric, felt, pom-poms, stickers, feathers, tissue and construction paper |
| ST3.3 ENGAGES IN DEVELOPMENTALLY APPROPRIATE INTERACTIONS WITH TECHNOLOGY AND MEDIA THAT SUPPORT CREATIVITY, EXPLORATION, AND PLAY | | |
| TECHNOLOGY HANDLING | <p data-bbox="184 901 403 925">Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Give children opportunities to explore simple technology tools. ◆ Incorporate technology tools into pretend play. ◆ Introduce children to simple digital devices. | <p data-bbox="1100 901 1360 925">Examples and Activities</p> <ul style="list-style-type: none"> □ Include a toy telephone and camera in the Dramatic Play Center. □ Add toy walkie-talkies to the Block Center or take outdoors. □ Include a keyboard and a telephone in the office prop box. □ Arranging the environment: <ul style="list-style-type: none"> ○ Locate computers in an area where two or more children can use them together. ○ Have two chairs for children in front of the screen and an adult chair to the side. □ Incorporate the following devices into various learning centers: <ul style="list-style-type: none"> ○ Touch screens ○ Light tables <p data-bbox="1747 1291 1990 1315"><i>(continued on next page)</i></p> |

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| TECHNOLOGY HANDLING, CONTINUED | | <ul style="list-style-type: none"> ○ Music player ○ Digital cameras ○ Oversized keyboard ○ Colored keyboard keys ○ Small mouse ○ Copier (if classroom equipment does not include a copier, consider taking an in-house field trip to the program office where children can observe copies being made of a note to go home to their families, for example.) □ Follow these strategies for introducing children to tablets and computers: <ul style="list-style-type: none"> ○ Introduce tablets and computers to children in small groups. ○ Encourage children to talk about the kinds of technology they have at home, how their families use the technology, and their access to it so that you have some background information about their experiences with technology. ○ Talk with children about how the device works and operates. ○ Encourage them to explore the devices under your guidance. |
| DIGITAL LITERACY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Demonstrate the proper use of technology in the classroom. ◆ Teach children how to use the icons that help them navigate the apps they use for learning. ◆ Use correct terminology to expand children’s understanding of technology tools. ◆ Emphasize proper care of technology. ◆ Help children understand basic operations and concepts. ◆ Arrange the environment so children can work together. ◆ Develop a checklist for selecting developmentally appropriate computer programs, apps, and games. ◆ Connect technology with other classroom activities. <p>Teacher Note: <i>Continue to offer children lots of opportunities to be actively involved with real objects throughout the day. Technology should support rather than replace hands-on learning with real materials.</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Developmentally appropriate practices to consider when using technology: <ul style="list-style-type: none"> ○ Age appropriate content ○ Content that is free of bias and violence ○ Realistic expectations for children’s skill level so that children can experience success and feel competent ○ Control features that child can use independently ○ Content that is meaningful and interesting to children ○ Instructions that are clear and do not require that a child be able to read ○ Emphasizes open-ended discovery learning rather than drill and practice activities or worksheets in disguise ○ Poses a problem, asks children to solve it, and provides feedback ○ Accessible to all children, including those with special needs and those who are English-language learners □ Integrating technology into the classroom: <ul style="list-style-type: none"> ○ Read the book <i>Mouse Paint</i> by Ellen Stoll Walsh or <i>Harold and the Purple Crayon</i> by Crockett Johnson before children use the paint program on the computer. ○ Involve children in classifying plastic eggs by color and then using a touch screen to put all of the red eggs in a red basket, the blue eggs in a blue basket, and the yellow eggs in a yellow basket. |

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| DIGITAL CITIZENSHIP | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Establish with children guidelines and rules for using and caring for digital devices. ◆ Make sure all children have been introduced to and understand the correct way to use all of the technology that is available to them. ◆ Determine and establish with children the number of children who can use the device at one time. ◆ Review with children ways of handling equipment safely. ◆ Establish with children proper procedures for storing devices such as tablets. ◆ Set a time limit and a sign-up system if necessary, to insure that all children are involved in other areas of the classroom and have equal opportunities to access the devices. <p>Teacher Note: <i>Refer to Minimum Licensing Requirements for Child Care Centers (Rev. 01/01/15) — 401 Program Requirements for All Ages for requirements related to the use of technology in a child care center.</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ During small group time, engage children in creating a get-well message on a digital device to send to a friend who is sick. □ Discuss with children materials (sand, water, playdough) that are to be kept away from computers. □ After a child has completed a project (art, block structure), teach him how to use the digital camera to take a picture. |
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RESOURCES

Science and Technology

ST1. SCIENTIFIC PRACTICES

ST1.1 ENGAGES IN THE SCIENTIFIC PROCESS TO COLLECT, ANALYZE, AND COMMUNICATE INFORMATION

Strand: Observations, Questions, and Predictions

Informational and Picture Books

- *POP! A Book about Bubbles* by Kimberly Brubakker Bradley, photos by Margaret Miller (informational book)
- *White Rabbit's Color Book* by Alan Baker (informational book)
- *Mouse Paint* by Ellen Stoll Walsh
- *Little Blue and Little Yellow* by Leo Lionni
- *Guess Whose Shadow?* by Stephen R. Swinburne (informational book)
- *Moonbear's Shadow* by Frank Asch
- *Shadows and Reflections* by Tana Hoban (informational book)

Strand: Investigation and Hypothesis Testing

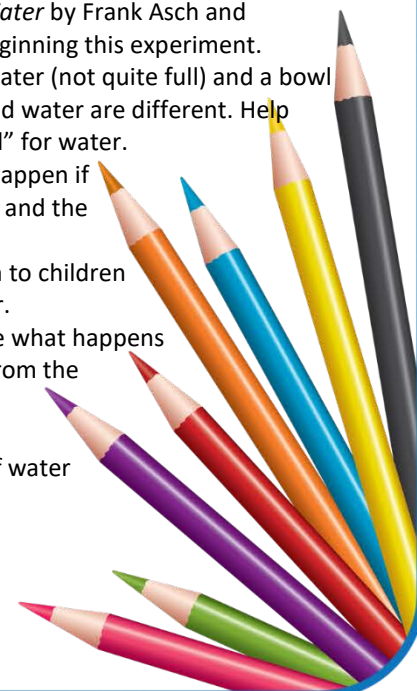
Sink or Float

- Gather objects such as a cork, small plastic cup, Ping-Pong ball, golf ball, clothespin, key, and rock.
- Provide a dishpan 1/3 full of water.
- Prepare a Sink or Float Chart by creating two columns, one labeled **What Sinks?** and one labeled **What Floats?**, and laminate or cover it with clear adhesive paper.
- Introduce this activity at group time or in a small group of three to five children.

- Select an object that will sink and invite children to predict if the item will sink or float.
- Put the object in the water, ask children what happened, and in which column should the object be placed.
- Follow the same procedure with an object that will float.
- Explain to children that the activity will be placed in the Discovery Center and encourage them to continue with the experiment.

Freezing and Thawing

- Read and discuss with children the books *Water* by Frank Asch and *The Snowy Day* by Ezra Jack Keats before beginning this experiment.
- Show and let children examine a bottle of water (not quite full) and a bowl of ice, and invite them to discuss how ice and water are different. Help them use the word "solid" for ice and "liquid" for water.
- Invite them to predict what they think will happen if the ice cubes are put on the Discovery table and the water is put in the freezer.
- Leave the ice cubes on the table and explain to children that you are putting the water in the freezer.
- Suggest that they watch the ice cubes to see what happens and that you will bring the bottle of water from the freezer later for them to examine.
- Guide children to discuss that the ice cubes melted and became liquid, and the bottle of water froze and became solid.



Other Experiments

- Use the same procedures for the following experiments:
- Which objects will hold water and will not hold water: measuring cups, slotted spoon, aquarium nets, small pitchers, sieve strainer, margarine tubs, soup ladle, funnels, and detergent scoops.
- Which objects will magnets attract? Refer to Strand: Physical Objects and Materials for information about the magnetic fishing game.
- Which objects will absorb and will not absorb water: wax paper, aluminum foil, paper towel, and sponge.

Mixing Cornstarch and Water

- Gather cornstarch, water, a bowl, and a spoon.
- Introduce the ingredients to children and invite them to feel the cornstarch and discuss how it feels.
- Allow children to help measure equal parts of cornstarch and water and pour into a bowl, take turns stirring with a spoon, and then mixing with hands.
- Provide time for each child to manipulate the goop, discuss how it feels, and what they can do with it.
- Extend the activity by involving children in making three batches of goop by adding red food coloring to one, blue to one, and yellow to one.
- Allow children to mix together small amounts of red and yellow, then blue and yellow, blue and red, and green and purple, then describe what happened.

Making Butter

- Gather children in a group and explain that they will all have a turn to help make butter.
- Pour $\frac{1}{2}$ pint of heavy whipping cream (have at room temperature) into a clear, plastic jar with lid.
- Allow children turns to shake the jar. Encourage them to shake the jar vigorously while holding the jar with both hands, until clumps form.

- Use a strainer to separate the liquid from the clumps of butter and transfer to a small bowl so that children can see that they have made butter.
- Invite children to take a small amount of the butter and use a plastic knife to spread it on crackers.
- Note that some teachers prefer that each child have a small baby food jar, so that each one can have the experience of making butter.

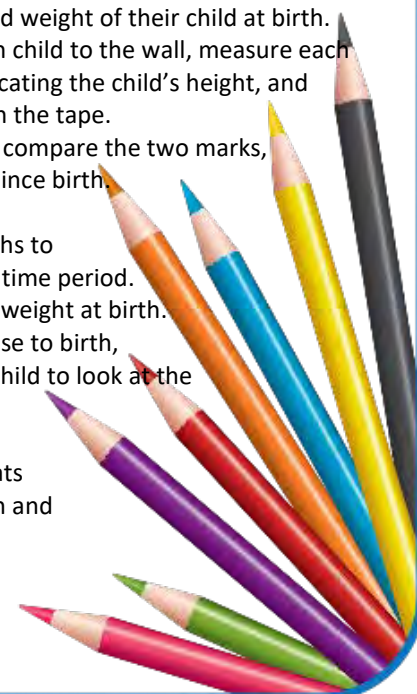
ST2. KNOWLEDGE OF SCIENCE CONCEPTS

ST2.1 DEMONSTRATES KNOWLEDGE OF CORE SCIENCE IDEAS AND CONCEPTS

Strand: Stability and Change

Children Learn About How They Have Grown

- Invite families to let you know the height and weight of their child at birth.
- Tape a strip of adding machine tape for each child to the wall, measure each child's height, make a mark on the tape indicating the child's height, and record the child's height next to the mark on the tape.
- Mark on the tape the child's height at birth, compare the two marks, and discuss how much the child has grown since birth.
- Do not compare children's height.
- Measure the child again in four to five months to show how much the child has grown in that time period.
- Weigh each child and compare that to their weight at birth.
- Ask families to send photos of their child close to birth, at about two years old and now. Invite the child to look at the photos and discuss how much he has grown and changed.
- Read the book *Peter's Chair* by Ezra Jack Keats to children and discuss how Peter has grown and can no longer fit in his chair.



ST3. KNOWLEDGE OF SCIENCE CONTENT

ST3.1 DEMONSTRATES KNOWLEDGE OF THE CHARACTERISTICS OF LIVING THINGS, THE EARTH'S ENVIRONMENT, AND PHYSICAL OBJECTS AND MATERIALS

Strand: Living Things

Trees

- Adopt a tree on or near your facility; a tree that sheds leaves each fall.
- Keep a journal about the life of the tree. Take photos and involve children in writing stories about the tree and in drawing pictures of the tree.
- Explore and discuss parts of the tree: roots which are under the ground for most trees, trunk, branches and leaves (green leaves and those that fall).
- Collect the leaves that fall from the tree and place them in the Discovery Center for children to explore.
- Involve children in raking leaves if the tree is on your playground.

Flowers

- Plant marigolds that grow from seeds, narcissus that grows from a bulb and grows in water, and petunias that are planted as seedlings (small plants).
- Discuss with children that the marigolds and petunias need water and sun to grow.
- Allow children turns to water the flowers.
- Document the growing of the flowers through photos, journaling, and children's drawings.

Vegetables

- Plant carrots and onions in a tire garden on the playground, following the directions on the seed packet.
- Plant carrots, radishes, tomatoes, or bell peppers in a container garden in the classroom. Place the container in a window where the sun shines in.
- Involve children in watering the plants.
- Help children measure and record the height of the plants to see how much they have grown.

- Document the growing of vegetables through photos, journaling, and children's drawings.
- Plan food experiences so that children can enjoy the vegetables they have grown.

Strand: Physical Objects and Materials

Magnet Activities

- Add magnetic letters and numerals and a magnetic board to the learning environment, and observe and listen to children as they play with the materials.
- Use a magnet board and magnetic story telling figures to tell stories to the children.
- Involve children in a fishing game with a magnet attached to the end of a fishing pole and magnetic strips attached to fish. Invite children to see how many fish they can catch.
- Collect objects, some that magnets will and will not attract:
 - Steel paper clips
 - Washers
 - Nails
 - Magnetic alphabet and numerals
 - Steel wool
 - Cotton balls
 - Small pieces of paper
 - Pieces of felt
 - Plastic spoon
 - Cork
 - Plastic paper clips
- Invite children to use a magnet to determine which objects magnets will attract and which objects magnets will not attract.



ST3.2 USES TOOLS AND ENGINEERING PRACTICES TO EXPLORE AND SOLVE PROBLEMS

Strand: Knowledge and use of tools

Tools to Add to Learning Centers and the Outdoor Environment

- Provide tools in all areas of the classroom:
 - Discovery Center: magnifying glasses, magnets, plastic thermometer, balance scales, flashlights, kaleidoscopes, prisms
 - Dramatic Play Center: timer, cooking utensils, eggbeater, child-sized broom and mop
 - Water Center: funnels, sieves, colanders, measuring cups, basters, whisks, water wheel
 - Sand Center: scoops, molds
 - Block Center: fire truck with a ladder, career figures with tools they use
 - Art Center: crayons, markers, paint brushes, scissors, cookie cutters, hammers and rollers for clay
 - Manipulative Center: manipulatives with gears, magnetic tiles
 - Music Center: musical instruments
- Add tools to the outdoor environment:
 - Large paint brushes for children to paint with water
 - Wrenches for repairing wheeled toys
 - Water gauge
 - Gardening tools

Community Helper Books

- *Emergency* by Gail Gibbons
- *Fire Engines* by Ann Rockwell
- *Building a House* by Byron Barton

Community Helper Prop Boxes

- Medical profession: stethoscopes, blood pressure cuff, flashlight
- Grocers: scales, cash register
- Gardeners: child-size gardening tools – shovel, rake, trowel

- Shoe Store: ruler or foot measurer
- Barbershop/Hair Dresser: hair dryer (minus cord), phone

Community Helpers and Their Tools Matching Game

- Firefighter and ladder
- Doctor and stethoscope
- Builder/Carpenter and hammer and nails
- Farmer/Gardener and shovel
- Chef and pots and wooden spoon

Strand: Engineering Practices and Thinking

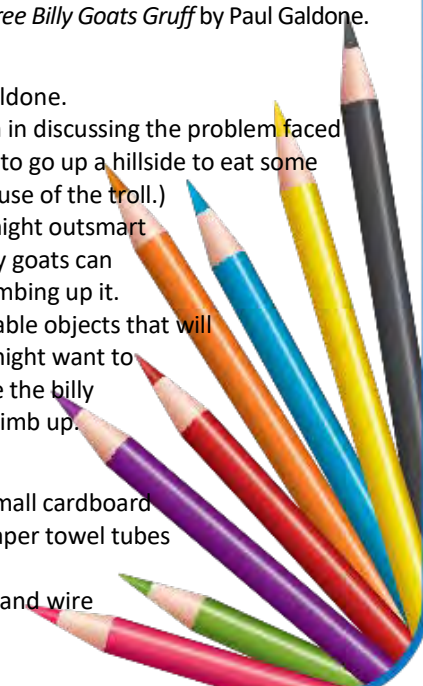
Use children's books as the springboard to introduce engineering practices and thinking to children. For example, begin with the book *The Three Billy Goats Gruff* by Paul Galdone.

Three Billy Goats Gruff Activity:

- Read *The Three Billy Goats Gruff* by Paul Galdone.
 - Follow up the reading by involving children in discussing the problem faced by the three billy goats when they wanted to go up a hillside to eat some grass. (They couldn't cross the bridge because of the troll.)
 - Discuss with children how the billy goats might outsmart the troll. Ask them what they think the billy goats can add to the bridge to keep the troll from climbing up it.
 - Show and discuss with children some reusable objects that will be added to the Block Center which they might want to use to build a "troll proof" bridge - a bridge the billy goats can cross over and the troll cannot climb up.

Materials to Inspire Bridge Building

- Craft sticks, plastic cups, Styrofoam® cups, small cardboard boxes, drinking straws, paper clips, paper, paper towel tubes
- Rulers, cloth tape
- Connectors such as glue, tape, clothespins, and wire
- Photos of different bridge designs



Suggestions to Help Children With This Project

- Allow children to use the materials over two or three days to design the bridge.
- Invite children to dictate to you how they build the bridge. What materials did they use? What problems did they encounter? How did they build a bridge that the troll could not climb up?
- Suggest that children draw a picture of their bridge.
- Use the children's book, *Not a Box* by Antoinette Portis, to encourage children to use engineering practices as they make things out of boxes.

Provide Opportunities for Children to Use Engineering Practices to Solve Problems

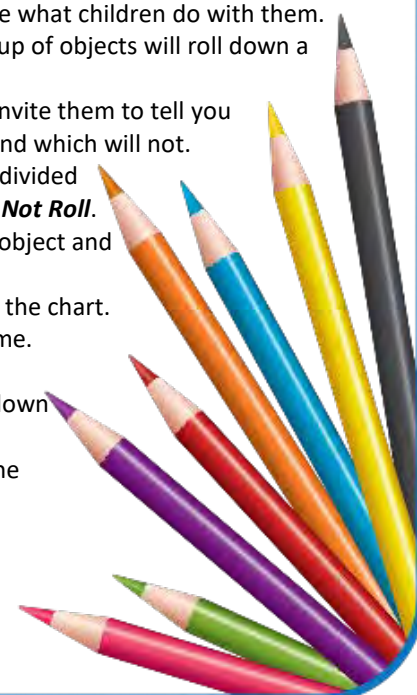
For example:

- Set up a Block Center in your classroom.
 - Provide hardwood unit blocks in a variety of shapes and sizes
 - Provide hollow blocks and cardboard blocks
 - Add small cars, trucks, and boats
 - Add blueprints and maps
 - Post pictures and include books, magazines, or postcards with pictures of buildings, roads, and bridges
- Allow children time each day to play in the Block Center.

Ramps

- Consider a variety of ways that children can create ramps. For example:
 - A triangle shaped hollow block (one side is flat and one side is sloped)
 - A large piece (about one foot wide) of heavy cardboard, with one end elevated
 - The top side of the lid of a large storage box, with one end elevated
 - The floor board from a wood unit block, with one end elevated
- Wooden cove molding which can be found in many building supply stores, with one end elevated, to become a ramp. Cut molding in 1', 2', 3' and 4' lengths. Molding should be 1 3/4" wide and flat on one side.
- A variety of materials can be used as base supports for the ramp structure:
 - Unit blocks which are sturdy
 - Cardboard, foam, or soft blocks which are lighter and can fall easily
 - Sponges

- Recycled materials such as empty tissue boxes stuffed with newspaper to give them more weight
- A bench or chair
- A variety of objects can be used to determine which will roll down the ramp and/or which can roll down the fastest. For example:
 - Pom-poms, ping pong balls, wooden balls, tennis balls
 - Spool, bear counter, seashell, wooden cube, rock, plastic bingo chip, plastic egg, jar lid, rectangular block
 - Small cars
- Introduce ramps to children in one of two ways:
 - Introduce ramps to children at group time by showing children pictures of ramps and how they are used. Show children the materials and ask them how they think they can be used.
- Put materials out in the Block Center and see what children do with them. Involve children in predicting which of a group of objects will roll down a ramp and which will not.
 - Show children a collection of objects and invite them to tell you which they think will roll down the ramp and which will not.
 - Record their predictions on a chart that is divided in two columns labeled: **Will Roll** and **Will Not Roll**.
 - Invite children, one at a time, to select an object and see if it will roll down the ramp.
 - Place the objects in the correct column on the chart.
 - Compare their predictions with the outcome.
 - Ask children questions such as:
 - △ "Why do you think some objects rolled down the ramp and others did not?"
 - △ "How are the objects that rolled down the ramp alike?"
 - Include pictures of ramps.



Social Studies



The area of social studies in early childhood consists of a child’s progression from “me” to “we.”¹ Young children show a gradual expansion in their understanding of the world, with infants and toddlers first interested primarily in themselves. During the preschool years, children begin to widen their circles to include their early learning setting, family and cultural heritage, and broader community. Children also become interested in the roles that people play in society. Social studies is a broad area of learning, incorporating concepts from the fields of history, geography, anthropology, sociology, civics, economics, and mathematics.² For example, understanding basic geographical concepts such as knowing where you are and how to get around in the world is related to the understanding of spatial relationships, a mathematical thinking skill.³


¹Neill, P. (2015). Going from me to we: Social studies in preschool. *High Scope Extensions*, 29(1), 1–10.

²Seefeldt, C. (1997). Social studies in the developmentally appropriate integrated curriculum. In C. H. Hart, D. C. Burts, & R. Charlesworth (Eds.), *Integrated curriculum and developmentally appropriate practice: Birth to age eight* (pp. 171–199). Albany, NY: SUNY Press.

³Clements, D. H. & Sarama, J. (2009). Early childhood mathematics education research: Learning trajectories for young children. In *Learning and Teaching Early Math: The Learning Trajectories Approach*. New York, NY: Routledge.

| SS1. FAMILY, COMMUNITY, AND CULTURE | | |
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| SS1.1 DEMONSTRATES POSITIVE CONNECTION TO FAMILY AND COMMUNITY | | |
| LEARNING COMMUNITY | Teaching Strategies <ul style="list-style-type: none"> ♦ Create in your classroom a learning community in which each child can feel physically and emotionally safe, and be an active and equal participant. ♦ Plan whole group time for creating a sense of the classroom as a community. ♦ Designate a space in your classroom for whole group time; a space large enough to accommodate all of the children and adults in the group. ♦ Keep group time moving, vary activities, listen to the children, and limit the amount of talking you do. ♦ Help children develop turn-taking skills during group time. ♦ Keep in mind that young children have short attention spans. ♦ Plan several brief group times each day rather than one long one. Begin with no more than 10 minutes, especially for three year olds, and expand the time as children are ready to participate for longer periods. ♦ Have a focus for group time. ♦ Involve children when making and discussing classroom rules. | Examples and Activities <ul style="list-style-type: none"> □ Provide group time to include active involvement of the children: songs, finger plays, moving to music, and activities the children can do together. □ Provide comfortable seating on the floor for whole group or small group times. If the area doesn’t have a carpet or a rug, consider using carpet squares which are soft and also define each child’s space. □ Use a tool, such as a talking stick or stone, to help children take turns to speak and be heard. This is an effective way to encourage children who tend to be shy or quiet to participate in group discussion. □ Give children words to use when standing up for their rights: <ul style="list-style-type: none"> ○ “Girls can play with blocks, too. Not just boys.” ○ “I don’t like it when you hit me. It hurts. Don’t do it anymore.” ○ “Don’t call me a baby. My name is _____.” |
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| LEARNING COMMUNITY, CONTINUED | <ul style="list-style-type: none"> ◆ Establish with children that in a classroom community each child has certain rights: <ul style="list-style-type: none"> • The right to be safe from harm • The right to be treated with respect by adults and children • The right to have personal possessions protected • The right to privacy • The right to play with all toys and in all areas of the classroom <p>Teacher Notes:</p> <ul style="list-style-type: none"> • <i>Refer to the Social and Emotional Domain, Strands: Develops Friendships and Social Skills for additional ideas to support this Strand.</i> • <i>Understand that when you do graphing activities with children where they indicate their preference for a certain food, or color for example, they are voting. They are practicing democracy. Developing and following rules and respecting the rights of each other are also keys to living in a democratic society.</i> | <ul style="list-style-type: none"> □ Provide concrete examples about children’s rights that they can understand: <ul style="list-style-type: none"> ○ Teachers are there to protect each child from harm. They make sure that all of the toys are safe to play with and practice emergency drills so everyone will know what to do if there is a storm or fire. ○ Teachers are there to protect children from hurting each other and to encourage them to be helpful to each other. ○ Children call each other by name and do not say things that will hurt other’s feelings. ○ Things in each child’s cubby or locker belong to that child only and are not for other children unless the child chooses to share them. ○ If a child chooses to be in the bathroom alone, this is his or her right. Or a child has the right to go the quiet area where she or he can be alone for a while. ○ Girls and boys can play in any learning center and with any toys they choose. <p> <i>Refer to the Resources section (p. 91) for establishing group time meetings and suggested guidelines for creating a set of classroom rules.</i></p> |
| FAMILY & CULTURAL IDENTITY | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s feelings of pride in family and cultural heritage as well as their recognition of similarities and differences among individual people and groups of people. ◆ Get to know each family. Be aware of its structure, occupations, activities, holidays, or family events that are important to the family. ◆ Encourage families to share traditions, songs/music, games, or special stories they read or tell at home with their children. ◆ Include authentic materials that reflect different cultures. ◆ Involve families and children in activities about their families. ◆ Be supportive of children who introduce words in a home language that is not English. ◆ Plan food experiences around the cultures of the children in your group. <p> <i>Suggestions on how families can contribute to creating family trees and a family cookbook are available in the Resources section (pp. 91-92).</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Add to the Dramatic Play Center food containers and utensils from different cultures. □ Add cultural objects such as art, basketry, weaving, woodwork, beadwork, and pottery from different cultures. □ Involve children in creating a family portrait. □ Provide paper plates, yarn, crayons, and colored pencils and markers in skin tones to create a family portrait. Be sensitive to a child who does not want to create a family portrait. This is a choice activity. □ Support children’s recognition of similarities and differences among individual people and groups of people through activities and children’s books such as <i>Shades of People</i> by Shelley Rotner and Shelia M. Kelly. Invite children to notice the differences in skin tones, hair, and eye color of other children. □ If a child says “Gato means cat in Spanish. We speak Spanish at home”, thank the child for sharing that with the class and say, “Yes, I notice that you and your grandmother speak Spanish when she brings you to the center in the morning.” |

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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">AWARENESS OF ROLES IN SOCIETY</p> | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children’s increasing awareness of the roles people perform at home and the community. ◆ Invite families to send pictures of family members performing different tasks and include them in a class book to be shared with the children. ◆ Learn as much about each child’s family as possible, especially who the family members are who live in the home, and the occupations of those who work outside the home or volunteer in the community. ◆ Talk with children about what family members do at home and the roles they play outside the home. The roles outside the home can be work related or as a volunteer. ◆ Be familiar with the community in which the children live. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Invite family members to visit your classroom and, if appropriate, bring materials children can use themselves: <ul style="list-style-type: none"> ○ Items related to their occupation such as firefighters gloves, wrenches, paint brushes. ○ Empty food boxes that are clearly labeled. □ Invite visitors to the classroom to share their jobs, and the tools and vehicles they use in their work. □ Take field trips to various places of work that seem of the most interest to children. □ Take a tour of your facility so that children can meet the people who work in your program and see what they do. □ Take a walk around the neighborhood and encourage children to stop, look, and listen to what they see and hear. When you return to the classroom involve children in discussing what they observed. □ Plan topics of study that will expand children’s awareness of people and their roles in their community (first responders, farmers, medical personnel). □ Develop prop boxes with dress-up clothes and items that relate to different community roles and have them available for children’s pretend play. □ Read books with children that focus on the roles of people in the community. □ Add materials to enhance awareness of the roles people play: <ul style="list-style-type: none"> ○ Include puzzles, block people, and vehicles representing a range of jobs. ○ Items related to care of an infant: small dish pan for baths, a baby doll and clothes, bibs, empty and clean baby shampoo bottle. ○ Office equipment such as an old keyboard, briefcase, telephone, phone book, pencils, and paper. <div style="background-color: #e6f2ff; padding: 10px; margin-top: 10px;">  <p><i>Refer to the Resources section (p. 92) for suggested book titles about the roles of people in the community.</i></p> </div> |
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SS2. HISTORY AND GEOGRAPHY

SS2.1 SHOWS AWARENESS OF SEQUENCE AND CHANGE OVER TIME

AWARENESS OF PAST & FUTURE

Teaching Strategies

- ◆ Involve children in activities that help them become aware of events in the immediate past or future and events that are increasingly distant from the present.
- ◆ Prepare, post, and review with children your classroom's daily schedule to help them become aware of the present, recent past, and short-term future events.
- ◆ Use pictures to help children sequence the parts of the day.
- ◆ Introduce a new material that will be added to a learning center and involve children in discussing how they plan to use the item.
- ◆ Plan a time near the end of the day for children to review what they did during the day and make plans for what they will do tomorrow.
- ◆ Invite a grandparent or a senior citizen to visit the classroom to share photos and talk with the children about what life was like when he/she was young.
- ◆ Involve children in making predictions about future events.

Teacher Note: *Be sure to remind visitors of children's short attention spans so that children are not expected to sit for long periods of time while visitors share photos/stories.*





Examples and Activities

- Involve children in recalling some of the things that happened that day such as a book they read, a new song they learned, or a special visitor to their room. Record what they recall, read it back to them, and make a copy for each child's family.
- Find time throughout the day to use time vocabulary with the children:
 - "What did you do yesterday when you got home?"
 - "We're going to have a special visitor in our classroom tomorrow."
- Encourage children to explore items from their earlier years and make comparisons between their baby items and their current selves:
 - Baby clothes
 - Toys they played with
 - Ask families to send photos of their child at different ages
- Include materials from past, current, and future:
 - A manual typewriter and a computer keyboard
 - Old and new cars and trucks
 - Clothes and accessories
- Include children's literature that has illustrations set in another time and involve children in discussing the differences they see from then and to now:
 - *Hush Little Baby* by Marla Frazee
 - Nursery rhymes such as "Simple Simon" and say to children, "Simple Simon wore short pants called knickers and he likes pie. Do you?"

Some ways to involve children in making predictions

- "What are some of the things you think you will be doing in kindergarten?"
- "When do you think you will lose your first tooth?"
- "When you learn to drive where would you like to go?"

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| TIME CONCEPTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Support children in their understanding and use of increasingly complex time-related words and concepts. ◆ Use time words in daily conversations with children. ◆ Give children time reminders. ◆ Avoid spending long periods on calendar time activities. ◆ Combine time concepts with movement activities. <p>Teacher Note: <i>Time concepts are very abstract for preschool children. While children may use words associated with time and recite days of the week, they may not fully comprehend what terms, such as day or week, used during calendar times truly mean.</i></p> | <p>Examples and Activities</p> <p><u>Express concepts of time during daily conversations</u></p> <ul style="list-style-type: none"> □ Now/later □ Day/night □ Last time/next time □ Read books such as: <ul style="list-style-type: none"> ○ <i>Goodnight Moon</i> by Margaret Wise Brown, illustrated by Clement Hurd ○ <i>Time for Bed</i> by Mem Fox ○ <i>The Kissing Hand</i> by Audrey Penn ○ <i>Night in the Country</i> by Cynthia Rylant, illustrated by Mary Szilagyi ○ <i>The Very Hungry Caterpillar</i> by Eric Carle ○ <i>The Very Quiet Cricket</i> by Eric Carle ○ <i>Today is Monday</i> by Eric Carle ○ <i>Chicken Soup with Rice: A Book of Months</i> by Maurice Sendak ○ <i>Cookie's Week</i> by Cindy Ward, illustrated by Tomie dePaola □ Use verbal time reminders with children before transitions. "You have five more minutes to play in learning centers, and then it's time to clean up." □ Use calendars with children in meaningful ways. Should your program require that you include calendar time in your daily schedule, here are some things to consider: <ul style="list-style-type: none"> ○ Mark special upcoming events at the beginning of the week or month. ○ Use a photo or name card to indicate a child's birthday. ○ Use drawings to represent special events. Draw a book to indicate the day when the librarian comes to read to the children. ○ Indicate special recurring events such as every Wednesday Ms. Hernandez comes in to teach the children Spanish. □ Use a symbol to indicate what the weather conditions were that day. □ Consider the following activity that you might call "How will we move today?" <ul style="list-style-type: none"> ○ Chant the following with children using the appropriate movements on the specified day: <p>"Today is Monday, so let's march and march today. Today is Monday, so let's march and march today. Let's march the day away."</p> □ Add a different movement for each day. For example, twirl on Tuesday, waltz on Wednesday, etc. |
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| SS2.2 DEMONSTRATES SIMPLE GEOGRAPHIC KNOWLEDGE | | |
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| AWARENESS OF LOCATION AND PLACE | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Introduce simple geographic concepts to children. ♦ Begin with what is concrete and familiar to children. ♦ Involve children in creating a house collage. <p> Refer to the Resources section (p. 92) for suggestions on how to create a house collage.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Talk with children about their home, their street address, and their neighborhood. □ Discuss with them things in their neighborhood that are near/close to their home, and things that are far from their home. □ Talk with them about places in the community that are familiar to them and to their families (stores where they shop, churches they attend, restaurants where they eat, recreation areas and public places such as libraries they visit). |
| | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Involve children in exploring geography tools, in creating simple maps, and discussing basic geographic concepts. ♦ Involve children in creating a pictorial map of their classroom and using drawings or pictures to represent objects in the environment. <p>Teacher Note: Some children will be familiar with GPS (Global Positioning System), which is another form of maps, in family vehicles or on phones and tablets. If children mention this, involve them in discussing how these are used by family members.</p> <p> The Resources section (p. 93) contains instructions on creating and incorporating a pictorial map of the classroom.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ As a way to introduce the concept of maps, read and discuss the book <i>Henry's Map</i> by David Elliott with the children. <p> Refer to the Resources section (p. 93) for a short summary of the story.</p> <ul style="list-style-type: none"> □ Place a road map in the Block Center and discuss with children that the map gives people directions on how to get from one place to another. □ Determine if your town, city, or community has a map that show streets and roads as well as airports, golf courses, attractions, lakes, and rivers. If so, obtain a copy of the map and involve children in locating the street on which they live and other places with which they are familiar. □ Consider involving children in making a pictorial map of their classroom by having children cut out pictures from school supply catalogs to represent the different objects in the room. □ Extend the map making activity to making a map of the playground if children seem interested. <p>Teacher Note: An additional children's book about mapping is titled <i>Me on the Map</i> by Joan Sweeney, illustrated by Annette Cable.</p> <ul style="list-style-type: none"> □ Take a walk around the neighborhood in which your facility is located and make a list of what children see. Return to the classroom and create a pictorial map representing what children saw on their walk. □ Create an obstacle course in the classroom and/or outdoors. <p> For examples of creating obstacle courses and a Community Rug, see the Resources section (p. 93).</p> |

RESOURCES

Social Studies

SS1. FAMILY, COMMUNITY, AND CULTURE

SS1.1 DEMONSTRATES POSITIVE CONNECTION TO FAMILY AND COMMUNITY

Strand: Learning Community

Group Times

- 1st Group Time – Greetings, taking attendance, music and movement, introducing or briefly discussing the current Topic of Study, making plans for the day.
- 2nd Group Time – Language and literacy activities finger plays, reading or telling stories with visuals such as felt or magnetic storytelling figures, and allowing time for discussion of stories.
- 3rd Group Time – Reviewing the day by involving children in discussing what they did during the day, activities they enjoyed, making plans for the next day, and concluding the Topic of Study when appropriate.

Classroom Rules

- Gather the children in a group and introduce the idea of rules by stating that “Our classroom is a community. When people live in a community they sometimes have rules that help them get along with each other, and keep everyone safe.”
- Lead a discussion about how we should treat each other, how we can work together, and how we care for the classroom and outdoor environment.
- Include the word respect: “We respect ourselves, each other and our environment.”
- Keep rules simple, few in number (3 to 5 rules), and stated positively.
- Guide children to say what they should do rather than what they shouldn’t do. (Children will often state rules negatively. For example “Don’t run in the building” instead of “We walk indoors.”)
- Record the rules on a chart. Add illustrations, pictures, or photos.

- Post the rules where children can see them and where they can be reviewed as needed.
- Make copies of the rules on 8 ½” x 11” paper, one for each child. Invite children to illustrate their individual set of rules. Suggest that they *read* them with their family.

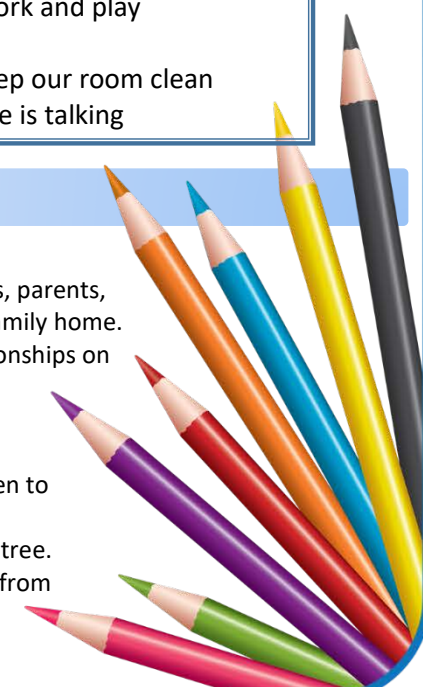
Our Classroom Rules

- ✓ We call each other by name
- ✓ We use our hands for work and play
- ✓ We walk indoors
- ✓ We work together to keep our room clean
- ✓ We listen when someone is talking

Strand: Family and Cultural Identity

Creating Family Trees

- Ask families to send photos of grandparents, parents, the child, siblings, and others living in the family home. Request that they include names and relationships on the back of each photo.
- Make your own family tree with children to illustrate the concept of a family tree.
- Cut out a tree for each child or invite children to draw their own.
- Involve children in making their own family tree.
- Write the name of each person on the tree from information dictated by the child and from information on the backs of photos.



- Invite each child to share his or her family tree with the other children. Be sensitive to children who do not want to share their family tree.
- Send the family trees home with the children, along with a note of thanks to parents for sharing the photos. Consider using magazine pictures to categorize age groups if this activity is inappropriate for your group of children. Pictures should reflect diversity.
- Write the names of family members on the family tree if photos are not an option. The children can help read back the names.

Creating a Family Cookbook

- Invite each family to send a favorite family recipe for a food that their child really likes; a recipe that will be included in a class cookbook.
- Suggest that the recipe be one that has been passed down from a grandparent for example.
- Invite children to draw a picture to go with the recipe.
- Create a cookbook from the recipes and make copies to send home to families.

Strand: Awareness of Roles in Society

Books about the Roles of People in the Community

- *Curious George and the Dump Truck* by Margaret and H. A. Rey
- *Fire Engines* by Ann Rockwell
- *Emergency* by Gail Gibbons
- *Curious George Visits a Police Station* by Margaret Rey and Alan J. Shalleck
- *Froggy Goes to the Doctor* by Jonathan London
- *The Berenstain Bears Visit the Dentist* by Stan and Jan Berenstain
- *Building a House* by Byron Barton
- *Tool Book* by Gail Gibbons
- *Just Shopping with Mom* by Mercer Meyer

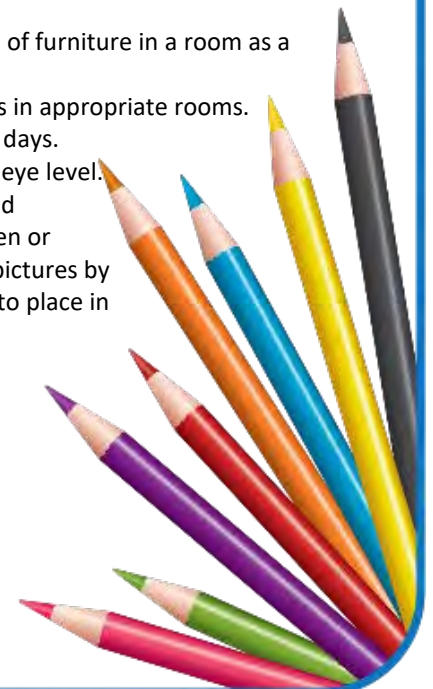
SS2. HISTORY AND GEOGRAPHY

SS2.2 DEMONSTRATES SIMPLE GEOGRAPHIC KNOWLEDGE

Strand: Awareness of Location and Place

Creating a House Collage

- Provide a large sheet of butcher paper, approximately 3' x 6', home decorating magazines, furniture store newspaper inserts, scissors, and glue.
- Write *Our House* across the top of the paper.
- Involve children in deciding on, naming, and listing the rooms they want in their house.
- Use markers to section the paper into rooms and label each section as a room that children chose.
- Suggest that children work in pairs or small groups to search for pictures for each room.
- Involve children in placing at least one piece of furniture in a room as a picture label guide.
- Guide children to use glue to add furnishings in appropriate rooms.
- Allow this activity to take place over several days.
- Post the house collage on the wall at child's eye level.
- Consider cutting out pictures of furniture and appliances ahead of time for younger children or children who need this support. Group the pictures by rooms and guide children to select pictures to place in each room.



Strand: Geographic Concepts

Create Pictorial Maps of the Classroom

- Begin with an 18" x 24" piece of paper or poster board.
- Discuss with children that they are to help you make a map of their classroom.
- Draw permanent fixtures such as the windows, doors, and closet.
- Invite children to look around the room and help you make a list of the things they need to put on the map.
- Provide construction paper on which children draw the things they listed, cut them out, and glue them to the map in the correct place.
- Consider having children work in pairs on specific items that go on the map.
- Guide children to place the objects in the correct place on the map. For example, say "Will and Annabelle, you have drawn the Discovery table and chairs. Look around the room. Where are they located?", "Yes, it's in front of the window. So place them there on the map."
- Continue this activity until the map is complete, and then review it with the children.

Summary of the story *Henry's Map*

- Henry is a pig who lives on a farm with other animals.
- Henry looks out his window one day and decides the farm is a mess and nobody will be able to find anything in the mess.
- He draws a map showing all the animals and where they belong.
- Henry then follows the map to get back to his home, a pig sty.

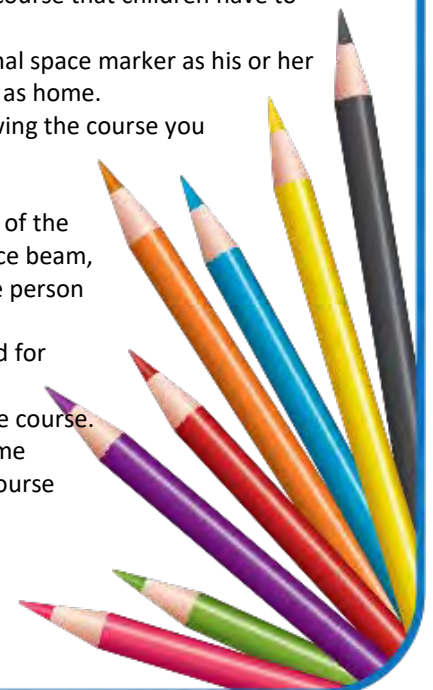
Community Rug (Community Rug can be purchased or made)

- Rugs are usually 3' x 6', have non-skid backing and can be spot cleaned.
- Rugs can be made from vinyl fabric that has a flannel backing. Use a permanent marker to draw streets, buildings, etc.
- Rugs show streets, buildings, businesses, police stations, parks, traffic lights, train tracks, and lakes, for example.

- Add small vehicles to the Block Center. Add boats if the rug has a lake or river, and trains if it has train tracks.
- Observe what children are doing with the rug and vehicles.
- Consider joining them and discussing what they are doing, what is happening in the different places shown on the rug, and any of the places on the map that they see as they are going places with their family.

Create an Obstacle Course


- Include a balance beam or tape a line on the floor or drawn on the sidewalk; rope to jump over; box to crawl through; hoop or circle of yarn to hop in and out of; and two liter bottles weighted with sand or rocks for children to zigzag through.
- Explain to children that you have created a course that children have to travel to get home.
- Provide each child a carpet square or personal space marker as his or her home (indoors) or a spot on the playground as home.
- Invite children to find their way home following the course you have laid out.
- Designate a leader to begin the trip.
- Use directional and positional words as part of the experience. For example: walk on the balance beam, crawl through the box, and stay far from the person in front of you.
- Create an obstacle course on the playground for children to steer tricycles through.
 - Use cones or two-liter bottles to create the course.
 - Designate a spot on the playground as home and invite children to travel through the course and return home.




Creativity and Aesthetics



Young children love to express themselves through music, movement, visual arts, and drama. With the proper learning environment, engaging in artistic expression can foster a child’s creativity and support other areas of development and learning. Creativity and creative thinking are critical 21st century skills, important drivers of innovation in society, and key elements for success and happiness in school and adulthood.¹ At the same time, music, visual arts, and drama are serious fields of study much like mathematics and science. Sophisticated artistic expression requires an understanding of the specific concepts and processes of these art forms that begins in early childhood. Music, for example, requires an understanding of tempo, dynamics (loud and soft), and pitch. Visual art requires an understanding of shape, color, and texture. Arkansas’s early childhood professionals can help young children learn these concepts and provide a foundation for more advanced artistic expression.

¹Partnership for 21st Century Skills. (2007). *The Intellectual and Policy Foundations of the 21st Century Skills Framework*.

| CA1. MUSIC AND MOVEMENT | | |
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| CA1.1 EXPLORES THROUGH LISTENING, SINGING, CREATING, AND MOVING TO MUSIC | | |
| EXPLORATION OF MUSIC & MOVEMENT | Teaching Strategies <ul style="list-style-type: none"> ◆ Introduce children to a variety of musical instruments; give them opportunities to explore the instruments and to move to music with different beats, volume, and speed. ◆ Introduce instruments to children a few at a time. ◆ Include a music center in your classroom. ◆ Designate a place on the playground as a music center and take some instruments outdoors for children to play. <div>  <p>See the Resources section (p. 102) for suggestions of how to set up a music center.</p> </div> | Examples and Activities <ul style="list-style-type: none"> □ Have musical instruments available for children such as: <ul style="list-style-type: none"> ○ Drums ○ Egg shakers ○ Rhythm sticks ○ Triangles ○ Cow bells ○ Tone blocks □ Include musical instruments and music from other cultures and eras: <ul style="list-style-type: none"> ○ Bongo drum ○ Tambourines ○ Maracas ○ Waltz ○ Guiro shaker ○ Cajun Zydeco ○ Castanets ○ Reggae ○ Rain stick ○ Texas Two Step ○ Gourd shaker □ Name the instrument, have children repeat the name, and invite children to experiment with the instruments. □ Have children close their eyes. Play one of the instruments, and have children name the instrument you played. □ Model and discuss with children the appropriate way to use and care for the instruments. □ Give children many opportunities to explore the sounds these instruments make. |
| | <i>(continued on next page)</i> | |

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| EXPLORATION OF MUSIC & MOVEMENT, CONTINUED | <ul style="list-style-type: none"> ❑ Consider purchasing the CD <i>Play Your Instruments and Make a Pretty Sound</i> by Ella Jenkins, and involve children in listening to and following the directions given. The instruments introduced are cow bells, rhythm sticks, maracas, triangle, castanets, and tone block. ❑ Collect photos of musical instruments and involve children in naming the instruments and how they are played. ❑ Invite musicians to bring in their instruments, and have them play and talk with children about the instruments. ❑ Include music and movement experiences and activities each day. ❑ Play a variety of music and invite children to use body movement to respond to the different types of music: <ul style="list-style-type: none"> ○ Music for children to move slowly (a lullaby) or quickly (a polka). ○ Marching music that involves children playing musical instruments while moving in step with the beat. <p>Teacher Note: <i>Music, movement, and dance tunes can be purchased online and from school supply catalogs. Consider these recognized recording artists for CDs of songs and dance tunes for children:</i></p> <ul style="list-style-type: none"> ○ <i>Greg and Steve</i> ○ <i>The Learning Station</i> ○ <i>All Time Dance Favorites by Kimbo®</i> ○ <i>Raffi</i> ○ <i>Caribbean Music</i> |
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| MUSIC & MOVEMENT CONCEPTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Create opportunities for children to understand and demonstrate the various components of music. ♦ Include singing and moving to music activities. Be willing to accept children’s different levels of participation in this activity. ♦ Include songs that are familiar and are favorites, and also introduce new songs to children. <div data-bbox="195 451 1068 566">  <p>Refer to the Resources section (pp. 102-103) for suggested strategies on introducing a new song to children. Songs and strategies for introducing music concepts are also included.</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Talk with children about the different music and movement concepts: <ul style="list-style-type: none"> ○ Melody (the tune) ○ Pitch (high and low) ○ Rhythm (the beat) ○ Tempo (the speed) ○ Dynamics (changes in volume) ○ Vocal range (all of the notes between the lowest and highest note in which a child can sing comfortably) □ Involve children in singing a variety of songs. For example: <ul style="list-style-type: none"> ○ Chant “five minutes til’ clean up time, five minutes til’ clean up time” when it is nearly time to clean up the room. ○ Sing songs to help children transition from one activity to another. ○ Sing lullabies at rest time. ○ Sing songs for special occasions such as a child’s birthday. □ Read books that focus on familiar songs. Read <i>Hush Little Baby</i> by Marla Frazee and then invite children to sing the song with you. □ Personalize songs by using children’s names in the song. |
| MUSICAL EXPRESSION & APPRECIATION | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Honor children’s requests for favorite types of music. ♦ Create illustrated songbooks or song charts of songs children frequently sing. ♦ Encourage children to make up new lyrics and actions to familiar tunes or to create their own songs. <p>Teacher Note: <i>Play music when you can encourage children to actively listen to the music. Do not play music as a background during play and other activities. The distraction can make it difficult for children to focus on what they are doing and may interfere with conversation.</i></p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Involve children in selecting songs to sing or to move to by creating a Music Jar: <ul style="list-style-type: none"> ○ Use a clear plastic bottle or jar with the opening large enough for a child’s hand. ○ Write the names of children’s favorite songs or dance tunes on individual slips of paper and put them in the jar. Add illustrations to help children be able to read the title. ○ Introduce the Music Jar to children and explain how it will be used. ○ Give children turns to reach inside the jar, pull out a slip of paper, and announce the next song or dance. □ Invite local musicians and dancers to your classroom to share with children their songs and dances. The local schools and dance studios in your community may be sources for singers and dancers. |

| CA2. VISUAL ARTS | | |
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| CA2.1 EXPLORES, MANIPULATES, CREATES, AND RESPONDS TO A VARIETY OF ART MEDIA | | |
| EXPLORATION OF ART | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Provide art media and materials, and daily opportunities for children to independently engage in a variety of child-initiated visual art activities. ◆ Be careful to not overwhelm children with too many materials at once. Introduce new materials gradually. ◆ Provide a drying area for finished work (clothesline, flat surfaces). ◆ Make sure there is ample display space for children's work at their eye level. <p>Teacher Note: Ask a special education consultant for assistance in meeting the developmental needs of all children in the area of visual arts.</p> <div>  <p>Refer to the Resources section (pp. 103-106) for expanded information on exploration of art with children.</p> </div> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Include materials and props to the Art Center: <ul style="list-style-type: none"> ○ Double-sided easel ○ Variety of paper (purchased and recycled) ○ Child-size, blunt-tipped scissors ○ Paint shirts, smocks, or aprons (shirts can be sized for older children or adults with sleeves cut off) ○ Crayons, washable markers, colored pencils ○ White and colored chalk, small chalk boards, sidewalk chalk ○ Washable paints, assorted paints, a variety of items with which to paint □ Set up an attractive and permanent Art Center in your classroom using the following guidelines: <ul style="list-style-type: none"> ○ Out of the line of traffic ○ Floor covering that is easy to clean ○ Near a sink ○ Tables and chairs ○ Open storage shelf/shelves ○ Labeled storage containers |
| ART CONCEPTS | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Recognize and support children's increasing development of drawing and painting skills. ◆ Begin with an understanding of the stages of development in children's drawing and painting skills as outlined below: <ul style="list-style-type: none"> • Stage 1: Children scribble and make marks with crayons or pencils. • Stage 2: Children make shapes, outlines, designs and symbols which adults may not recognize as being anything specific, but may mean something to children. For example, a circle with lines may be Daddy's face. • Stage 3: Children begin to draw or paint something that is becoming recognizable to others. A self-portrait with a large circular head with small circles for eyes and tiny stick-like arms and legs extending from the head. • Stage 4: Children begin to create realistic art. They often draw the important people in their lives. | <p>Examples and Activities</p> <p><u>Ways to add variety as children paint with liquid tempera:</u></p> <ul style="list-style-type: none"> □ Add small granules of sawdust for a textured effect. □ Add liquid starch to make it creamy. □ Add corn syrup or liquid glue to give tempera a glossy sheen. □ Add unscented shaving cream to give tempera volume. □ Add school glue to make it stringy. <div>  <p>Refer to the Resources section (p. 106) for ways to involve children in mixing colors to make other colors.</p> </div> |

Teaching Strategies

- ◆ Encourage children to recognize objects in the environment that are beautiful and to appreciate their own art and the art of others.
- ◆ Call children's attention to the beauty in nature.
- ◆ Involve children in looking at and discussing art created by others.

Examples and Activities

- During outside time point out to children the color of a flower or leaf; a dewy spider web glistening in the sun; markings on the wings of a butterfly; or white fleecy clouds in the sky.
- Consider the following ways you can encourage and support children's efforts as they engage in art activities:
 - Describe what you see rather than making judgment statements about it. Say "I see that you drew three circles of different sizes" instead of saying "I really like those three circles you drew."
 - Ask open-ended questions. "What do you suppose will happen if you mix these two colors together?"
 - Encourage children to discuss their art work. "Can you tell me about your painting?" "What did you enjoy most about making this collage?" "How did you make that robot?"
- Have an area for displaying children's art work.
- Use poster board, a bulletin board, or outline an area with a border. Label it *Art Gallery*.
 - Ask a child to choose the art they wish to display.
 - Encourage them to talk about why they chose that particular piece of art for display.
 - Respect a child's choice not to have his or her art work displayed.
- Select children's books about art and read to children and include in the library.




Refer to the Resources section (p. 106) for some suggested children's books about art.


- Display the work of famous artists through prints, posters, paintings, art books, and art postcards:
 - *Starry Night* and *Sunflowers* by Vincent van Gogh
 - *Gardens at Giverny* and *Water Lillies* by Claude Monet
 - *Fishin'*, *Apple Picking* and *Snap the Whip* by Winslow Homer
 - *A Goodnight Hug*, *Child in a Straw Hat*, *The Child's Bath*, and *Children Playing in the Sand* by Mary Cassatt
- Invite children to look at specific pictures and ask them questions such as "How did the picture make you feel?"

Teacher Note: Art print posters can be purchased inexpensively online or in stores where picture framing is done. Search online by artist's name and title of painting.

CA3. DRAMA

CA3.1 EXPLORES FEELINGS, RELATIONSHIPS, AND CONCEPTS THROUGH IMITATION, PRETEND PLAY, AND SOCIODRAMATIC PLAY

| | | |
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| EXPLORATION OF DRAMA | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ♦ Create an environment for dramatic play by providing materials that children can easily incorporate into their play. ♦ Support children’s exploration of a variety of themes and roles. ♦ Organize props in an orderly fashion. ♦ Participate in children’s dramatic play when invited or when you observe the need for redirection. <p>Teacher Notes:</p> <ul style="list-style-type: none"> • <i>Make sure all props are safe, clean and in good repair. Repair or replace props that become torn or broken.</i> • <i>Check out thrift stores in your area for some of the props listed here.</i> • <i>Clothes for older children are the right size for preschool children. Shorten skirts or sleeves of adult clothing to make them safer for children to wear.</i> | <p>Examples and Activities</p> <p><u>Dramatic play environment</u></p> <ul style="list-style-type: none"> □ Define the space with walls, shelves and furniture to create a separate area. □ Provide sufficient space for three to five children. □ Locate the dramatic play area near other noisy areas such as the block center. □ Add softness and touches of home with a small rug, tablecloths, napkins, and plants. □ Set up the area initially to look like a home because children are most familiar with themes related to home life. □ Furnish the area with familiar furniture such as child-size kitchen furniture, table and chairs, doll bed, stroller, couch, full-length mirror. <p><u>Dramatic play materials</u></p> <ul style="list-style-type: none"> □ Dress-up clothes for men and women, and accessories such as shoes, jewelry, clip-on ties, purses, wallets, boas, costume jewelry □ Dress up clothes that reflect different cultures: woven vests, saris, kimonos, serapes, shawls, and footwear such as sandals, clogs, moccasins, huaraches □ Large pieces of fabric in squares, triangles, and rectangles in different patterns such as batik, tie-dyed, madras prints □ Dance costumes and shoes (tap and ballet) □ Pots, pans, dishes and other kitchen equipment relevant to different cultures □ Dolls representing different ethnic groups, doll clothing, blankets □ Empty food containers relevant to different cultures (stuff the containers with newspaper and seal with clear tape) □ Toy telephones □ Memo pads, pencils, phone book, calendars <div data-bbox="1108 1027 1984 1125">  <p>Information on organizing and facilitating dramatic play is available in the Resources section (p. 107).</p> </div> |
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| <p>DRAMA CONCEPTS</p> | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Encourage children to engage in more complex dramatic play scenarios and support their understanding of the foundational components of drama (the main idea, plot, series of events, and characters). ◆ Include books and stories providing children opportunities for creative drama. <p>Definition:</p> <p>Creative drama — Children act out stories with or without props.</p> | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Develop theme or prop boxes to add to the Dramatic Play Center. □ Keep most of the home-related furniture and props in the Dramatic Play Center while adding theme or topic of study related props so children can explore new ideas and concepts they are learning. □ Consider adding the new topic of study related props a few at a time and removing some as children lose interest in them, so that children are not overwhelmed by so many items. Too many props can also make clean-up time difficult for children. <div data-bbox="1108 500 1982 704">  <p>Refer to the Resources section (pp. 107-108) for the following items related to creative drama:</p> <ul style="list-style-type: none"> ✓ Tips on incorporating creative drama in the classroom ✓ Theme or prop box ideas ✓ Organizing and storing prop boxes ✓ Books for creative drama </div> |
| <p>DRAMA APPRECIATION & EXPRESSION</p> | <p>Teaching Strategies</p> <ul style="list-style-type: none"> ◆ Look for opportunities in your community for your children to be able to view performances that are developmentally appropriate by older children or a professional group. ◆ Follow up by involving children in discussing the performance. ◆ Involve children in writing a thank you note to the performers if appropriate. | <p>Examples and Activities</p> <ul style="list-style-type: none"> □ Developmentally appropriate performance opportunities: <ul style="list-style-type: none"> ○ Older children coming into your program and acting out children's stories ○ School based performances ○ Performances by older children or youth who are involved in local service organizations ○ Community theater group ○ Children's theatre group ○ Local college group ○ Professional group □ Take into consideration the content and length of the program, including language, to make sure it is appropriate for children. □ After the performance ask children to recall events and the characters in the performance. "Rachel, what part did you like the best?" or "Who was your favorite character?" |

RESOURCES

Creativity and Aesthetics

CA1. MUSIC AND MOVEMENT

CA1.1 EXPLORES THROUGH LISTENING, SINGING, CREATING, AND MOVING TO MUSIC

Strand: Exploration of Music and Movement

Setting up a Music Center in the Classroom

- Locate the Music Center away from quieter areas such as the library center.
- Use a divider or shelf to define the boundaries of the music center.
- Use an area rug to further define the space. A rug also provides comfortable seating and absorbs excess sound.
- Hang carpet and sound-absorbing materials on the walls to further reduce excess sound.
- Add sheet music and illustrated charts with the words to familiar songs.
- Determine and establish with children the number of children the learning center can accommodate, and allow enough space and instruments for that number of children.
- Display instruments so that children can easily select and put them away.
- Rotate instruments to maintain children's interest.
- Add materials and props such as scarves or ribbon sticks.
- Display pictures of musical instruments, people playing instruments, orchestras, and marching bands.
- Join children in the center to support them as they use the instruments and the materials and props.

Strand: Music and Movement Concepts

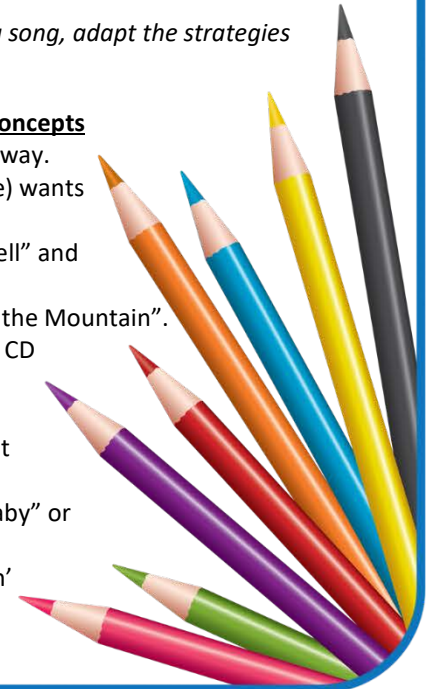
Introducing New Songs to Children

- Select a song that is relatively short, has simple words, a melody that is easy to remember, and is within children's vocal range of about five notes.
- Make sure that you have practiced the song and know it by heart.
- Begin by telling a story about the song.
- Sing the song to the children with animation and enjoyment.
- Sing the song again and again if you wish. Invite children to join in or clap along.

Teacher Note: *If you use a CD to introduce a song, adapt the strategies just listed.*

Songs and Strategies for Introducing Music Concepts

- Sing-song nursery rhymes – “Rain, rain, go away. Come again another day. Little (child's name) wants to play”.
- Familiar songs such as “The Farmer in the Dell” and “Wheels on the Bus”.
- Folk songs such as “She'll Be Comin' 'Round the Mountain”.
- Songs from other cultures – The Ella Jenkins CD *Multi-cultural Children's Songs* is easy for children to listen to and sing along with.
- Involve children in singing songs that suggest different volumes (dynamics). For example:
 - Sing softly a lullaby such as “Rock A Bye Baby” or “Hush Little Baby”.
 - Sing loudly a song such as “She'll Be Comin' 'Round the Mountain”.



- Invite children to join you in singing “Row, Row, Row Your Boat” at different tempos.
 - Say, “It’s a warm, sunny day and we are going to row our boat slowly and gently down the stream”. Sing the song and row the boat very slowly. Then say in an excited voice, “A big storm is coming up. So we have to sing and row our boat back to shore as quickly as possible”. Sing the song and row the boat very fast, changing the word *gently* to *quickly*.

CA2. VISUAL ARTS

CA2.1 EXPLORES, MANIPULATES, CREATES, AND RESPONDS TO A VARIETY OF ART MEDIA

Strand: Exploration of Art

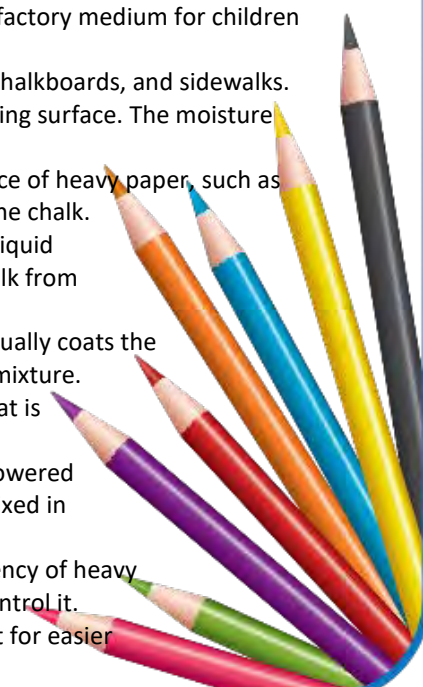
Materials and Props for the Art Center

- Finger paints and finger paint paper
- Paint, paper, crayons, and markers in a variety of skin tones
- Washable ink stamp pads and stamps
- Playdough (homemade preferred)
- Molding clay
- Washable glue, tape, string, yarn
- Collage materials, including materials that reflect different cultures
- Materials for creating three-dimensional structures
- Art books and art post cards featuring famous paintings. For example, *Museum ABC* by Metropolitan Museum of Art

Applying

- **Crayons** – often the first art medium that children use
 - Provide the crayons for a classroom rather than have children bring a box for their individual use. This encourages children to share materials.
 - Provide crayons that are soft and apply well to surfaces.
 - Include fat or chubby crayons as well as the slimmer varieties.
 - Remove the paper from some crayons to try drawing with sides as well as the tips and for creating rubbings.

- Store like colors in labeled containers. Use the color of the crayon as part of the label. The color names can be added in both English and Spanish, for example.
- Have crayons available throughout the year.
- Introduce special types of crayons such as fluorescent and multicultural skin tones.
- Provide a variety of types of paper for children to use.
- Introduce children to crayon rubbings. Place newsprint or fairly thin paper on top of an object that has an interesting texture or design: coins, keys, brick or bark, for example. Guide children to use the side of a crayon with paper removed to rub back and forth until the desired image appears. Tape the object down if children have difficulty when objects shift.
- **Colored Chalk and Sidewalk Chalk** – a satisfactory medium for children
 - Provide thick sticks of the soft variety.
 - Allow children to use chalk on paper, on chalkboards, and sidewalks.
 - Provide damp paper towels as an interesting surface. The moisture keeps the chalk dust from flying.
 - Have children brush liquid starch on a piece of heavy paper, such as construction paper, and then draw with the chalk.
 - Prepare a mixture equal parts water and liquid starch to dip dry chalk into to prevent chalk from flaking off.
 - Scrape off the sticky substance that eventually coats the end of chalk that has been dipped in the mixture.
- **Tempera Paint** – a water-based medium that is available in a wide variety of hues
 - Purchase washable liquid tempera. Dry powered tempera can present a health hazard if mixed in the presence of children.
 - Provide tempera paint that is the consistency of heavy cream so that children are best able to control it.
 - Add a teaspoon or two of liquid detergent for easier cleanup of spills.



- Add a small amount of wintergreen or oil of cloves to prevent liquid tempera paint from turning sour. Make sure children aren't allergic to either of these scents.
- Provide no-spill paint containers with lids.
- Begin with brushes with chubby handles which are easier for children to handle. Appropriate brush widths for young preschool children is one inch and for older preschool children one-half to three-fourths inches. Long-handled brushes are best for easel painting and shorter-handled brushes are best for painting at the table.
- Wash brushes after use and store with bristles up for drying.
- Provide a variety of paper: newsprint (it is inexpensive, but is thin and can tear when a child paints over and over in one area), manila paper, construction paper, textured paper such as wallpaper samples and ends, wrapping paper, computer paper, shelf paper, opened paper bags, and printed newspaper.
- Provide paper that is at least 18 x 14 inches for beginning painters. They need sufficient space for broad arm sweeps. This size paper will fit standard easels.
- Provide easels for painting. Children can also paint at tables, either sitting or standing.
- Cover the floor with newspaper or a piece of plastic or vinyl to prevent paint from dripping on the floor.
- Have children wear paint shirts, aprons, or smocks when painting.
- Demonstrate to children how to dip their paint brush in the paint, wipe off excess paint two times, and then paint so that the paint is less likely to run when applied to paper. Share these words: "Dip, wipe, wipe, paint".
- **Finger Paint** – a sensory experience in which children use their fingers and hands to explore the paint and to create designs
 - Include finger painting experiences for the children.
 - Respect those children who are hesitant to finger paint. They may change their minds after watching other children enjoy the process.
 - Understand that finger painting can be a messy experience and be prepared for this.
 - Have children wear paint shirts or smocks when they finger paint.

- Decide on the surface for finger painting; for example paper with a glossy finish, directly on laminated tables, or on a tray with or without paper.
- Dampen the surface to be painted with a sponge.
- Purchase finger paint in ready-mixed form. Scoop out the premixed, pudding-like paint and apply to a wet surface.
- Provide dampened paper towels for wiping hands before children go to the sink to their wash hands.
- **Watercolors** – a set with blocks of watercolors that are washable and nontoxic with paintbrush
 - Provide two to four watercolor sets and a brush for each set, small containers of water for rinsing brushes, and paper that is sturdy and absorbent.
 - Demonstrate and explain how to use the watercolors.
 - △ Dip the brush in the water, and then swirl the tip of the brush in the color of paint they want to use. Guide them on how much water to use (less water makes it easier to control the flow of wet paint onto the paper).
 - △ Remind them to thoroughly rinse their paintbrush before changing color.
 - △ Explain to children that if they continue adding water to the painting the wet paper will eventually tear.

Teacher Notes about Watercolors:

- *Watercolor brushes are very thin. Therefore children must be able to grasp and manipulate the brush to successfully use water colors.*
- *It is a good idea to cover the table with newspaper before children begin using watercolors.*
- *Large coffee filters, especially those made from recycled paper, are excellent for watercolors. They are inexpensive if purchased in bulk.*



- **Collage** – the process of selecting and attaching materials on a flat surface to create a more or less two-dimensional design or picture.

- Collect materials that children can use to create collages:

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| ✓ pieces of colored construction paper | ✓ pieces of yarn and string |
| ✓ paper cut or torn into shapes | ✓ large buttons |
| ✓ tissue and cellophane in various hues | ✓ stamps and stickers |
| ✓ wallpaper ends or samples | ✓ sticky dots |
| ✓ wrapping paper | ✓ pieces of ribbon and lace |
| ✓ greeting cards | ✓ dried flower petals |
| ✓ fabric scraps with interesting textures and designs | ✓ doilies |

- Sort materials and store in individual containers.

- Rotate collage materials so that children always have a variety from which to choose.

- Provide cardboard or heavy paper as the base for collage.

- Have glue and scissors available in the center.

- Allow children to choose materials and create their own collages.

Forming and Assembling

- **Playdough** – a non-hardening dough that can be purchased or made and is used as a molding material

- Consider making your own playdough which saves money, is less likely to crumble, and allows children to vary its texture and color.

- Store playdough in an airtight container.

- Allow children to have many opportunities to manipulate the playdough before adding accessories.

- Add accessories such as alphabet and cookie cutters, small rolling pins, plastic knives and forms, potato masher.

- Provide vinyl placemats to define children's space and for easy clean up.

- **Molding and Baking Clay** – viewed by many preschool teachers as an ideal medium

- Consider making your own clay. Recipes can be found in curriculum books.

- Store clay in airtight container.

- Provide modeling clay, which is a soft clay. This clay can be manipulated easily into balls, snakes or different shapes.

- Provide baking clay, which is clay that can be baked in a kiln or left to harden on its own. This clay can be painted and the final product children make can be saved.

- Add accessories such as:

- | | |
|------------------------|------------------------------------|
| ✓ rolling pins | ✓ cookie cutters of various shapes |
| ✓ plastic knives | including letters of the alphabet |
| ✓ craft sticks | ✓ clay boards and hammers |
| ✓ plastic pizza cutter | ✓ potato masher |

- **Three-dimensional Structures** – the process of assembling a variety of materials and attaching them to a base

- Collect materials that children can use in creating three-dimensional structures:

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| ✓ boxes of different sizes | ✓ scissors with blunt-ended blades |
| ✓ small cereal boxes | ✓ pieces of ceiling tiles |
| ✓ paper towel tubes | ✓ natural items such as shells, pebbles, pine cones and small sticks |
| ✓ cardboard | ✓ blocks of wood approximately six inches long |
| ✓ corrugated cardboard | ✓ tape |
| ✓ wall paper ends | ✓ broken jewelry |
| ✓ wood scraps | ✓ spray can tops |
| ✓ craft sticks | ✓ other items that are safe for children to use |
| ✓ yarn | |
| ✓ cotton balls | |
| ✓ fabric scraps | |
| ✓ plastic lids | |
| ✓ glue | |

- Explain to children that they can use the materials to create a structure.

- Allow children to explore the materials and talk about what they are and how they might be used.

- Guide children to select a base on which to build.



- o Stand back and allow children to create their own three-dimensional structure.
- o Invite children to dictate a story about their structure: what it is and how they built it, for example. Record their dictation and place it with the structures.
- o Provide a place in the classroom for displaying the structures and dictated stories.
- o Suggest that children invite their families to look at the display.

Visual Arts Dos and Do Nots for Preschool Teachers

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| Do | <ul style="list-style-type: none"> ✓ Introduce art materials to children, and demonstrate and discuss with them their proper use. ✓ Store materials close to where they are to be used. ✓ Organize materials so children can make selections independently. ✓ Respect children's names. Instead of automatically writing a child's name in the upper left-hand corner of the paper, ask "Do you want your name on your art work?" If the answer is "Yes", ask "Where would you like your name?" or "Do you want to write your name, or do you want me to do it?" (Name can always be written on the back of the picture or on a card and attached to the art work.) ✓ Allow children to be involved in messy activities. Paint aprons or shirts can protect clothing and children can assist with clean up. |
| Do NOT | <ul style="list-style-type: none"> x Give children tasks such as pre-drawn forms or pictures to color, or emphasize "coloring inside the lines." Children will draw and color their own pictures. x Restrict children's choices by telling them which art activities they should engage in. Instead, let children choose their own materials for exploration, experimentation, and creative discovery. x Fix children's work because it did not meet your expectations. x Give rewards for good work. Children need to please only themselves. x Presume to know what a child has drawn. Instead, invite children to tell you about it. |

Strand: Art Concepts

Mixing Colors

- Start with tempera paint in the primary colors of red, blue, and yellow. Children can mix their own secondary colors using brushes.
- Add at a later time white and black tempera paints that children can use for mixing tints and shades.
- Involve children in creating a new color by putting one color of finger paint on the surface, then adding another color as the child is experimenting with the first color.
- Give children two small balls of playdough, one blue and one yellow, and suggest that they mix the two balls together to see what happens.

Strand: Art Appreciation and Expression

Children's Books about Art

Matthew's Dream by Leo Lionni
A Color of His Own by Leo Lionni
Little Blue and Little Yellow by Leo Lionni
Mouse Paint by Ellen Stoll Walsh
Planting a Rainbow by Lois Ehlert
Draw Me a Star by Eric Carle
A Rainbow of My Own by Don Freeman
Museum ABC by the Metropolitan Museum of Art



CA3. DRAMA

CA3.1 EXPLORES FEELINGS, RELATIONSHIPS, AND CONCEPTS THROUGH IMITATION, PRETEND PLAY, AND SOCIODRAMATIC PLAY

Strand: Exploration of Drama

Organizing the Dramatic Play Environment

- Use hooks on the back of shelves or on a board attached to the wall for hanging hats, ties, bags, and dress-up clothes.
- Use an open shelf or a small chest with drawers to hold small dress-up items and doll clothes.
- Add a shoe rack or hanging shoe bag for shoes and small items such as wallets.
- Provide plastic storage bins for costume jewelry.

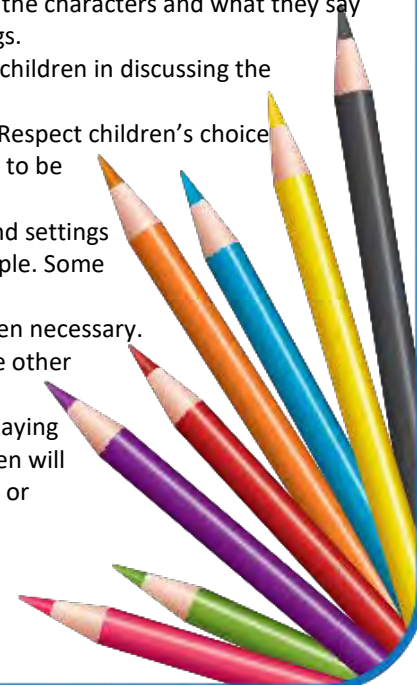
Facilitating Dramatic Play

- Observe children so you can know when they may need your help in coming up with new ideas or to extend their play. For example, if you see a child pretending to stir something in a bowl, you might say, “I see you’re busy stirring up something in that bowl. What are you making?”
- Become involved in children’s play when you observe them involved in pretend play but not interacting with each other. For example, if you see Lucinda putting on dress-up clothes and jewelry, while Raoul is sitting in a chair doing nothing, you might say, “Lucinda, you’re getting all dressed up like you’re going to a party. Do you think Raoul might like to join you? Am I right?” When Lucinda doesn’t answer, say “I like parties. Raoul, I know you like parties. Lucinda, give Raoul a few minutes to get dressed up so he can go to the party with you.”

Strand: Drama Concepts

Tips for Incorporating Creative Drama

- Begin with this understanding of creative drama:
 - In creative drama, children act out stories with or without props.
 - They become actively involved in the story.
- They use words and actions to dramatize the stories they have heard. Sometimes they use props.
- Creative drama is more appropriate for older preschool and kindergarten children and should be simple, child-centered, fun, and pressure-free.
- Audiences should be each other and younger children such as three year olds, rather than adults.
- Consider these creative drama tips:
 - Begin with a book to read or a story to tell. See suggested list that follows.
 - Choose a story with few characters, a simple story line, and lots of action. Stories with repetitive dialogue and predictable stories are appropriate for dramatizing.
 - Read or tell the story over a period of time so it is digested and becomes familiar to the children.
 - Ask children to pay particular attention to the characters and what they say (dialogue) and do and express their feelings.
 - Lead a discussion about the story. Involve children in discussing the sequence of events (plot).
 - Invite children to volunteer for each part. Respect children’s choice of level of involvement. Some may choose to be part of the audience.
 - Involve all children in deciding on props and settings needed. Keep both props and settings simple. Some stories may require no props.
 - Serve as narrator and prompt children when necessary.
 - Allow children to present the drama to the other children in their own creative way.
 - Allow reenacting with different children playing the parts. The attention span of the children will determine if this takes place the same day or another day.



- Make the props available for children's independent play. This will extend children's involvement with the story. It will also allow children who do not choose to perform for others to play a part without an audience.
- Refer to this Resource Page for suggestions of books for creative drama.

Theme of Prop Box Ideas

- Develop theme or prop boxes to add to the Dramatic Play Center; prop boxes that include a variety of materials that are relevant to a particular theme or topic of study. Here is a list to get you started:
 - **Supermarket:** empty food containers, cash registers, paper or plastic money, paper bags for groceries, plastic fruits and vegetables, coupons, supermarket ads, signs for different sections such as meat, dairy, fruits, vegetables, canned goods, and cereals
 - **Office:** pads of paper, pencils, briefcases, telephones, stamp pads and stampers, envelopes, computer keyboard, adding machine or calculator, calendars, old planners, business cards
 - **Barbershop/hairdresser:** empty shampoo bottles with labels, wigs on stands, curlers and pins, hair dryer (minus electric cord), towels, basins, smocks, signs with services provided and prices, hair styling magazines, magazines for the waiting room
 - **Camping:** pup tent, canteens, cooking utensils, empty food boxes, flashlight, small logs for campfire
 - **Medical office/hospital:** stethoscope, blood pressure cuff, ace bandages, white "lab" jackets, scrubs, prescription pads and pencils, telephone, x-rays, folders and clipboards for patients' charts, flashlight

- **Shoe store:** chairs to sit in, variety of old shoes, shoe boxes (labeled and priced), cash register, play money, shoe horn, ruler to measure foot or a foot measurer from a shoe store, signs with name of store
- **Bakery:** baker's hat, apron, small plastic bowls, muffin tins, cake pans, spoons, spatulas, empty cake mix boxes, recipe cards
- **Gardening:** gardening gloves, small gardening tools, vegetable and flower seed packs

Organizing and Storing Prop Boxes

- Store props for each theme or topic in a box or plastic tub with lid.
- Label each container with the name of the theme or topic of study.
- Tape an inventory list to the inside cover of the container.
- Check prop boxes periodically and repair or replace items that are torn or broken.
- Invite families to provide items for the prop boxes.

Books for Creative Drama

The Three Bears by Paul Galdone
The Gingerbread Boy by Paul Galdone
Caps for Sale by Esphyr Slobodkina
The Three Billy Goats Gruff by Paul Galdone



Books That Support Strategies and Activities: Preschool

A

A Ball for Daisy by Chris Raschka
A Boy, a Dog, a Frog, and a Friend by Mercer Mayer
A Boy, a Dog, and a Frog by Mercer Mayer
A Chair for My Mother by Vera B. Williams (also available in Spanish)
A Color of His Own by Leo Lionni (also available in Spanish/English bilingual board book)
A House Is a House for Me by Mary Ann Hoberman, illustrated by Betty Fraser
A Letter to Amy by Ezra Jack Keats
A My Name Is Alice by Jane Bayer, illustrated by Steven Kellogg
A Pocket for Corduroy by Don Freeman (also available in Spanish)
A Pocket Full of Kisses by Audrey Penn, illustrated by Barbara Leonard Gibson
A Rainbow of My Own by Don Freeman
A Sick Day for Amos McGee by Philip C. Stead, illustrated by Erin E. Stead
A Tree is Nice by Janice May Udry
ABC I Like Me! by Nancy Carlson
Abuela by Arthur Dorros, Illustrated by Elisa Kleven (includes Spanish phrases, also available in Spanish)
All by Myself by Alikiaall
Alphabet under Construction by Denise Fleming
Amazing Grace by Mary Hoffman
Anansi and the Moss Covered Rock by Eric Kimmel, illustrated by Janet Stevens
Apples and Pumpkins by Anne Rockwell
Apples and Pumpkins by Anne Rockwell, illustrated by Lizzy Rockwell
Are You My Mother? By P.D. Eastman (also available in Spanish)
The Artist Who Painted a Blue Horse by Eric Carle
Ask Mr. Bear by Marjorie Flack

B

Babies in the Bayou by Jim Arnosky
Barnyard Banter by Denise Fleming
Beautiful Oops! by Barney Saltzberg
The Berenstain Bears Go To the Doctor by Stan and Jan Berenstain
The Berenstain Bears Visit the Dentist by Stan and Jan Berenstain
Bigmama's by Donald Crews

B-I-N-G-O by Rosemary Wells
Blueberries for Sal by Robert McCloskey
Bread, Bread, Bread by Ann Morris, photo illustrated by Ken Heyman
Brown Bear, Brown Bear, What do You See? By Bill Martin, Jr. illustrated by Eric Carle (also available in many languages)
Building a House by Byron Barton

C

Caps for Sale by Esphyr Slobodkina (also available in Spanish)
The Carrot Seed by Ruth Kraus
Changes, Changes by Pat Hutchins
Chicka, Chicka, Boom Boom by Bill Martin, Jr. and John Archambault
Chicken Soup with Rice: A Book of Months by Maurice Sendak
Clifford the Big Red Dog by Norman Bridwell
Clifford the Small Red Puppy by Norman Bridwell
Color Dance by Ann Jonas
Cookie's Week by Cindy Ward, illustrated by Tomie dePaola
Count by Denise Fleming
Corduroy by Don Freeman (also available in Spanish)
Curious George and the Dump Truck by Margaret and H. A. Rey
Curious George and the Firefighters by Margret and H. A. Rey (also available in Spanish)
Curious George Visits a Police Station by Margaret Rey and Alan J. Shalleck

D

Daddy Makes the Best Spaghetti by Anna Grossnickle Hines
Do You Know Which Ones Will Grow? by Susan A. Shea, paintings by Tom Slaughter
The Doorbell Rang by Pat Hutchins (also available in Spanish)
Down by the Bay by Raffi, illustrated by Nadine Bernard Westcott
Draw Me a Star by Eric Carle
Duck! Rabbit! by Amy Krouse Rosenthal, illustrated by Tom Lichtenheld

E-F

Emergency by Gail Gibbons
The Enormous Turnip by Aleksei Tolstoy, illustrated by Niamh Sharkey
Families are Different by Nina Pellegrini
Feast for Ten by Cathryn Falwell
Feelings by Aliko
Fire Engines by Ann Rockwell
Fish Eyes: A Book You Can Count On by Lois Ehlert
Five Little Ducks by Raffi, illustrated by Jose Aruego and Arienne Dewey
Five Little Monkeys Jumping on the Bed by Eileen Christelow (also available in a bilingual Storybook Treasury)
Five Little Monkeys Sitting in a Tree by Eileen Christelow (also available in a bilingual Storybook Treasury)
Five Little Monkeys Wash the Car by Eileen Christelow
Five Little Monkeys with Nothing to Do by Eileen Christelow (also available in a bilingual Storybook Treasury)
Flora and the Flamingo by Molly Idle
Flora and the Peacocks by Molly Idle
Flora and the Penguin by Molly Idle
Friends at School by Rochelle Bunnett, photo-illustrated by Matt Brown
Frog Goes to Dinner by Mercer Mayer
Frog, Where Are You? by Mercer Mayer
Froggy Goes to School by Jonathan London
Froggy Eats Out by Jonathan London
Froggy Gets Dressed by Jonathan London, illustrated by Frank Remkiewicz (also available in Spanish)
Froggy Goes to Bed by Jonathan London, illustrated by Frank Remkiewicz
Froggy Goes to School by Jonathan London, illustrated by Frank Remkiewicz
Froggy Goes to the Doctor by Jonathan London
Froggy Learns to Swim by Jonathan London, illustrated by Frank Remkiewicz
Froggy's Baby Sister by Jonathan London, illustrated by Frank Remkiewicz
Froggy's First Kiss by Jonathan London, illustrated by Frank Remkiewicz
Frogs by Gail Gibbons
From Head to Toe by Eric Carle (also available in Spanish)
The Full Moon at the Napping House by Audrey Wood, illustrated by Don Wood

G

The Gigantic Turnip by Aleksei Tolstoy, illustrated by Niamh Sharkey (also available in Spanish)
Gilberto and the Wind by Marie Hall Ets
The Gingerbread Boy by Paul Galdone
The Gingerbread Man retold by Jim Aylesworth
Giraffes Can't Dance by Giles Andreae
Glad Monster, Sad Monster by Ed Emberley
Goldilocks and the Three Bears by Jan Brett
Goodnight, Goodnight Construction Site by Sherri Duskey Rinker, illustrated by Tom Lichtenheld
Goodnight Moon by Margaret Wise Brown, illustrated by Clement Hurd (available in multiple languages)
Goodnight, Owl by Pat Hutchins
The Great Kapok Tree: A Tale of the Amazon Rain Forest by Lynne Cherry (also available in Spanish)
Growing Vegetable Soup by Lois Ehlert (also available in Spanish/English board book)
Guess How Much I Love You by Sam McBratney, illustrated by Anita Jeram (also available in Spanish)
Guess Whose Shadow? by Stephen R. Swinburne

H

Happy Birthday Moon (Moonbear Book) by Frank Asch (also available in Spanish)
Harold and the Purple Crayon by Crockett Johnson (also available in Spanish)
Harry the Dirty Dog by Gene Zion (also available in Spanish)
Henry's Map by David Elliott
Here Are My Hands by Bill Martin, Jr. and John Archambault
Houses and Homes by Ann Morris, photo illustrated by Ken Heyman
How a House is Built by Gail Gibbons
How are you Peeling? by Saxton Freymann and Joost Elffers
Hush Little Baby by Marla Frazee

I

I Am Water by Jean Marzollo
I Like Me! By Nancy Carlson
I Read Signs by Tana Hoban
I Really Like Slop (An Elephant and Piggie Book) by Mo Willems
I Was So Mad by Mercer Mayer
I Went Walking by Sue Williams
I Will Take a Nap (An Elephant and Piggie Book) by Mo Willems
If You Give a Cat a Cupcake by Laura Numeroff, illustrated by Felicia Bond
If You Give a Dog a Donut by Laura Numeroff, illustrated by Felicia Bond
If You Give a Moose a Muffin by Laura Numeroff, illustrated by Felicia Bond
If You Give a Mouse a Brownie by Laura Numeroff, illustrated by Felicia Bond
If You Give a Mouse a Cookie by Laura Numeroff, illustrated by Felicia Bond
If You Give a Pig a Pancake by Laura Numeroff, illustrated by Felicia Bond
If You Give a Pig a Party by Laura Numeroff, illustrated by Felicia Bond
If You Take a Mouse to School by Laura Numeroff, illustrated by Felicia Bond
If You Take a Mouse to the Movies by Laura Numeroff, illustrated by Felicia Bond
In the Small, Small Pond by Denise Fleming
In the Tall, Tall Grass by Denise Fleming
Inch by Inch by Leo Lionni
Ira Sleeps Over by Bernard Waber
It Looked Like Spilt Milk by Charles G. Shaw

J

Jacob's Eye Patch by Beth Kobliner Shaw and Jacob Shaw, illustrated by Jules Feiffer
Jake at Gymnastics by Rachel Isadora
Jamaica's Find by Juanita Havill, illustrated by Anne Sibley O'Brien
Jamberry by Bruce Degen
Jambo Means Hello: Swahili Alphabet Book by Muriel Feelings, illustrated by Tom Feelings
Jesse Bear, What Will You Wear? by Nancy White Carlson, illustrated by Bruce Degen.
Jump, Frog, Jump by Robert Kalan

Just Going to the Dentist by Mercer Mayer
Just Me and My Dad by Mercer Meyer
Just Me and My Puppy by Mercer Mayer
Just Shopping with Mom by Mercer Meyer
The Kissing Hand by Audrey Penn, illustrated by Ruth E. Harper and Nancy M. Leak (also available in Spanish)

K-L

Kitten's First Full Moon by Kevin Henkes
Listen to the Rain by Bill Martin, Jr. and John Archambault, illustrated by James Endicott
The Listening Walk by Paul Showers
Little Blue and Little Yellow by Leo Lionni
The Little Mouse, the Red Ripe Strawberry and the Big Hungry Bear by Don and Audrey Wood (also available in Spanish)
The Little Red Hen by Paul Galdone

M

Maggie and Michael Get Dressed by Denise Fleming
Mama Zooms by Jane Cowen-Fletcher
Mary Engelbreit's Mother Goose by Mary Engelbreit
Matthew's Dream by Leo Lionni
Me on the Map by Joan Sweeney, illustrated by Annette Cable
Miss Tizzy by Libby Moore Gray
The Mitten by Jan Brett
Moonbear's Shadow by Frank Asch
Mouse Count by Ellen Stoll Walsh
Mouse Paint by Ellen Stoll Walsh
Mouse Shapes by Ellen Stoll Walsh
Mr. Gumpy's Outing by John Burningham
Museum ABC by the Metropolitan Museum of Art
My Farm Friends by Wendell Minor
My Feet by Alik
My Five Senses by Alik (also available in Spanish)
My Friend Is Sad by Mo Willems
My Hands by Alik
My Very First Mother Goose by Iona Opie, illustrated by Rosemary Wells
The Napping House by Audrey Wood, illustrated by Don Wood (also available in Spanish)
Night in the Country by Cynthia Rylant, illustrated by Mary Szilagyi

N-O

No, David! By David Shannon
Noisy Nora by Rosemary Wells
Not a Box by Antoinette Portis
Of Colors and Things by Tana Hoban
Old Macdonald Had a Farm, illustrated by Pam Adams
On Monday When it Rained by Cherryl Kachenmeister
One Frog Too Many by Mercer Mayer
One Was Johnny by Maurice Sendak
Otis by Loren Long (Also available in Spanish)
Owl Babies by Martin Waddell
Owls by Gail Gibbons

P

Painting a Rainbow by Lois Ehlert
Pajama Time by Sandra Boynton
Pancakes for Breakfast by Tomie dePaola
Papa Do You Love Me? by Barbara Joose, illustrated by Barbara Lavallee
The Patchwork Quilt by Valerie Flournoy, illustrated by Jerry Pinkney
Pete the Cat and His Four Groovy Buttons by Eric Litwin, illustrated by James Dean
Pete the Cat: I Love My White Shoes by Eric Litwin, illustrated by James Dean
Pete the Cat: Rocking in My School Shoes by Eric Litwin, illustrated by James Dean
Peter's Chair Ezra Jack Keats
The Pigeon Has Feelings, Too! By Mo Willems
Pigs Make Me Sneeze! (An Elephant and Piggie Book) by Mo Willems
Planting a rainbow by Lois Ehlert
Polar Bear, Polar Bear, What Do You Hear? by Bill Martin, Jr., illustrated by Eric Carle (also available in Spanish)
POP! A Book about Bubbles by Kimberly Brubakker Bradley, photos by Margaret Miller
Press Here by Herve Tullet
Pumpkin, Pumpkin by Jeanne Titherington

Q-R

Quack & Count by Kevin Baker
The Quarreling Book by Charlotte Zolotow
Quick as a Cricket by Audrey Wood, illustrated by Don Wood
Rainbow Fish by Marcus Pfister
Raising a Hero (Work for Biscuits) by Laura Numeroff, illustrated by Lyn Munsinger (service dog)

Read-Aloud Rhymes for the Very Young by Jack Prelutsky
The Real Mother Goose illustrated by Blanche Fisher Wright
The Reasons for Seasons by Gail Gibbons
The Relatives Came by Cynthia Rylant, illustrated by Stephen Gammell
Rosie's Walk by Pat Hutchins (also available in Spanish)
Runaway Bunny by Margaret Wise Brown, illustrated by Clement Hurd (also available in Spanish)

S

School Bus by Donald Crews
The Seasons of Arnold's Apple Tree by Gail Gibbons
Shades of People by Shelley Rotner and Shelia M. Kelly
Shadows and Reflections by Tana Hoban
Silly Sally by Audrey Wood
The Snowy Day by Ezra Jack Keats
Steam Train, Dream Train by Sherri Duskey Rinker, illustrated by Tom Lichtenheld
Stone Soup by Marcia Brown

T

Tap the Magic Tree by Christie Matheson
Ten Red Apples by Pat Hutchins
Ten, Nine, Eight by Molly Bang
There Was an Old Lady Who Swallowed a Fly by Simms Taback
This Old Man by Pam Adams
The Three Bears by Paul Galdone
The Three Billy Goats Gruff by Paul Galdone
The Three Little Pigs by Paul Galdone
Time for Bed by Mem Fox
Today is Monday by Eric Carle
Tomie dePaola's Mother Goose illustrated by Tomie dePaola
Tool Book by Gail Gibbons
Tool Box by Anne and Harlow Rockwell
Tools by Ann Morris with photos by Ken Heyman
Tops and Bottoms by Janet Stevens
Umbrella by Taro Yashima
The Very Busy Spider by Eric Carle (also available in Spanish)
The Very Hungry Caterpillar by Eric Carle
The Very Lonely Firefly by Eric Carle
The Very Quiet Cricket by Eric Carle

W-Z

Water by Frank Asch

The Way I Feel by Janan Cain (Also available in Spanish)

We're Going on a Bear Hunt, by Michael Rosen, illustrated
by Helen Oxenbury

We're Going on a Picnic by Pat Hutchins

What a Wonderful World by George D. Weiss and Bob

Thiele illustrated by Ashley Bryan.

The Wheels on the Bus by Raffi, illustrated by Sylvie

Wickstrom

Where the Wild Things Are by Maurice Sendak

White Rabbit's Color Book by Alan Baker

Who Sank the Boat by Pamela Allen

Will I Have a Friend by Mariam Cohen

William's Doll by Charlotte Zolotow, illustrated by William

Pene DuBois

The Wind Blew by Pat Hutchins

Yoo-hoo Ladybug by Mem Fox, illustrated by Laura

Ljungkvist

Yoko by Rosemary Wells

Teacher Note:

*All of the books on this list were available for purchase as
of June 1, 2017.*

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Resources

The Arkansas Department of Human Services Division of Child Care and Early Childhood Education (DCCECE) offers numerous services and resources to help families and caregivers learn about quality child care. One is Better Beginnings, a program which connects Arkansas families with information and resources to identify and locate quality child care providers in their communities.

Better Beginnings enhances parents' understanding of the value of quality child care. Better Beginnings also gives Arkansas child care providers' valuable tools for improving the quality of their programs at every level.

In collaboration with DCCECE, the University of Arkansas Early Care and Education Projects offers professional development for early educators in Arkansas and meets the Better Beginnings requirements for centers-based care, family child care homes, and school aged care. A link to Better Beginnings and other valuable links for both providers and parents can be found on the University of Arkansas Early Care and Education Projects *For the Provider* webpage.

