Topic of Study - Caterpillars, Butterflies, Worms, and Insects

Introduction

Preschool children enjoy discovering a worm under a rock or leaf. They notice a beautiful butterfly as it hovers over a flower. They watch in amazement as they see their first firefly. The outdoor environment is teeming with insects that crawl and fly, with caterpillars, butterflies and worms. Thus a study of caterpillars, butterflies, worms, and insects is a natural for children.

Teacher Notes about STEM

- Early Childhood Educators are now linking together science, technology, engineering, and math into what is called STEM curriculum.
- This topic of study, Caterpillars, Butterflies, Worms, and Insects, focuses on the science component of STEM.

Teacher Notes

Arkansas Minimum Licensing Requirements (Rev. 1.1.15) requires the following:

400 PROGRAM – 401 Program Requirements for all ages

5.a. The facility shall have an appropriate curriculum with weekly activity plans appropriate for the developmental needs of each group of children.

To assist your program in meeting this requirement, refer to Developing Weekly Activity plans for Adventures in Learning for information on how to develop your plans. Feel free to make copies of the plan sheet you select and use it each week. To help you in your planning, there are also 2 samples of completed plan sheets that you may use as guides when developing weekly activity plans for your group of children.

- Adventures in Learning is an Arkansas approved curriculum.
- This curriculum guide is a collection of activities that support the Big Ideas listed below. Choose those activities that best meet the needs of the children in your group.
- Consider extending this topic of study beyond a one-week period of time. There is so much for children to learn about caterpillars, butterflies, worms, and insects. Carry over activities from one week to another because children enjoy and learn best through repetition.
- If you do not have some of the featured books, refer to the Additional Books section for other books you can use.
- It is important to read the same book several times to children so that they can have a better understanding of theme, plot, characters and the sequence of events. In each of the readings presented here, there is a different focus on what is happening in the story.

Big Ideas

Here are five big ideas about caterpillars, butterflies, worms and insects that you can help children explore:

- > Caterpillars become either butterflies or moths
- Some insects crawl
- Some insects fly
- Insects have antennae and 6 legs
- > Worms live underground, in the grass, under leaves and under rocks

Materials to Collect and Make

- Pictures of caterpillars, butterflies, worms, bees, ants, beetles, fireflies.
- Children's books about caterpillars, butterflies, worms, and insects In the Tall, Tall Grass by Denise Fleming The Very Hungry Caterpillar by Eric Carle Inch by Inch by Leo Lionni
- Felt or Magnetic Board
- Storytelling figures (felt or magnetic) for the book, *In the Tall, Tall Grass* (See Attachment: In the Tall, Tall Grass)
- Storytelling figures (felt or magnetic) for the book *The Very Hungry Caterpillar* (See Attachment: The Very Hungry Caterpillar)
- Stages of a Butterfly Sequence Cards (See Attachment: Stages of a Butterfly)
- Tall, Tall Grass Cube and Concentration Cards (See Attachment: Tall, Tall Grass Cube and Concentration)
- Butterfly Kit
- Worm Terrarium/Jar

Resources

- Check with your local library for the availability of children's books.
- Children's books can be purchased online, from school supply catalogs or local bookstores.
- Check school supply companies to order a Butterfly Kit Everything needed to observe the cycle from caterpillars/larvae to butterflies.

Introducing and Concluding the Topic

Learning Goals:

CD2.4 Holds and manipulates information in memory (short-term and working memory and long-term memory)

CD3.2 Engages in symbolic and abstract thinking (abstract thinking)

EL3.1 Responds to features of books and print (print knowledge)

Introduction: Finding Out What Children Know About Caterpillars, Butterflies, Worms and Insects

To introduce the topic of "Caterpillars, Butterflies, Worms, and Insects" you need to find out what children already know about the topic. This allows you to build on your children's experiences. It also helps create an interest in the topic. Here's how to begin.

- Gather the children in a group. Say, "For the next few days we're going to be learning about caterpillars, butterflies, worms and insects."
- Write on chart paper, chalkboard or marker board the words "Caterpillars, Butterflies, Worms and Insects."
- Invite children to tell you things they already know about caterpillars, butterflies, insects and worms. They may name the creatures they have seen. You may have to ask questions to stimulate their thinking, questions such as, "Where did you see a butterfly?" "What did you do with the worms you bought at the bait shop?"
- Make a list of all of the things children know about caterpillars, butterflies, worms and insects.
- Review the list with them and say, "You already know a lot of things about caterpillars, butterflies, worms and insects and we'll find out even more."
- Now ask children what they would like to know about caterpillars, butterflies, worms and insects and make a list of the things they say.

What We Know about Caterpillars, Butterflies, Worms and Insects	What We Would Like to Know about Caterpillars, Butterflies, Worms and Insects	Things We Learned about Caterpillars, Butterflies, Worms and Insects

• Keep the two lists until you have completed the topic of study.

Conclusion: Finding out What Children Have Learned about Caterpillars, Butterflies, Worms and Insects

- Gather the children in a group at the conclusion of the study about caterpillars, butterflies, worms and insects. Write on chart paper, chalkboard or marker board, "Things We Learned about Caterpillars, Butterflies, Worms and Insects"
- Invite children to tell you some things they have learned. You may have to ask prompt questions such as "What do you remember about the caterpillar and the butterfly?" "How many legs does an insect have?" "When do you see fireflies?"
- Make a list of all the things children learned about caterpillars, butterflies, worms and insects.
- Read the first two lists you made with the children. Then say, "Here are some new things you found out about caterpillars, butterflies, worms and insects" and read today's list with the children.

Teacher Note: This method of introducing and concluding the topic is known as KWL: What do children <u>know</u>, what they <u>want</u> to know and what did they <u>learn</u>.

Reading Books with Children

Learning Goals:

- CD2.1 Focuses and sustains attention
- CD2.4 Holds and manipulates information in memory (short-term and working memory)
- LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension)
- EL1.1 Shows interest in literacy experiences (engagement in literacy experiences)
- EL1.2 Engages in red-alouds and conversations about books and stories
- EL3.1 Responds to features of books and print (book knowledge)

Book #1: In the Tall, Tall Grass by Denise Fleming, author and illustrator

First Reading of In the Tall, Tall Grass

- Prepare to read the book, In the Tall, Tall Grass.
- Show cover; give title, author and illustrator. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Invite children to look at the cover and describe what they see. Call attention to the caterpillar if the children did not notice it.
- Read the story so all children can see the pictures in the book.
- Follow up by inviting children to name the animals on each page. See if children notice that the caterpillar can be found on each page.
- Invite children to tell you which animal is their favorite and explain why.

Second Reading of In the Tall, Tall Grass

- Prepare to read the book, In the Tall, Tall Grass
- Show cover and invite children to recall the title. Give author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by showing each page and inviting children to tell you what they know about the animal on that page.
- Say to children that some of the animals in the book are insects and name them as you show the page on which they are located: bees, ants, beetles and fireflies.
- Explain that insects have antennae and six legs. Show pages with bees and ants and call attention to the antennae and legs. (Locate the bee that clearly shows six legs)

Additional Learning Goals:

ST2.1 Demonstrates knowledge of core science ideas and concepts (system parts and wholes)

ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (living things)

Third Reading of In the Tall, Tall Grass

- Prepare to read the book In the Tall, Tall Grass.
- Show the cover and invite children to recall the name of the book. Give the author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the third reading by inviting children to say the sound or action of each animal. For example, caterpillars "crunch and munch" and bees "strum, drum and hum."
- Ask children if they hear any words that rhyme or sound alike. For example, say, "crack, **snap**, wings **flap**" and ask which words rhyme. Emphasize the rhyming words as you say them.

Additional Learning Goal:

EL2.1 Notices and manipulates the sounds of language (rhyme)

Fourth Reading of In the Tall, Tall Grass

- Prepare to read the book, In the Tall, Tall Grass
- Show cover, invite children to say the title. Give author and illustrator.
- Invite children to recall some of the animals in the book. Do they remember which are insects?
- Read the story so all children can see the pictures in the book.
- Follow up the fourth reading by pausing before reading the last word on a page. Invite children to say the rhyming word. For example, read "crunch, munch, caterpillars _____" (lunch), "dart, dip, hummingbirds _____" (sip).

Trainer Note: This strategy of pausing and allowing the children to complete the sentence is called the cloze technique. Children are also hearing rhyming words (*Learning Goal: EL2.1*)

Fifth Reading of In the Tall, Tall Grass (Small Group)

- Gather a small group of children (3 to 5).
- Prepare to read the book, *In the Tall, Tall Grass.*
- Show the cover and invite children to read the title and the name of the author and illustrator with you. Run your fingers under the words as you and the children read them together.
- Read the story so all children can see the pictures in the book. Suggest that children locate the caterpillar on each page.
- Follow up the fifth reading by having children locate letters that are the same on a page. For example, on the first page, show the letter "t" in the word "the", say "This is a "t". Can you find another "t" that looks just like this one?" There is a "t" in the next two words: tall, tall. On the next page there is a "c" in the four words: crunch, munch, caterpillars, lunch.
- Invite children to locate letters that are in their name.

Trainer Note: Do the activities involving letters only as long as the children are interested. Make this a fun activity rather than a pressure activity.

Additional Learning Goal:

EL3.2 Shows knowledge of the shapes, names, and sounds of letters (alphabet knowledge)

Book #2: The Very Hungry Caterpillar by Eric Carle, author and illustrator

First Reading of The Very Hungry Caterpillar

- Prepare to read the book, *The Very Hungry Caterpillar*
- Show cover; give title, author and illustrator. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Invite them to name the animals they see on the cover
- Recall with children that in the story, *In the Tall, Tall Grass*, there was a caterpillar on each page of the book.
- Ask children to predict what the story is about.
- Read the story so all children can see the pictures in the book.
- Follow up by asking children if there was anything in the book that surprised them? What part of the story did they like best? What do they think would happen to them if they ate everything the caterpillar ate?

Second Reading of The Very Hungry Caterpillar

- Prepare to read the book, *The Very Hungry Caterpillar*
- Show cover and ask children to recall the title. Give the author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by involving children in naming and counting each of the food items the caterpillar ate.
- Show children the staggered pages that show one of each of the five fruits. Involve children in naming the fruits and discussing which fruit they have eaten and which fruit they like best.

Third Reading of The Very Hungry Caterpillar

- Prepare to read the book, The Very Hungry Caterpillar
- Invite children to recall the title. Give author and illustrator
- Read the story so all children can see the pictures in the book.
- Follow up the third reading by showing the pages with the fruit and involve children in helping you "read" what is on each page. For example, read "On Monday, he ate through ____ (one apple). But he was still _____ (hungry)."
- Show the page with all of the food items and read, "On Saturday, he ate through_____ (one piece of chocolate cake)." Point to each food item and invite children to say each item.
- Involve children in counting all of the food items on the page. Point to each item as you and the children count together. (10 items)

Teacher Note: This strategy of pausing for children to fill in the missing word is called the cloze technique.

Additional Learning Goal:

MT1.1 Demonstrates number sense and an understanding of quantity (number sense and count sequence)

Book #3: Inch by Inch by Leo Lionni, author and illustrator

First Reading of Inch by Inch

- Prepare to read the book, *Inch by Inch.*
- Show cover; give title, author and illustrator. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Ask children to look at the cover and predict what the story is about. Call attention to the inchworm and say, "This is an inchworm. Let's read and find out what happens to the inchworm in the story."
- Read the story so all children can see the pictures in the book.
- Follow up by showing pictures and inviting children to help you name the different birds that the inchworm met and which parts of each bird's body the inchworm measured.

Second Reading of Inch by Inch

- Bring measuring tools to story time: ruler, metal measuring tape, cloth measuring tape, yard stick. Keep them out of sight of the children until you have read the story to them.
- Prepare to read the book, *Inch by Inch*.
- Show cover, give title, author and illustrator.
- Ask children why they think the title of the book is *Inch by Inch*.
- Ask children to show how big they think an inch is.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by showing the children the measuring tools. Allow them to examine the tools.
- Ask children to find the numeral 1 on their tool. Explain that this means one inch. Help children find the numeral. Children may notice other numerals on the tools. Explain that the 2 means two inches and so forth.
- Place the book on the floor and turn to the page where the inchworm is at the top of a plant looking at the nightingale. Use one of the measuring tools to measure the inchworm and say, "This inchworm is one inch long."
- Invite children to suggest other objects in the room they might measure.
- State that some of the measuring tools will be placed in learning centers for children to use for measuring.
- Place measuring tools in Block Center and in Discovery Center, for example.

Additional Learning Goals:

MT3.1 Participates in exploratory measurement activities and compares objects (measurement) ST3.2 Uses tools and engineering practices to explore and solve problems (knowledge and use of tools) Third Reading of Inch by Inch

- Prepare to read the book Inch by Inch.
- Show cover and invite children to recall the title. Give name of author and illustrator.
- Involve children in discussing the objects in the room they measured. "How many inches long was____?" (objects they measured)
- Read the story so all children can see the pictures in the book.
- Follow up the third reading by asking children why the inchworm could not measure the nightingale's song. (Inchworm measures things, not songs) How did the inchworm keep the nightingale from eating him? (He inched out of sight of the nightingale).

Additional Learning Goal: CD3.2 Engages in symbolic and abstract thinking (abstract thinking)

Additional Books

Butterfly House by Eve Bunting, illustrated by Greg Shed

The Caterpillar and the Polliwog by Jack Kent

Diary of a Worm by Doreen Cronin, illustrated by Harry Bliss

Waiting for Wings by Lois Ehlert

Informational Books:

The Butterfly Alphabet Book by Brian Cassie, Jerry Pallotta, Mark Astrella

From Caterpillar to Butterfly (Let's-Read-and-Find-Out Science) by Deborah Heiligman and Bari Weissman

Monarch Butterfly by Gail Gibbons

Where Butterflies Grow by Joanne Ryder, Lynne Cherry (Illustrator)

Wonderful Worms by Linda Glaser

Language and Literacy Materials and Activities

Learning Goals:

LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension)

- EL1.1 Shows interest in literacy experiences (engagement in literacy experiences)
- EL2.1 Notices and manipulates the sounds of language (rhyme)

The Little Firefly

There was a little firefly, Flashing around the tree. Flashing here and flashing there, He winked his light at me. (Laverne Nelson, Fayetteville)

In the Grass (Tune: Wheels on the Bus)

The caterpillars in the grass go crunch, crunch, crunch Crunch, crunch, crunch, crunch, crunch, crunch, The caterpillars in the grass go crunch, crunch, crunch All through the grass.

The bees in the grass go hum, hum, hum, Hum, hum, hum. Hum, hum, hum. The bees in the grass go hum, hum, hum, All through the grass.

The ants in the grass go tug, tug, tug, Tug, tug, tug. Tug, tug, tug. The ants in the grass go tug, tug, tug, All through the grass. The snakes in the grass go glide, glide, glide, Glide, glide, glide. Glide, glide, glide. The snakes in the grass go glide, glide, glide, All through the grass.

The beetles in the grass go scurry, scurry, scurry, Scurry, scurry, scurry, scurry, scurry, The beetles in the grass go scurry, scurry, scurry, All through the grass.

The fireflies in the grass go glow, glow, glow, Glow, glow, glow. Glow, glow, glow. The fireflies in the grass go glow, glow, glow, All through the grass.

Teacher Note: Show storytelling figures from In the Tall, Tall Grass as you sing each verse.

Baby Bumblebee

I'm bringing home a baby bumblebee, Won't my mommy be so proud of me, I'm bringing home a baby bumblebee, Ouch! It stung me!

I'm squishing up the baby bumblebee, Won't my mommy be so proud of me, I'm squishing up a baby bumblebee, Ooh! It's yucky!

I'm wiping off the baby bumblebee, Won't my mommy be so proud of me, I'm wiping off the baby bumblebee, Now that's better!

Bees

Bees are a-buzzin'. Bees are at play Bees are busy throughout the day. Bees are traveling. Bees in flight, Bees are workin', both day and night.

Here Is a Beehive

Here is a beehive Where are the bees? Hiding away Where nobody sees!

(Make a beehive with fists) (Pretend to look around for them) (Try to see inside beehive)

(Unlock fists slowly)

(Extend fingers one at a time) (Flutter hands vigorously)

Learning Goal:

EL1.1 Shows interest in literacy experiences (engagement in literacy experiences, variety of activities)

Storytelling Figures: In the Tall, Tall Grass (See Attachment: In the Tall, Tall Grass)

- Make either felt or magnetic storytelling figures for the story, In the Tall, Tall Grass
- Read the book, *In the Tall, Tall Grass*, to the children.
- Use the storytelling figures to tell the story.
- Explain to the children that the storytelling figures will be in the library/book area for them to use.
- Demonstrate and discuss with the children the correct way to use the storytelling figures.

Storytelling Figures: The Very Hungry Caterpillar (See Attachment: The Very Hungry Caterpillar)

- Make either felt or magnetic storytelling figures for the story, The Very Hungry Caterpillar
 - Read the book, The Very Hungry Caterpillar, to the children.
 - Use the storytelling figures to tell the story.
 - Explain to the children that the storytelling figures will be in the library/book area for them to use.
- Demonstrate and discuss with the children the correct way to use the storytelling figures.

Science / Discovery and Math

Learning Goals:

- LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension)
- LD2.1 Uses increasingly complex vocabulary, grammar, and sentence structure (in child's home language) (*expressive vocabulary*)
- EL3.1 Responds to features of books and print (print knowledge)
- ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions, and predictions)

Activity: Fruit Exploration (Small Group – 4-5 children)

- Provide an apple, pear, plum, strawberry, orange
- Invite children to name, examine, explore with their senses and discuss each fruit. Guide children to discuss what the fruit looks like, its color, its texture, how it smells, how you eat it, things you can make with it.
- Involve children in a shared writing experience. Your role is to summarize what the children say about each fruit and record it on a chart sheet.

Fruit Exploration
Apple
The apple feels smooth. Apples are good to eat. You can make an apple pie.

Learning Goal:

LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension)

Activity: In the Tall, Tall Grass Cube (See Attachment: Tall, Tall Grass Cube and Concentration)

- Make a cube with the following animals from the book, In the Tall, Tall Grass
 - Carefully fill an empty cube shaped tissue box with crumpled newspapers. Use several sheets of paper because this will make your cube more durable.
 - Cover the cube with colored paper.
 - Color, cut apart and glue one animal per side to the cube
 - Ask a child to toss the cube, name the animal and tell one thing about it.
- Continue with each child having a turn to toss the cube.

Learning Goals:

SE2.1 Interacts with peers (social skills)

CD2.4 Holds and manipulates information in memory (short-term and working memory)

- Activity: Tall, Tall Grass Concentration (See Attachment: Tall, Tall Grass Cube and Concentration)
- Gather a small group of children to play the game.
- Place the cards face up, show to children and have them name the animals.
- Turn the cards over and mix them up.
- Explain to children that they will each have a turn turning over a card, naming the animal, and trying to find the matching card. Demonstrate if necessary.
- Give each child a turn.
- Continue playing the game as long as the children remain interested.

Teacher Notes:

- Remember that the object of the game is for the children to develop short-term and working memory skills and that there are no winners or losers.
- Allow the children to play the game independently.

Learning Goals:

- LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension, follows directions)
- LD2.1 Uses increasingly complex vocabulary, grammar, and sentence structure (in child's home language) (expressive vocabulary)
- ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions and predictions)
- ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (living things, nature and the environment)
- ST3.2 Uses tools and engineering practices to explore and solve problems (knowledge and use of tools)

Activity: Going on a Bug Safari

- Gather children in a group. Discuss with them that they are going on a bug safari. Explain that they will be looking for insects or bugs in the grass. Ask children if they have looked for bugs outside their home and if they can name a few insects or bugs they have seen.
- Invite children to predict the insects or bugs they might see.
- Discuss with children that they are to look, not touch or disturb the bugs or insects they see.
- Take rope or string and hand-held magnifiers outdoors
- Make 36" circles with rope or string on grass and on the ground/dirt.
- Give children time to look for bugs or insects. Allow them to use the magnifiers to look more closely at the bugs and insects.
- Return to classroom and list the bugs or insects the children observed.
- Involve children in discussing what they noticed about the bugs or insects they observed.
- Suggest that children might want to draw pictures of the bugs or insects they saw. Record what they say about their drawing if they ask you to do this.

Activity: Butterfly Kit (complete with everything needed, including butterfly house)

- Gather the children around in a circle.
- Show the children the little box with larvae inside.
- Involve children in discussing what they know about butterflies. Recall with them the things they learned about caterpillars and butterflies in the book, *The Very Hungry Caterpillar*.
- Show the children the booklet that comes with the kit and discuss with them the things that are needed for the larvae/caterpillars to become butterflies.
- Follow the instructions in the booklet as you and the children prepare for the caterpillars and later for the butterflies.
- Encourage children to observe what is happening to the caterpillars each day.
- Record what the children say about the experience.
- Suggest that children draw pictures of the different stages from larvae/caterpillar to butterfly. Record their comments on their drawings if they request this.
- Observe the butterflies for a couple of days, making sure they have appropriate food as indicated in the booklet.
- Call children's attention to the colors and the markings on the wings of the butterflies.
- Explain to the children that we cannot keep the butterflies; they need to go out into their own environment.
- Take the children outdoors, open the butterfly home and say goodbye to the butterflies.
- Listen to their comments as the butterflies fly away.

Additional Learning Goal:

CA2.1 Explores, manipulates, creates, and responds to a variety of art media (art appreciation and expression)

Food/ Nutrition Experience

Learning Goals:

PH2.2 Adjusts grasp and coordinates movements to use tools (utensils)

PH3.1 Demonstrates interest in engaging in healthy eating habits and making nutritious food choices (exploration of food experiences)

Activity: Caterpillar's Favorite Fruit

- Provide fresh fruit: apples, pears, plums, strawberries, oranges
- Involve children in naming each fruit and discussing if they have ever eaten it before
- Allow children to help wash fruit if possible.
- Cut up fruit and place in individual serving bowls with small serving spoons.
- Allow a helper to give each child a small bowl and spoon.
- Invite children to serve themselves a spoonful of each fruit.
- Join the children as you eat the fruit.

Activity: Caterpillar's Saturday Snack

- Provide cheese slices, salami slices, pickle slices, lettuce leaves
- Give each child a small plate.
- Invite children to put a lettuce leaf, a slice of cheese, a slice of salami, and a pickle slice on their plates.
- Demonstrate and assist children as needed to place the cheese, the salami and the pickle on the lettuce leaf and roll it up.
- Eat and enjoy your snack

Teacher Notes:

- Allow children to do as much of these food experiences as possible.
- Be aware of children's food allergies and eliminate those foods from food/nutrition experiences.
- Teachers and children should always wash hands before participating in food experiences.

Movement / Physical Education

Learning Goals:

PH1.1 Demonstrates locomotor skills (traveling)

PH3.3 Engages in a variety of developmentally appropriate physical activities (participation in physical activity)

Crawling Activities

- Recall with the children how the inchworm moved in the book, *Inch by Inch*.
- Involve them in the following crawling activities
 - Scoot on their tummies through a cardboard box without touching the sides
 - Crawl on hands and knees under a chair without touching the sides
 - Crawl through a hula hoop as you hold it vertically with it touching the floor
 - o Crawl through geometric crawl-through shapes or cardboard boxes with shapes cut out of sides
 - Provide a tunnel for children to crawl through. Tunnels can be placed indoors or outdoors
 - \circ $\;$ Provide large snap-together cubes for children to crawl through.
 - o Involve children in moving through obstacle courses that include opportunities for crawling.
 - Have children crawl backwards.
 - Have children do a crab walk.
 - Involve children in crawling through barriers such as cones or liter bottles without touching them.

Teacher Notes:

- Observe children to determine when they begin to tire of crawling and stop the activity.
- Include crawling activities as part of your physical education/movement education program.





Learning Goal:

CA1.1 Explores through listening, singing, creating, and moving to music (exploration of music and movement)

Activity: Firefly Dance

Materials you will need: Flashlights and a slow swaying song on CD

- Show children page with fireflies in the book, In the Tall, Tall Grass.
- Invite children to tell you what they know about fireflies. Discuss that fireflies are an insect, that we can see them at night because they glow (make light).
- Darken the room and slowly turn flashlight on and off.
- Begin to play slow, swaying music, continuing to move the flashlight across the ceiling of the classroom, occasionally turning it off and then back on like the firefly.
- Invite children to stand and gently sway back and forth while the music is playing.
- Allow children turns with flashlights, moving their lights in response to the music.

Activity: Butterfly Waltz

Materials you will need: Scarves, waltz music on CD

- Show children the book, *The Very Hungry Caterpillar*. As you show the cover, ask them how they think the caterpillar moves.
- Show them the last page of the book with the beautiful butterfly. Invite children to discuss how they think the butterfly moves.
- Distribute a scarf to each child and say that they will pretend to be butterflies as they listen to the music and move their scarves.
- Begin to play a waltz tune and invite children to move like butterflies.

Learning Centers

Teacher Note: As children are involved in the learning centers, they are engaging in activities that support all or most of the domains of child development and early 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

However, there will also be activities included and these will have specific learning goals.

Learning Goal:

CA2.1 Explores, manipulates, creates, and responds to a variety of art media (exploration of art)

<u>Art</u>

Butterfly Blots:

- Fold a sheet of paper in half, gently creasing the fold.
- Provide two or three colors of paint and a teaspoon for each container.
- Suggest that children open up the paper, add a teaspoon of each color of paint, close the paper at the fold and rub the paper all over the outside.
- Ask children to open up the paper and describe what they find.

Learning Goals:

MT3.1 Participates in exploratory measurement activities and compares objects (measurement, comparison)

ST3.2 Uses tools and engineering practices to explore and solve problems (knowledge and use of tools)

Blocks

- Measuring Tools: Add tape measures and rulers for measuring blocks.
- Join children in the block center as they build with unit blocks. Guide them to see that each block is a unit of another block. For example, if a child says she needs all of the long blocks to make her house large enough, show her how several blocks can be put together and be the same length as the long block.
- Provide note paper or index cards and pencils so children can "write" down their measurements or ask you to record them.

Library/Book Corner

- Add books about caterpillars, butterflies, worms and insects.
- Add pictures that show caterpillars, butterflies, worms and insects. (laminate or cover pictures with self stick adhesive)
- Add felt or magnetic board and story figures for the stories, *In the Tall, Tall Grass* and *The Very Hungry Caterpillar*.

Home Living/Dramatic Play

- Hang attractive butterfly or insect pictures on wall in home living area.
- Look for fabric with butterfly or insect patterns to use to decorate the home living area. For example, make a tablecloth or place mats from the fabric.

Manipulatives

• Add butterfly and insect puzzles

Sand table or tub

- Place a couple of inches of potting soil in the sand table or tub.
- Hide plastic worms in the potting soil.

Teacher Note:

- Stress to children that potting soil is to be kept in the tub or table.
- Consider placing a towel under the tub for easy cleanup.
- Keep a small whisk broom and dust pan near by and remind children to use them to sweep up any spilled soil.

Additional Activities:

- Place shredded green paper or Easter grass in the sand table or tub.
- Add plastic insects and hand magnifiers for exploration.

Learning Goals:

SE3.2 Demonstrates competence and confidence (self-confidence)

MT3.1 Participates in exploratory measurement activities and compares objects (measurement)

Science/Discovery

Activity: How Tall Am I?

- Prepare strips of adding machine tape approximately 6" longer than the child is tall (one per child)
- Tape the strip of tape vertically to the wall.
- Write the child's name and the date on the tape. As the child stands next to the wall, make a mark on the tape, indicating the child's height.
- Use a measuring tape and help child measure his/her height. Record the child's height in inches next to the mark.
- Tell and show the child how many inches tall he or she is.
- Repeat this procedure for each child.
- Store each child's tape his or her portfolio or folder.
- Repeat this activity every 3 to 4 months to show how the much the child has grown.

Teacher Note: Do not compare the children's heights.

Activity: Measuring with Feet

- Recall with children that the Inchworm used its body to measure the birds. We can use our feet for measuring things.
- Help children trace around a foot on a piece of cardboard or tag-board. Have them cut out the foot.
- Demonstrate how to use the cardboard foot to measure the length of a table or a storage shelf.
- Observe to see if children use their foot to do additional measuring.

Learning Goals:

- LD1.1 Understands and responds to language (in child's home language) (vocabulary and language comprehension)
- ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions, and predictions)
- ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (living things, nature and the environment)

Activity: Create a Worm Habitat

- Gather a large clear plastic jar (one or two gallon or three to six liter) with a large mouth, or an empty terrarium, earthworms, small rocks, small sticks, food for worms (lettuce, cornmeal, cereals)
- Gather the children together and discuss that children will help you create a habitat (home) for the worms much like the one in which they live.
- Involve children in placing the soil, the rocks and the sticks in the container and adding the earthworms.
- Provide a small spray bottle for water to keep the soil moist (not wet). Add food to the container.
- Encourage the children to observe and discuss the way the worms burrow and live underground. Do they see the worms eat the food? How do they get under the dirt?
- Suggest that the children draw a picture about the worms. Record on their paper what the children say about their drawings if they request this.

Learning Goals:

MT3.1 Participates in exploratory measurement activities and compares objects (seriation)

ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (living things)

Activity: Stages of a Butterfly Sequence Cards (See Attachment: Stages of a Butterfly)

- Place the sequencing cards on the science/discovery table. See attachment for the cards.
- Invite children to put the cards in order. Ask questions such as, "What is the first thing you see?" "What happens next?" Encourage them to discuss what they are doing.

Learning Goal:

SE2.1 Experiences, expresses, and regulates a range of emotions (emotion regulation)

Quiet Corner

- Create a quiet corner in your classroom; a place where children can go to be alone and to get away from the stresses of group living.
- Place soft items in the quiet corner. Carpet on the floor, soft pillows, and soft and cuddly stuffed animals or dolls are examples.
- Discuss with children when they might want to go to the quiet corner. When they are angry and need to get away from the source of their anger? When they are sad and need to be alone? When the room gets too noisy and they need a quiet spot?
- Explain to children that the quiet corner is for one child at a time

Transition Activities

Learning Goal:

CD2.2 Shows flexibility in adjusting thinking and behavior to different contexts (adjusting behavior to match context)

Activity: Tall, Tall Grass Cube (See Attachment: Tall, Tall Grass Cube and Concentration)

- Give each child a turn to toss the cube.
- Ask child to name the animal on top of the cube, tell something about it and go to the next activity.
- Continue with this activity, giving each child a turn.

Butterfly Fly Away

- Gently tap the shoulder of a child and have them stand up and float like a butterfly to the next activity.
- Continue with this activity, giving each child a turn.

Family Connection and Engagement

Send home a note to parents stating for the next few days, the children will be learning about caterpillars, butterflies, worms and insects

Suggest some ways families can be involved in the topic of study:

- Collect items such as pictures of butterflies, worms and insects.
- Include the titles and authors of some of the children's books about caterpillars, butterflies, worms and
 insects. Suggest that they look for these books in the local library, check them out and read them with
 their child.
- Suggest that families go outside with their child during the day and look for butterflies, worms and insects. Explain to families that we have talked with children about only looking at the creatures and that they are not to disturb them.
- Ask families if they see fireflies at night. If so, suggest that they take their child outdoors to view this amazing sight.
- Send home a copy of the finger play, Baby Bumblebee.