

Informational Books in the Preschool Classroom
Topic of Study: Butterflies

***From Caterpillar to Butterfly* by Deborah Heiligman, illustrated by Bari Weisman**
***Are You a Butterfly* by Judy Allen and Tudor Humphries**
****Where Butterflies Grow* by Joanne Ryder, illustrated by Lynne Cherry**
(See Teacher Note below for information about this book)

Introduction

In this guide children are engaged in activities that primarily support three domains in the *Arkansas Child Development and Early Learning Standards: Birth through 60 months: Language Development, Emergent Literacy* and *Science and Technology*. The **Learning Goals** (with **Strands**) that precede each activity relate to specific areas of development and learning that are the focus of the activities.

In the LET'S-READ-AND-FIND-OUT Science book, Level 1, *From Caterpillar to Butterfly*, children have the opportunity to watch a caterpillar change into a butterfly right in their classroom. Then children are introduced to the world of the butterfly as they hear the story, *Are You a Butterfly?*, and view the colorful illustrations in the book.

Teacher Notes:

- **Developers do not include a reading of the book, *Where Butterflies Grow*, but suggest that it be purchased for several reasons: as a resource for teachers, to be read to children who may be interested in learning more about butterflies, and to be placed in the Discovery Center or Library Center. Consider reading this book to an individual child or to a small group of children so that they can clearly see the beautiful illustrations.*
- *Before beginning this topic of study, the developers suggest that you read the **Before You Begin** section that follows to give you background information for the featured books and suggested activities.*

Before You Begin

Developers of this topic recommend that programs purchase a Butterfly Growing Kit/Garden for the classroom so that children can observe and better understand the life cycle of the butterfly from egg, to caterpillar, to chrysalis, to butterfly. Butterfly Growing Kits/Gardens can be purchased from school supply catalogs and from other online sites. Read the information that comes with the kit so that you can guide children through the stages they can see; from caterpillar, to chrysalis, to butterfly.

Plan to extend this topic of study over four or more weeks because of the time it takes for the caterpillar to grow, molt, form a chrysalis, and turn into a butterfly.

For additional information and photos about butterflies in Arkansas and in your particular part of the state, you can google several sites.

It is also recommended that this topic be integrated with the topic, Growing Plants for Butterflies, to help children understand the connection between certain plants and the life cycle of the butterfly. For this reason, we are including the following information from that topic:

The following information is a summary of an article titled Plant a Butterfly Garden from <https://kidsgardening.org/> (2016):

- A chart with a few examples of common butterflies and their preferred food sources (carrots and beans are listed as host plants for caterpillars, zinnias are listed as nectar plants for adult butterflies).
- Consider planting a butterfly garden with plants that attract butterflies and often hummingbirds as well.
- Select an area that receives at least six to eight hours of sunlight and is sheltered from the wind.
- Select plants that grow well in your area.

- Plant two types of plants:
 - Nectar producing plants (nectar is a sugary fluid found in flowers and is food for the butterflies)
 - Leafy “host plants” that attract egg-laying butterflies. These plants also provide food for the caterpillars. (stages one and two of the life cycle of a butterfly)
- Choose plants for the butterflies that bloom throughout the growing season to attract butterflies for longer periods of time.
- Butterflies are most active in the summer.
- Plant each kind of plant in groups of at least three so that it is easy for passing butterflies to locate your flowers.
- Add a couple of large, flat rocks in the sun where butterflies can rest.
- Fill a container such as an old bird bath with water where butterflies can perch and drink safely.
- Avoid all pesticides. Butterflies are insects, so pesticides can harm them.

Teacher Notes:

- *Some of the information above can also be found on pages 28 and 29 in the National Geographic Kids, Level 1: Caterpillar to Butterflies by Laura Marsh.*
- *Developers also suggest that the book, Where Butterflies Grow, be purchased.*
- *Add the two books to the Discovery Center or the Library Center.*
- *In both topics of study decide if the books might be appropriate to share with all or some of the children in the group. Children’s questions and comments and their interest in and reaction to the books placed in a center may give you some indication as to sharing the books with them.*
- *Consider planting in the garden other host plants, such as dill, parsley and fennel that attract egg-laying butterflies and provide food for caterpillars.*

This curriculum guide can stand alone or be used as a supplement to the following:

Informational Books in the Preschool Classroom

- Growing Plants for Butterflies

Teacher Notes:

- *The topic listed above can be found on the Better Beginnings website.*
- *This curriculum guide can also be used with similar topics of study from any curriculum.*

Materials to Collect and Make

- Butterfly Growing Kit/Garden
- From Egg. to Caterpillar, to Chrysalis, to Butterfly (**See Attachment:** [From Egg, to Caterpillar, to Chrysalis, to Butterfly](#))
Copy the attachment on cardstock, color the illustrations (use the books in the topic for reference) and laminate.
- 3-ring binder

Story Presentations

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*)

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

EL1.2 Engages in read-alouds and conversations about books and stories (*story comprehension*)

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

ST2.1 Demonstrates knowledge of core science ideas and concepts (*stability and change*)

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*)

Book: From Caterpillar to Butterfly

- Have the butterfly kit/garden out of the sight of the children, but where you can easily get to it.
- Prepare to read the book, *From Caterpillar to Butterfly*.
- Show the cover, give title, author and illustrator. (Explain that the author is the person who writes the story and the illustrator is the one who draws the pictures.)
- Invite children to look at the cover and describe what they see. (butterfly, caterpillars, and flowers)
- Read each page slowly, allowing children to see the illustrations.
- Help children understand the meaning of unfamiliar words as they are used in the book; words such as
 - metamorphosis: to change from a caterpillar to a butterfly
 - molt: to shed skin to be replaced by a new skin
 - chrysalis: the hard shell of a caterpillar
 - nectar: a sugary fluid found in flowers and is food for butterflies
 - proboscis: a long tube through which butterflies sip the flower's nectar (On page 29, show children the proboscis of the butterfly as it sips nectar from a flower)
- Follow up the reading by inviting children to tell you what surprised them most about the story. What part did they enjoy the most?
- Say to the children, "I have a surprise for you. Can you guess what it is?"
- Show the children the butterfly kit and explain to them what it is and what it contains.
- Invite the children to follow you to the Discovery Center where the kit will be placed on the table so that that they can watch what happens.

Extensions:

- Gather small groups of children for additional readings of the story. As you read the story, show the children the small pictures on some of the pages and read to them the small print. Give them additional explanations as needed. For example, the host plants are leafy plants that attract egg-laying butterflies and also provide food for the caterpillars.
- Gather a small group of children and show the pictures on pages 30 and 31 and read the name and information about each of the butterflies.
- Show the children the cards, From Egg, to Caterpillar, to Chrysalis, to Butterfly, and read the cards to the children in order. Explain that the cards will be in the Discovery Center for them to look at and to talk about with other children.

Additional Learning Goal:

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

Book: Are You a Butterfly?

- Prepare to read the book, *Are You a Butterfly?*
- Show the cover, give title, and author and illustrator.
- Invite children to describe what they see on the cover.
- Ask children the title question, “Are You a Butterfly?” Invite them to discuss/explain their answers.
- Say, “Let’s read and find out if you are a butterfly.”
- Show the title page and invite children to describe what they see, then ask “Is this a butterfly?”
- Read the story so all of the children can see the pictures in the book.
- Follow up the reading by inviting children to discuss how they are different from a butterfly.

Extensions:

- Gather small groups of children for additional readings of the story.
- Call attention to some of the details in the story that are easier to see in small groups: for example, on page 4, the proboscis of the butterfly sipping nectar from the yellow flower, page 6, the eggs and the tiny caterpillar on leaves.
- Share the Did You Know...information on the last two pages of the book.
- Make sure to read to all children this from the last page: Never touch a butterfly’s wings. They are easily damaged, and if the butterfly can’t fly anymore, it will die.

Teacher Note: *Involve all children in these small group readings.*

Additional Language and Literacy Activities

Teacher Notes:

- The following activity supports the following Domains in the Arkansas Child Development and Early Learning Standards: Birth through 60 months:
 - Language Development
 - Mathematical Thinking
 - Emergent Literacy
 - Science and Technology
 - Social Studies
 - Creativity and Aesthetics.

Learning Goals:

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

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

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

ST1.1 Engages in the scientific process to collect, analyze, and communicate information (*observations, questions and predictions, data analysis and communication*)

ST2.1 Demonstrates knowledge of core science ideas and concepts (*stability and change*)

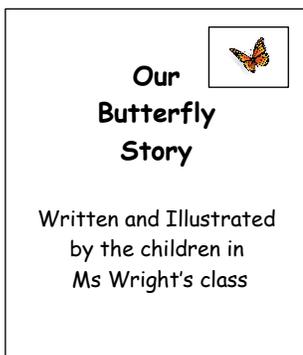
ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (*living things, nature and the environment*)

SS2.1 Shows awareness of sequence and change over time (*awareness of past and future, time concepts*)

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

Learning Activity: Our Butterfly Story

- Begin this activity the day you introduce the Butterfly Kit to children.
- Explain to children they will be involved in writing a story about the butterfly. Each day you will choose one child to dictate to you what he or she observed in the Butterfly Kit that day.
- Gather the children in a group and invite the selected child to tell you his or her observations.
- Record what the child says and read it back to confirm that what you have written is correct.
- Write or have the child write his or her name on the page.
- Suggest that the child go to the art center and draw a picture to illustrate his/her page, and then the page will be placed in a story binder.
- Show children the binder with the cover: Our Butterfly Story, written and illustrated by the children in Ms. Wright's class.
- Write on the page for that day: Day 1 Date: May 15, 2020.
- Continue this, choosing a different child for Day 2, Day 3, and so forth, until the last day when the butterfly is released.
- Read the daily entries each day during story time. Say things like "Yesterday, this is what Ellen observed. I wonder what Miguel will observe tomorrow."



Learning Goals:

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

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

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

Activity: From Egg, to Caterpillar, to Chrysalis, to Butterfly

- Have the book, *From Caterpillar to Butterfly*, and the From Egg, to Caterpillar, to Chrysalis, to Butterfly cards with you
- Gather a small group of children for this activity.
- Show the book to the children and review with them some things they remember about the story. Ask questions such as "How did the caterpillar start out?" (pages 8 and 9), (as an egg)
- Continue this process until you think the children have an understanding of the stages.
- Explain that you have the cards that you read to them before and you would like them to tell the story with the cards.
- Give a child card #1 and invite him or her to explain what is happening in the picture.
- Continue this process, giving another child card #2, and so forth.
- Thank the children for helping tell the story about the butterfly.

Teacher Note: *This activity can help you know if children really understand how a butterfly comes to be.*

Activity: Poems about Butterflies

- Develop a chart for each of the poems that follow.
- Illustrate the charts with drawings or pictures as follows:
 - Fuzzy Wuzzy Creepy Crawly: caterpillar on a leaf that has been partially eaten
 - Only My Opinion: dancing caterpillar on a leaf
- Recite each poem at a separate time with children.
- Recite the poem again and pause and invite children to fill in the rhyming word:
(funny/sunny, yellow/fellow) (giggles/wiggles, belief/leaf)
- Invite children to help you find a space in the classroom where you can post the charts at their eye level so that they can look at on their own.

<p style="text-align: center;">Fuzzy Wuzzy, Creepy Crawly</p> <p style="text-align: center;">Fuzzy wuzzy, creepy crawly Caterpillar funny. You will be a butterfly When the days are sunny.</p> <p style="text-align: center;">Winging, flinging, dancing, springing Butterfly so yellow, You were once a caterpillar, Wiggly, wiggly fellow.</p> <p style="text-align: center;">-Lillian Schulz</p>	<p style="text-align: center;">Only My Opinion</p> <p style="text-align: center;">Is a caterpillar ticklish? Well, it's always my belief That he giggles, as he wiggles Across a hairy leaf.</p> <p style="text-align: center;">-Monica Shannon</p>
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Additional Learning Goal:

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

Teacher Note:

- *The two poems can be found in Read-Aloud Rhymes for the Very Young, selected by Jack Prelutsky, illustrated by Marc Brown, page 62.*

Learning Environment

Library Center

- Add the following books:
From Caterpillar to Butterfly
Are You a Butterfly
Where Butterflies Grow

Discovery Center

- Butterfly Kit/Garden
- From Egg to Caterpillar, to Chrysalis, to Butterfly Cards
- Calendar
- Magnifying Glass
- Books:
Where Butterflies Grow
Caterpillar to Butterfly

Activity: From Egg, to Caterpillar, to Chrysalis, to Butterfly

- Place the four cards on the table in the Discovery Center. Make sure they are not in sequential order.
- Invite children to put the cards in the correct order.

Art Center

- Hang attractive butterfly pictures on the wall in the Art Center.
- Have available brightly colored crayons, markers and paints in the center.

Dramatic Play Center

- Hang attractive butterfly pictures on the wall in Dramatic Play Center.
- Look for fabric with butterfly patterns to use in decorating the Dramatic Play Center. For example, make a tablecloth, napkins or place mats from the fabric.

Music Center/Circle Time

Learning Goal:

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

Activity: Butterfly Waltz

Materials: scarves, waltz music on CD

- Show children the cover of the book, *From Caterpillar to Butterfly*. As you show the cover, ask 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 like butterflies.
- Begin to play a waltz tune and invite children to move around the room like butterflies.

Outdoors:

- Suggest that children look for butterflies when they are outdoors and observe their colors.
- Remind them that they are to never touch a butterfly's wings. They are easily damaged. If the butterfly can't fly anymore, it will die.

Transition Activities

Learning Goal:

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

- Play the waltz music and have children, one or two at a time, move like butterflies as they transition to the next activity.
- Continue until all children have transitioned to the next activity.

Family Connection and Engagement

- Communicate with families that children have been learning about butterflies.
- Invite families to observe the Butterfly Kit in the classroom and suggest that they ask their child to tell them about what is happening in the kit.
- Suggest that families help their children become aware of butterflies they see in their environment. Keep count of the number of butterflies they see and their colors.

Additional Books

National Geographic Kids, Level 1, Caterpillar to Butterfly by Laura Marsh

Where Butterflies Grow by Joanne Ryder, illustrated by Lynne Cherry