

# THE BUTTERFLY HOUSE

Step inside to discover over 100 species of nature's most beautiful insects • What are the differences between Written by Katy Flint. Illustrated by Alice Pattullo ISBN: 9781786039750 \$19.99 US/\$24.99 CAN 40 pages, 50 illustrations Hardcover, 8.66 x 11.81inches

#### **Essential Questions in** This Unit:

- How do butterflies and moths begin
- What are their eating habits during their life cycle?
- butterflies and moths?

What are the various families of butterflies and moths?

• What markings and other structural (body part) features are common within a butterfly or moth family?

Learning Objective: Featuring over 100 species of butterflies and moths, this introduction to some of the world's most beautiful insects takes readers through the rooms of a 'butterfly house'. Each room showcases a theme where kids learn about the life cycle of butterflies and moths, the differences between the two, and various families of butterflies and moths. By learning to spot colors and markings -as well as learn about numerous basic butterfly facts -students are challenged to think about how these creatures live, what makes them unique, and how they fit into our larger ecosystem.

### **Classroom Discussion Topics:**

- 1. After looking at The Hatchery, discuss the butterfly and moth life cycle with students. Talk about how butterflies and moths hatch from eggs instead of being born like mammals-what other animals hatch(e.g., frogs, birds, other insects)? How are other animals born? Then discuss the different stages of their life cycle and the duration of each stage. What are the different markings of various caterpillars featured in The Hatchery? How do some caterpillars protect themselves?
- 2. Talk about the concept of metamorphosis in the life cycle of these insects. What features or stages indicate that a butterfly or moth is going through metamorphosis? Then discuss what other animals or insects go through a significant metamorphosis, where their structure changes during their life cycle (e.g., flies, frogs, bees, and ladybugs). Talk about the difference between a complete vs. incomplete metamorphosis -which animals fall into which category?
- 3. Discuss the similarities and differences between butterflies and moths after looking at the comparison of the two. Talk about when they are active as well as structural features, such as moths out in nature.

- 4. Look with the class at the eating habits of both caterpillars and butterflies/moths. What do caterpillars prefer, such as the orchard swallowtail? What do adult butterflies drink? What do male butterflies eat to increase their salt? Think about what physical structures caterpillars and butterflies use to eat with -why do students think these body parts are present during these stages in the insects' life cycle? What body parts do other insects have to eat with in certain stages of the life cycle?
- 5. Protection against predators is mentioned throughout the book. Discuss how various caterpillars and butterflies defend themselves from being eaten, including Gossamer- Winged Butterflies using ants for protection, eye spots on Metalmark moth wings, and the poisonous leaves garden tiger moth caterpillars eat. What other examples can they find throughout the book? How does camouflage aid in protection? What defense mechanisms do other animals and insects use?
- 6. Look at which world regions the various butterfly families live in, for example monarch butterflies in North America and butterflies in the Yellows, Whites and Sulphur family in Africa and Asia. Ask them to research what other areas of the world play home to butterfly and moth families. How might habitat affect coloring and marking?

# **Classroom Discussion Topics:**

- 1. Ask students to make their own classroom feeding station to attract butterflies. During warmer fall or spring days, hang a plastic plate or plastic plant saucer outside and fill it with sugar water or fruit. If using fruit, orange slices or other citrus works best. Challenge the students to study the different butterflies that come to visit, and keep a classroom journal that identifies the insects -don't forget to group them into families!
- 2. Do you live in an area where it's easy to find butterfly or moth caterpillars? If so, think about finding one and watching its life cycle progress in a classroom aquarium. (If not, it's simple to buy caterpillars or butterfly kits online.) Ask the class to research the kind of caterpillar it is, and keep its food supply up. What kind of leaves or plants does it like to eat? You can watch it metamorphose into a butterfly or moth, making notes about its chrysalis and habits. After it breaks out of its cocoon, throw a classroom party to let it go into nature.
- 3. It's no secret that moths are attracted to indoor and outdoor lights after sunset. Ask students to capture nighttime moths in a jar and identify them. What kinds of moths live in your area?
- 4. Get artful with the butterfly or moth life cycle! Go through the butterfly or moth life cycle and ask children to create the different stages through art. Students

- can pick the caterpillar of their choice, and they should use the correct colors during all stages. Do they want to paste their pictures to the proper paper leaves that the caterpillars feed on? What type of material would they like to use for their art? You may suggest their final butterfly or moth could be created with crepe or construction paper, drawn with colored pencils or painted. Then think about creating a classroom Butterfly Art Gallery. You may also choose to create art projects about the life cycles of other animals as well.
- 5. Practice Venn diagramming through a series that shows the relations between butterflies/moths and other creatures. Begin with comparing butterfly's body to a moth's body, then get slowly more complicated: a butterfly to a bird's body, a butterfly's body to a cow's body, and finally a butterfly's body to a human body.
- 6. Using The Butterfly House as inspiration, ask students to create their own introductory guide book of insects or animals either individually or in groups. After children have decided the subject of their guide book, ask them to research the creature's families, choose how the guide book will be organized, what kinds of images will be used, and the information about each family that will be given. Is there anything else they may want to include? (If done in groups, each student may want to be in charge of a different task.) Think about how they can share their guide books with the class or school: create a classroom library where the books are checked out and returned or ask students to give presentations.

# **Further Reading:**

Curiositree: Natural World ISBN: 9781847807823

Treasure Hunt House ISBN: 9781847809582

Pocket Guide to Turtles, Snakes,

and other Reptiles ISBN: 9781786031129

Created by Matthew D. Warner











