



Animal Differences

Objectives and State Standards:

- ☉ Students will list two differences between arachnids and insects. (Science Standard 3.1)
- ☉ Students will name the four stages of a butterfly and moth's life cycle. (Science Standard 3.3)

Activities for before your visit:

- ☉ **Life Cycles:** After discussing a butterfly's life stages, give students a strip of paper with four boxes. Have students draw pictures of the four life stages of a butterfly and then cut their pictures apart. Have students trade pictures with a partner. They should each see if they could put each other's life cycles back together in the correct order. Have them glue their life cycles on a piece of paper to take home.
- ☉ **Butterfly/Spider Comparison:** Show students a picture of a butterfly and a spider. Brainstorm all the ways these two animals are different. List these differences on the board. Now make a list of how they are the same. After your trip to the Butterfly Pavilion see how many things you can change and/or add to your lists.
- ☉ **Bug Hunt:** Read "The Great Bug Hunt" by Bonnie Dobkin. (Note: the book uses the term bug for all the arthropods in the book even when they aren't insects.) Take the children outside on a "bug" hunt. (It might be best to break students into small groups with an adult chaperone to do the actual "bug" catching. If students do the actual collecting, talk about safety concerns before going outside.) Collect bugs in observation containers (clear containers with lids or bug vacuums, see download). Bring the "bugs" back into the classroom. Depending on how many you collect, divide them among the students. Have students observe the "bugs", sort them by how they look, and share what they discovered before returning the "bugs" back outside where they were found.

Activities for after your visit:

- ☉ **Pavilion Review:** Have students draw a picture and write two facts or "I wonder questions" about their favorite animal at the Butterfly Pavilion. Was it an arachnid, an insect, or something else?
- ☉ **Life Cycles:** To get a first hand look at life cycles, raise mealworms in your classroom. Have each student care for their own animal. Each week have them observe their animal, measure its length, and record their observations in life cycle journals. (See Classroom Critter & Nature Journal download.)
- ☉ **Monarchs:** Read "The Extraordinary Life: The Story of a Monarch Butterfly." Show students on a map how the monarchs in our area travel down to Mexico. Using a template, have students color paper butterflies. Pin each child's butterfly to his/her shirt. Don't tell the students that at the end of the day you are going to count to see how many of them still have their butterfly. After you count, talk about what happened to the missing butterflies. Ask students if they think in real life, some butterflies don't make it all the way to Mexico. Talk about some things that can happen along the way to Mexico. Have students play "Ultimate Butterfly". (See Ultimate Butterfly download.) Write a class story about a monarch's trip to Mexico and its exciting adventures.

Resources:

An Extraordinary Life: The Story of a Monarch Butterfly by Lawrence Pringle
Monarchs by Kathryn Lasky
Monarch Butterfly by Gail Gibbons
The Great Bug Hunt by Bonnie Dobkin
A Mealworm's Life by John Himmelman
<http://www.cnr.berkeley.edu/citybugs/teachercorner/makeOwnNets.htm>
<http://www.monarchwatch.org/>