



Comparing Adult to Offspring

Outdoor Classroom Field Journal Activity Lesson Plans & Resources

Online Lesson Plans & Resources available on the Alabama Wildlife Federation website

Students will explore the outdoor classroom to find and observe an animal, identify it, determine if it is an adult or offspring, and then compare and contrast the adult and offspring of the species.

Materials: Copies of *National Audubon Society Field Guides for Southeast* (or other field identification books), copies of the “Comparing Adult to Offspring” Field Journal Activity Page (choose between version #1 & version #2), Clipboards, & Pencils *Optional: Hand trowels (for digging), magnifying glasses or binoculars*

Duration: Intro Discussion – 30 min. | Outdoor Exploration – 30 min. | Indoor Research & Review– 30 min.

STEP 1: Engage through Discussion

The background information and example questions below can be used to help introduce the topic, engage the students, and build a foundation to discuss the topic:

Background Information [\(online as a PDF\)](#)

All living things on earth have one thing in common – a life cycle that starts with some type of “birth” and then continues with growth and/or metamorphosis into an adult until the cycle starts over with reproduction. During the stages of development, these organisms display different inherited traits and use different strategies for survival all with the goal of allowing some of the population to reach adulthood so that they can reproduce and start a new generation. Some organisms at birth closely resemble the adult of that species except for size, while other organisms go through very unusual changes during their life cycle stages. A good comparison is looking at our own life cycle where we go from baby to adult over a span of 18 years while insects like a butterfly go through complete metamorphosis from an egg to a caterpillar to a butterfly in a few weeks. Inherited traits are those things that an offspring directly inherits due to genetics and does not learn from parents. Even though creatures will resemble their parents when they reach maturity, if not before, they are not exact copies.

Example Discussion Questions & Answers [\(online as a PowerPoint or PDF\)](#)

Q: How do children look similar or different to their parents? *(Keep in mind that some children are adopted or live with guardians, and they may not look like the people who they call their parents.)*

A: *Every human child and adult has two legs, two arms and other similar body parts. However, some things can be different or the same as their parents such as hair color, eye color, height and other genetically determined traits.*

Q: What are other examples of animals that look similar as offspring and adults?

A: *Rabbits, songbirds, turtles and fish.*

Q: Which animals look different as offspring and adults?

A: *Caterpillars and butterflies, tadpoles and frogs, nymphs and dragonflies.*

Q: Are all animals born the same way?

A: *No, some animals hatch from an egg like birds, snakes, and fish. Other animals have “live birth” such as humans, fox, squirrels, rabbits and most other “furry” creatures.*



Q: Do all animals live the same amount of time? Do they have the same “lifespan”?

A: *No, most humans live to be 70-80 years old, while dogs only live to be 10-12 years old and cats live to be 13-18 years old. Bullfrogs have a lifespan of approximately 7-9 years, hummingbirds live around 3-5 years, and butterflies live from 6 weeks to 1 year.*

Q: Do animals grow into adults the same way? How are the life cycles of different animals alike and different?

A: *Different types of animals (or species) go through different stages of growth to become adults. Some animals just grow larger, while other animals like a butterfly or frog go through multiple stage of growth. However, the goal of all animals’ lives are the same—they want to grow, develop, and then reproduce before they die.*

Q: What animals do you think we can find living in the outdoor classroom? Will they be adults or offspring?

A: *Answers will vary. Students may name ants, birds, butterflies, lizards, spiders, squirrels & other critters.*

STEP 2: Explore with Literature

These books can be used to further explore the topic with your students:

- *Explore My World Baby Animals* by Marfe Ferguson Delano (ISBN-10:1426320469)
- *Baby Animals of the World* by Speedy Publishing (ISBN-10:1635012546)
- *Big Babies Little Babies* by DK Publishing (ISBN-10: 075666165X)

STEP 3: Explain using Technology

This video can be used to further explain the topic to your students ([online as a PowerPoint or PDF](#))

- Comparing animal offspring & their parents (2:56 min):

<https://www.bing.com/videos/search?q=camparing+offspring+to+parents&&view=detail&mid=BC92D406B15F6150B11BC92D406B15F61500B11&rvsmid=0C8BBE6A26C27A38B00F0C8BBE6A26C27A38B00F&FORM=VDMCNR>

- Baby Animals who Grow Up to Look Totally Different (2:18 min.): <https://www.youtube.com/watch?v=-OTkOoakcP0>

or use the link on the [AWF Field Investigation Comparing Adult to Offspring Field Investigation](#) webpage.

STEP 4: Elaborate with a Field Investigation in the Outdoor Classroom

Download the free Activity Pages from the [AWF Field Investigation Comparing Adult to Offspring](#) webpage

The Outdoor Classroom Field Journal Activity Observation Page(s) allow students to apply what they have learned as they investigate and record their real-world observations in their field journals. Before you go outside, don't forget to review the activity instructions and your Outdoor Classroom Rules:

- **Activity Instructions for the Comparing Adult to Offspring Activity pages Version #1:** Have students explore your outdoor classroom to find and observe an animal. Students will record their observations about the animal that they find, and then they will use their observations to identify the animal and to determine if it is an adult or offspring. (*examples: Caterpillar or butterfly, chick or adult bird*). Then compare and contrast the adult and offspring on the observation page.
- **Activity Instructions for the Comparing Adult to Offspring Activity pages Version #2:** Have students explore your outdoor classroom and look for an adult and offspring of the same animal species (*examples: Caterpillar and butterfly, chick and adult bird*). Compare and contrast the adult and offspring on the observation page. If you cannot find both the adult and offspring, complete observations on the one you find and then research the other when you return to the classroom.



Outdoor Classroom Activity Tip - Conduct this activity in the warm months of spring or fall. Spring is the best season to look for animal adults and their offspring in the school's outdoor classroom as there are a greater variety of species going through reproduction at that time. However, students may also be able to find adults and their offspring in the early fall as some birds and insects are still reproducing in August and September. Some examples of animals that you may be able to view at different stages of development are birds and their chicks in a nesting box, caterpillars and adult butterflies in your butterfly/pollinator habitat, worker ants and their larva near an ant hill, or a frog/toad and its tadpoles in a pond.

Wildlife Identification Tips – Use the *National Audubon Society Field Guide to the Southeast* or other similar field guides to help the students identify the animal(s) they found. Also, you can use the Alabama Department of Conservation and Natural Resources' Outdoor Alabama Watchable Wildlife website to assist you with the identification of local native wildlife.

Example Outdoor Classroom Rules - The outdoor classroom is not a playground, so do not run and do not climb on anything. Remember that the outdoor classroom provides habitat (a home) for local wildlife, and you should not damage the local wildlife habitat. Therefore, do not pick up wildlife, plants, flowers or rocks. Also, do not feed wildlife.

STEP 5: Review and Assess

Review and assess the students' observations and answers on their observation pages. Another extension might be to have students select an animal from a field journal and complete the observation pages as an assessment for that organism.



Alabama Course of Study Standards for First Grade

Language Arts (2016)

- 5) Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
- 34) Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- 35) Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
- 37) Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- 38) Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.
- 41) Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships.

Mathematics (2016)

- 5) Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 6) Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.

Science (2015)

- 7) Make observations to identify the similarities and differences of offspring to their parents and to other members of the same species.

