



Life on Earth: The Story of Evolution

This book tells the amazing story of life on earth! Students will learn about the beginning of life and various plant and animals that are now extinct. They will also learn about Charles Darwin and the observations that helped him develop the theory of evolution, including variation and natural selection. The main story is told in a large font. There are many smaller stories and additional details in the captions in a smaller font.

Learning Goals

Big Idea 4: Classification of Organisms

- Plants and animals can be classified into species and other types of groups based on the characteristics they share.

Big Idea 5: Interspecific Differences

- There are differences between species

Big Idea 7: Intraspecific Differences

- Individuals of the same species may differ.
- Students should know, and be able to articulate, that not all offspring from the same parents look alike, even with respect to inherited traits.

Big Idea 8: Adaptation/Evolution

- Organisms with traits best suited to their environment have better chances of survival.

Big Idea 9: Heritability of Traits

- Offspring inherit some, but not all, of their traits from their parents.
- There is a difference between traits that are inherited and traits that are not.

Big Idea 11: Descent with modification

- Species evolve from common ancestors.
- Different species could arise from one species if different groups had different selection pressures.

Lesson Plan

1. Estimated time

This activity should take approximately 30 minutes.

2. Introduce the activity (Engage)

Display the five books on evolution on a tabletop in your classroom. Allow students time to peruse the books. When you're ready to read *Life on Earth: The Story of Evolution* to the class, ask what the students know about the word "evolution." Some may have heard of Darwin. Tell them they'll learn more about Darwin and his discoveries. If students bring up religious beliefs, make sure to tell them that you are focusing these lessons on scientific facts and information, not religion.

3. Guided inquiry (Explore)

Read the book aloud to the students. Start at the very beginning! Be sure to show students the beautiful illustrations (they will certainly love the dinosaur, for instance) and to read all the captions.

You may want students to think about the following discovery questions as they listen to the story:

- Where did all life come from?
- Why have some plants and animals died while others survived?
- Why are there so many different forms of life?

4. Discuss the activity (Explain)

The book is a wonderful teaching device, explaining the concepts of classification, fossils, adaptation, natural selection, variation, and evolution in child-friendly terms. Indeed, the book covers many of the big ideas (see above). However, it is important to remember that *Life on Earth* is just the introduction to these concepts. Children will have many chances to grapple with these big ideas in upcoming activities.

Note: Near the end of the book (on the page with the woolly mammoth), the text states, "Because of human activity, the earth has lost hundreds of thousands of species in the last fifty years and may lose half of all the species alive now in the next hundred years." Children love animals and nature. Encourage students to learn about extinction and the positive steps they can make to take care of the environment and help preserve local animal habitats.

5. Use the timeline (Elaborate)

Show students the timeline at the back of the book, which condenses the history of life into one 24-hour period. Then use the giant floor mat timeline from Charlie's Playhouse as a follow-up activity.