

What Shapes Our Earth?

Grade Level: PreK–2

Content Areas: Music, Science, Art, and Language Arts

Time Frame: 60 Minutes

MATERIALS

What Shapes Our Earth? series

towels (in different colors)

two bins

paper and markers or crayons

modeling clay (in yellow, orange, red, brown, and blue)

dental floss

OBJECTIVES

Students will:

- Understand how Earth formed over billions of years
- Discover the processes that shaped our planet and its landforms
- Learn about the extreme landforms found on Earth
- See how Earth is made of layers covered by moving tectonic plates

KEY VOCABULARY

Before reading, focus on vocabulary. Read the glossary words and their definitions.

continents—The seven major bodies of land on Earth. From largest to smallest, they are Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

eon—A very long period of time

erosion—How land is changed and moved by wind and water

evolved—Changed slowly over a very long time

tectonic plates—Giant pieces of Earth's crust



PROCEDURES/ACTIVITIES

Preparation:

Gather students and show them a globe or an image of Earth as seen from space. Explain that it shows what Earth looks like from space. Ask students to name all the parts of our planet. Tell the class that they will be listening to songs and reading books about all the parts of Earth and how they came to be.

Lesson Procedure:

1. Start the lesson by reading and playing the song for *The Story of Earth*.
2. Revisit pages 10–11 and ask students to describe what they see in the picture. Reread the text and say: Imagine you could travel back in time. Would you like to visit Earth when it was like this? Why?
3. Walk through the pictures in the rest of the book. Point out the mountains and volcanoes in the pictures. Ask students how they think mountains form.
4. Now read *Tectonic Plates Are On the Move*. Play the song and sing along.
5. Review pages 6–7 and point out the labels of Earth's layers. Have students repeat the names of the layers with you.
6. Now show the class pages 14–15 again. Ask: How do you think tectonic plates make mountains? (Two plates push against each other. It makes the land crumple and move up.)
7. Demonstrate this using the towels and the two bins. Lay the towels in layers on the floor. Put the two bins at both sides. Ask for two volunteers and have them slowly push the bins together. The towels will crumple and form points that rise up. Ask students to describe what they see happening to the towels. Explain that this is how tectonic plates form mountains.
8. Read *Wind and Water Shape the Land* and play the song. Tell students that wind and water both move land. Ask: How does wind move land? How does water move land?
9. Now have students draw a picture of a place they've been to that has been changed by wind or water. Provide some ideas, such as the beach, a river, a waterfall, a desert, or a canyon.
10. Finally, tell students that some landforms are bigger than any others on Earth. They are real record breakers. Read *Earth's Record Breakers* and review the information in the boxes on the spreads.
11. End the lesson by looking at the globe or image of Earth as seen from space. See if the class can locate some of the record breakers they just learned about in the book.

FREE SONG

Click [here](#) to download or stream the What Shapes Our Earth? songs.

Find other Cantata Learning songs and books at <https://cantatalearning.com>.



Science Extension: Distribute modeling clay to students and tell them they will be making a model of Earth with clay. Show them the picture on pages 6–7 of *Tectonic Plates Are On the Move*. Begin by making a yellow ball as the center of the model. Show students how to add the colors of clay in layers, going from yellow to orange and red. Then add thinner layers of brown and blue. When students are done with their models, show them how to slice them in half with dental floss. Now they can see the layers in their models of Earth.

Writing Extension: Ask students to write a short narrative describing a place in nature that they have visited. They should explain some details about what it looked like. They can also add some things they did there. Then students can draw a picture of the place they wrote about.

Technology Extension: Have students visit <http://www.kineticcity.com/mindgames/warper/> and play a game about erosion. They can also explore the site to learn more about Earth

Standards:

Kindergarten: CCSS.ELA-LITERACY.RL.K.7, CCSS.ELA-LITERACY.RL.K.10, CCSS.ELA-LITERACY.RI.K.7, CCSS.ELA-LITERACY.RI.K.10, CCSS.ELA-LITERACY.RF.K.1, CCSS.ELA-LITERACY.RF.K.2, CCSS.ELA-LITERACY.RF.K.3, CCSS.ELA-LITERACY.RF.K.4, CCSS.ELA-LITERACY.W.K.3, CCSS.ELA-LITERACY.SL.K.1, CCSS.ELA-LITERACY.SL.K.2, CCSS.ELA-LITERACY.SL.K.4, CCSS.ELA-LITERACY.SL.K.5, CCSS.ELA-LITERACY.L.K.1

First Grade: CCSS.ELA-LITERACY.RL.1.10, CCSS.ELA-LITERACY.RI.1.1, CCSS.ELA-LITERACY.RI.1.7, CCSS.ELA-LITERACY.RI.1.10, CCSS.ELA-LITERACY.RF.1.3, CCSS.ELA-LITERACY.RF.1.4, CCSS.ELA-LITERACY.W.1.3, CCSS.ELA-LITERACY.SL.1.1, CCSS.ELA-LITERACY.SL.1.2, CCSS.ELA-LITERACY.SL.1.5, CCSS.ELA-LITERACY.L.1.1

Second Grade: CCSS.ELA-LITERACY.RL.2.10, CCSS.ELA-LITERACY.RI.2.10, CCSS.ELA-LITERACY.RF.2.3, CCSS.ELA-LITERACY.RF.2.4, CCSS.ELA-LITERACY.W.2.3, CCSS.ELA-LITERACY.SL.2.1, CCSS.ELA-LITERACY.L.2.1, NGSS 2-ESS1-1, NGSS 2-ESS2-2

