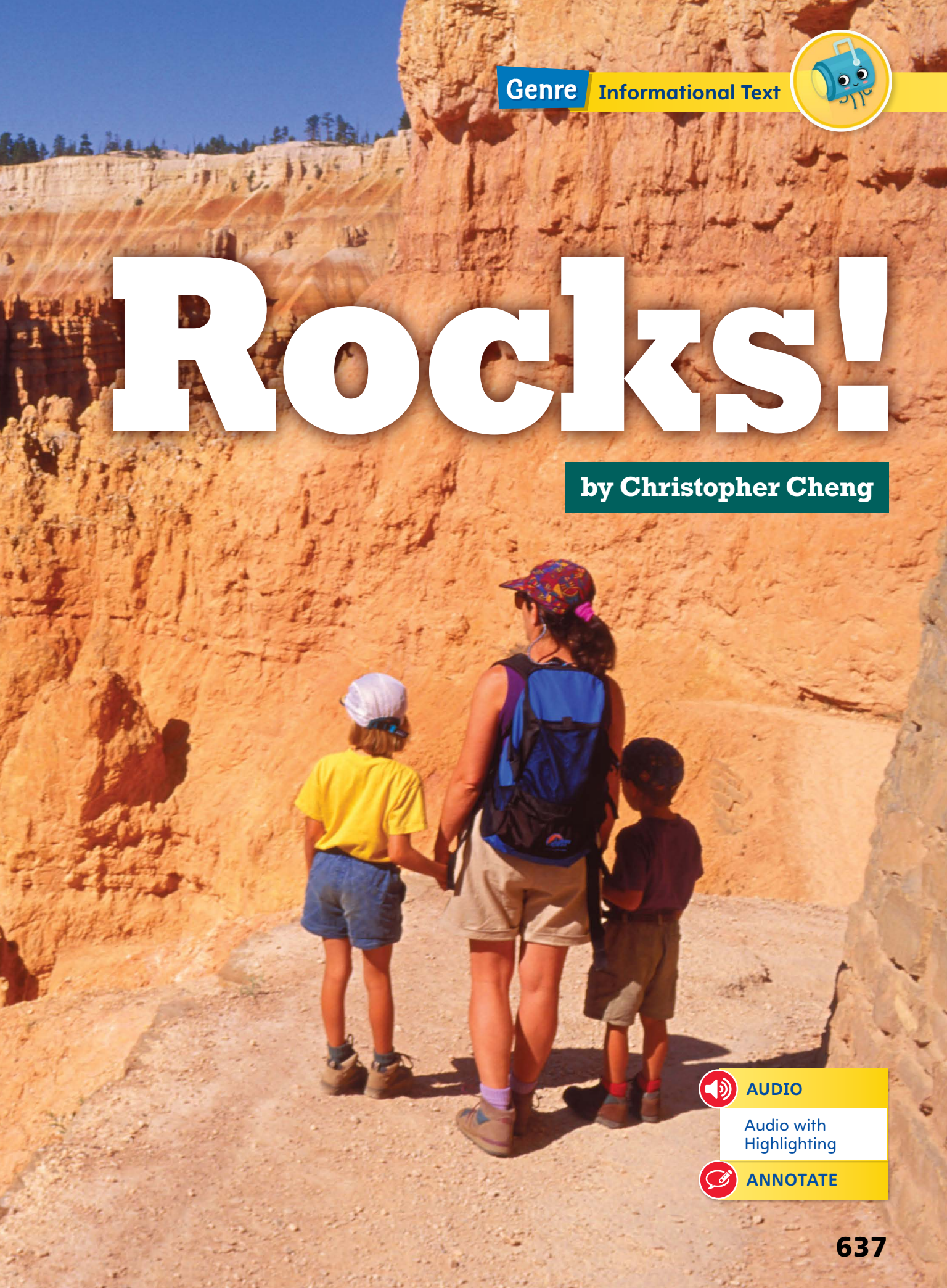


Genre Informational Text

Rocks!

by Christopher Cheng

AUDIO

Audio with Highlighting

ANNOTATE

CLOSE READ

Identify Main Idea

Underline sentences that help state the main idea of the first paragraph.

1 You are standing on a rock. Right now. Maybe you are not standing right on top of a rock, but if you dig down far enough, you will hit rock. That's because Earth is made of rock. Rock is the building block that makes up our planet. Rock lies under every bit of land. There is rock on the bottom of every ocean. Rock is everywhere!

TEKS 2.9.D.i Recognize characteristics and structures of informational text, including the central idea and supporting evidence with adult assistance.

What Is a Rock?

2 Rock is a hard material made of minerals. Minerals are solid, nonliving matter found in nature. To form a rock, it takes one or more minerals. Heat and pressure form the minerals into the hard things we call rocks. Pressure is a force, similar to pressing down on something. Rocks can be as small as a grain of sand or taller than a skyscraper. They can be as dark as night or as light as milk. Mountains, the seabed, and beach stones are all rock.

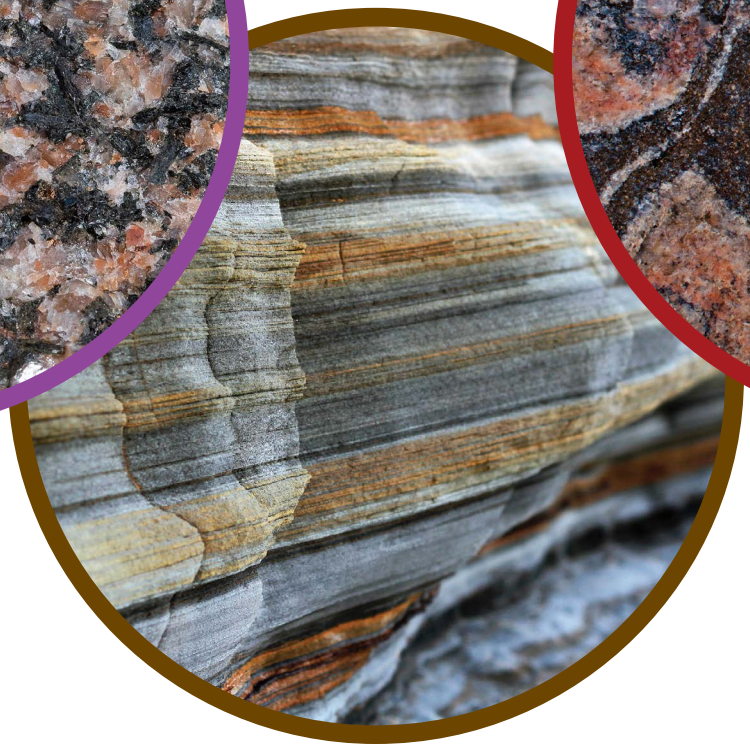
3 There are rocks in space too. Some rocks called meteorites crash into Earth from outer space.

CLOSE READ

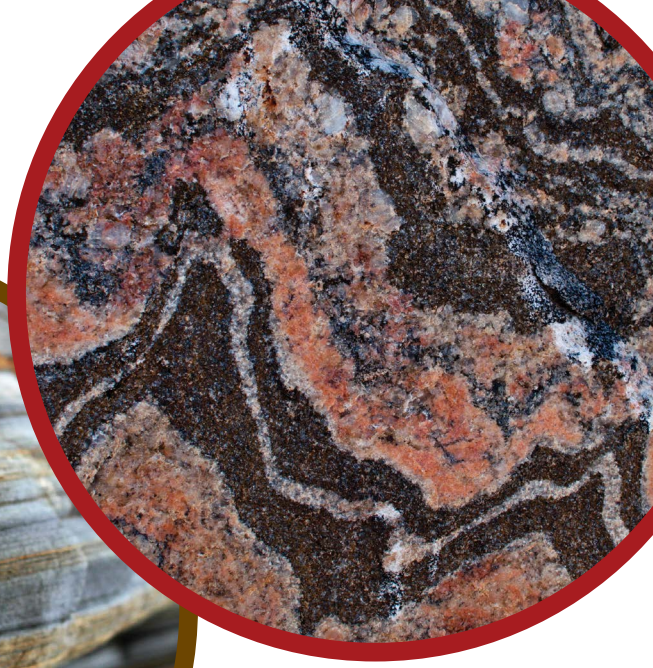
minerals solid materials, usually dug from the earth, such as coal and gold

Space rocks!

igneous



sedimentary



metamorphic

CLOSE READ

4 Geologists are scientists who study rocks. Geologists usually sort rocks into three different kinds. Each kind of rock is formed, or made, in a slightly different way.

- Igneous rocks form when hot, liquid rock cools.
- Sedimentary rocks form when layers of minerals pile up over a long period.
- Metamorphic rocks form when pressure and heat change the make-up of a mineral.

layers thin or thick parts of something that are over or under one another

The Rock Cycle

5 Rocks are always changing. These changes are called the Rock Cycle. The changes happen in different ways. They usually take thousands of years to happen. Parts of igneous rocks can become sedimentary rocks. Sedimentary rocks can change to metamorphic rocks. Metamorphic rocks can become sedimentary rock or even igneous rocks.

CLOSE READ

Make Inferences

Sometimes the main idea is not stated, but you can use evidence in the text to figure it out. Highlight the sentences that can help you figure out the main idea of this section.

CLOSE READ

Vocabulary in Context

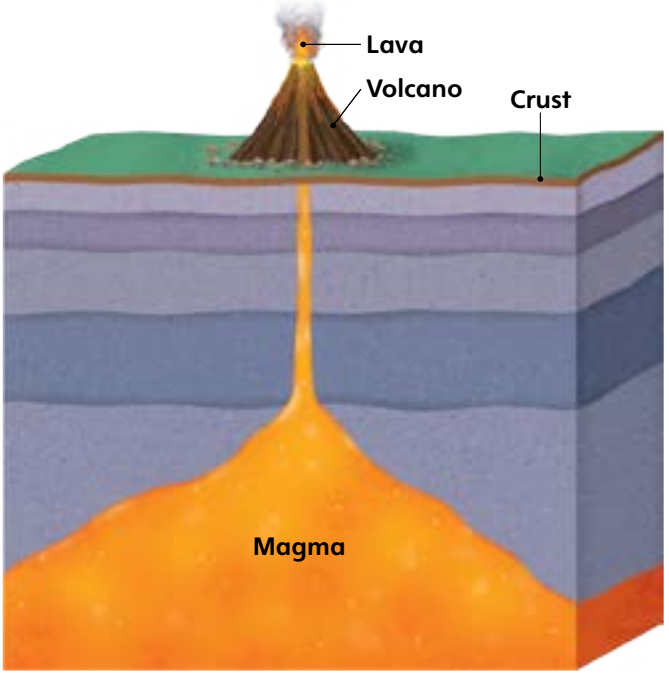
You can sometimes figure out the meaning of a word by reading the words nearby. Identify the word in the second sentence that is a homograph. Underline the words in the sentence that tell the meaning of the homograph. What other meaning of the homograph do you know?

magma hot, melted rock under the surface of the Earth

Igneous Rocks

6 Igneous rocks are made from hot, liquid rock. The top layer of the Earth is called the crust. Beneath the crust is liquid rock, called magma. Magma is melted rock. Magma often comes through the crust from cracks or holes called volcanoes. When magma comes to Earth's surface, it's called lava. Lava cools very quickly when it meets the air. This creates igneous rocks. Magma can cool slowly in the crust. This can create igneous rocks too.

How Igneous Rocks Form

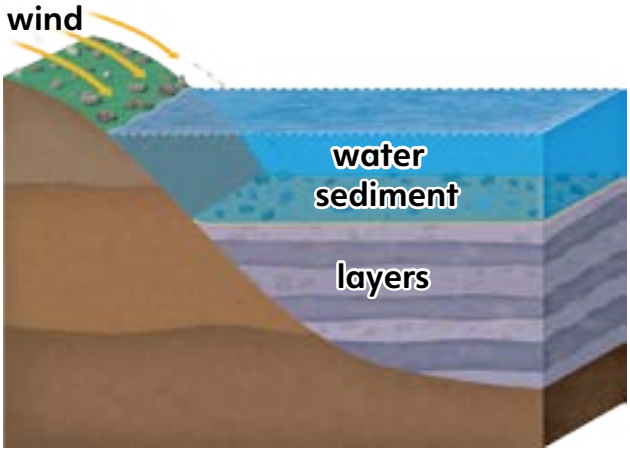


TEKS 2.3.B Use context within and beyond a sentence to determine the meaning of unfamiliar words.
2.3.D Identify, use, and explain the meaning of antonyms, synonyms, idioms, and homographs in context.

Sedimentary Rocks

7 Sedimentary rocks are made from tiny pieces of other rocks. Wind and water can break up big rocks into very tiny pieces. These small pieces are called sediment. Sand is similar to sediment. Sediment might roll down hills, be blown by the wind, or pushed by water. Over thousands of years, the sediment forms layers. The layers press down on each other. They become a solid, new kind of rock—sedimentary rock.

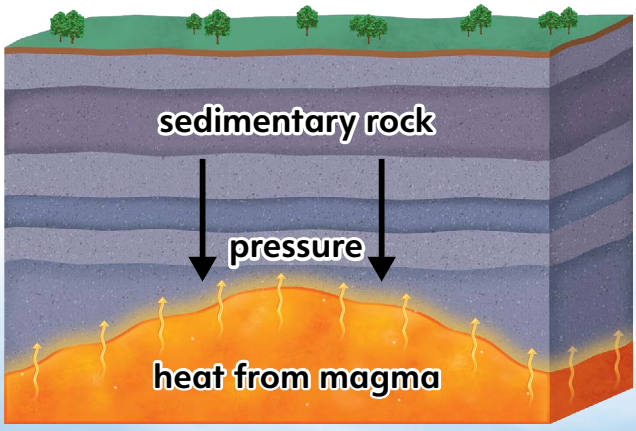
How Sedimentary Rocks Form



Metamorphic Rocks

8 Metamorphic rocks are also made from other kinds of rock. Over long periods of time, rocks in the Earth press down on each other. This pressure creates heat. There is also heat from magma deep inside the Earth. The heat changes these rocks. It's like the heat is cooking the rock. These rocks don't melt, but they do change into a new type of rock—metamorphic rocks.

How Metamorphic Rocks Form



Some Other Ways People Use Rocks			
Type of Rock		**How It's Used**	
limestone		building	
graphite		pencil	
slate		floors	

Rocks and People

9 Rock and stone are used in many ways. We use small rocks such as diamonds for jewelry. Artists cut stones such as marble to make art. Many kitchens in America have rock countertops. Glass is made from melting sand, and sand is rock. Even metal comes from rocks. If you look around wherever you are right now, you'll probably see something made from rock.

CLOSE READ

Make Inferences

Highlight the sentences that can help you decide what the main idea of this section is.

CLOSE READ

Identify Main Idea

Underline the sentence that tells the main idea of this section.

Building with Rocks

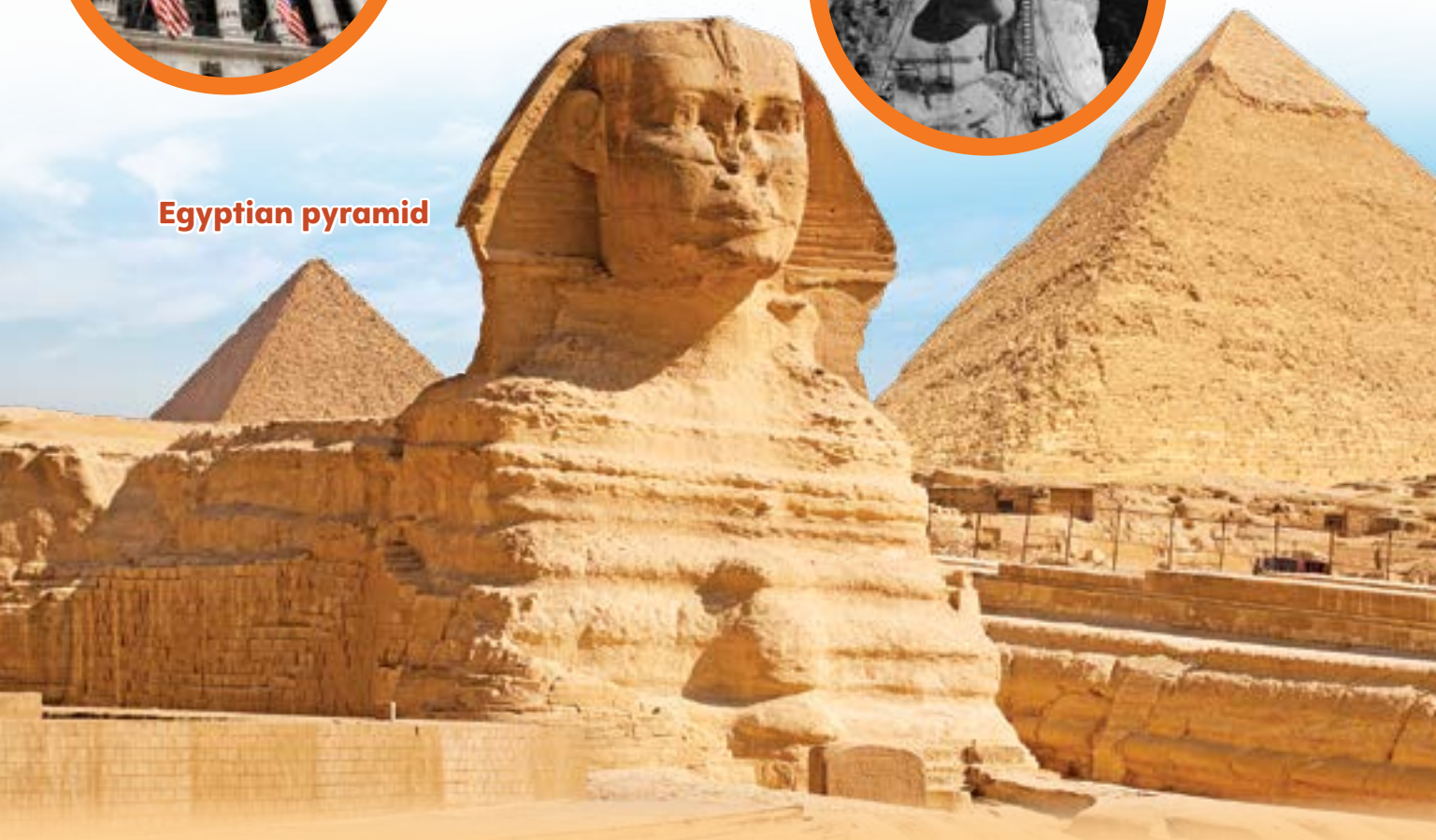
10 People have been building with rocks for thousands of years. Many cities long ago were made from rock. The ancient Egyptians made pyramids with giant blocks of limestone. In most cities today, rock is in buildings and sidewalks. Crushed rock is in roads. Many bridges are built with rock or stone.

bridge

building

A team of artists carved the giant sculptures of Mount Rushmore in rock.

Egyptian pyramid



TEKS 2.9.D.i Recognize characteristics and structures of informational text, including the central idea and supporting evidence with adult assistance.

moray eel

Many birds build nests on rocks.

Animals and Rocks

11 People aren't the only creatures who use rocks. Animals use rocks too. Some animals swallow small rocks to help them digest food. These swallowed rocks are called gastroliths. Ostriches are birds. They have no teeth. They need help grinding food in their stomachs. So they swallow gastroliths—small rocks and sand.

12 Some animals use rocks for their homes. Some eels and octopuses live in cracks in undersea rocks.

ostrich

gastroliths

CLOSE READ

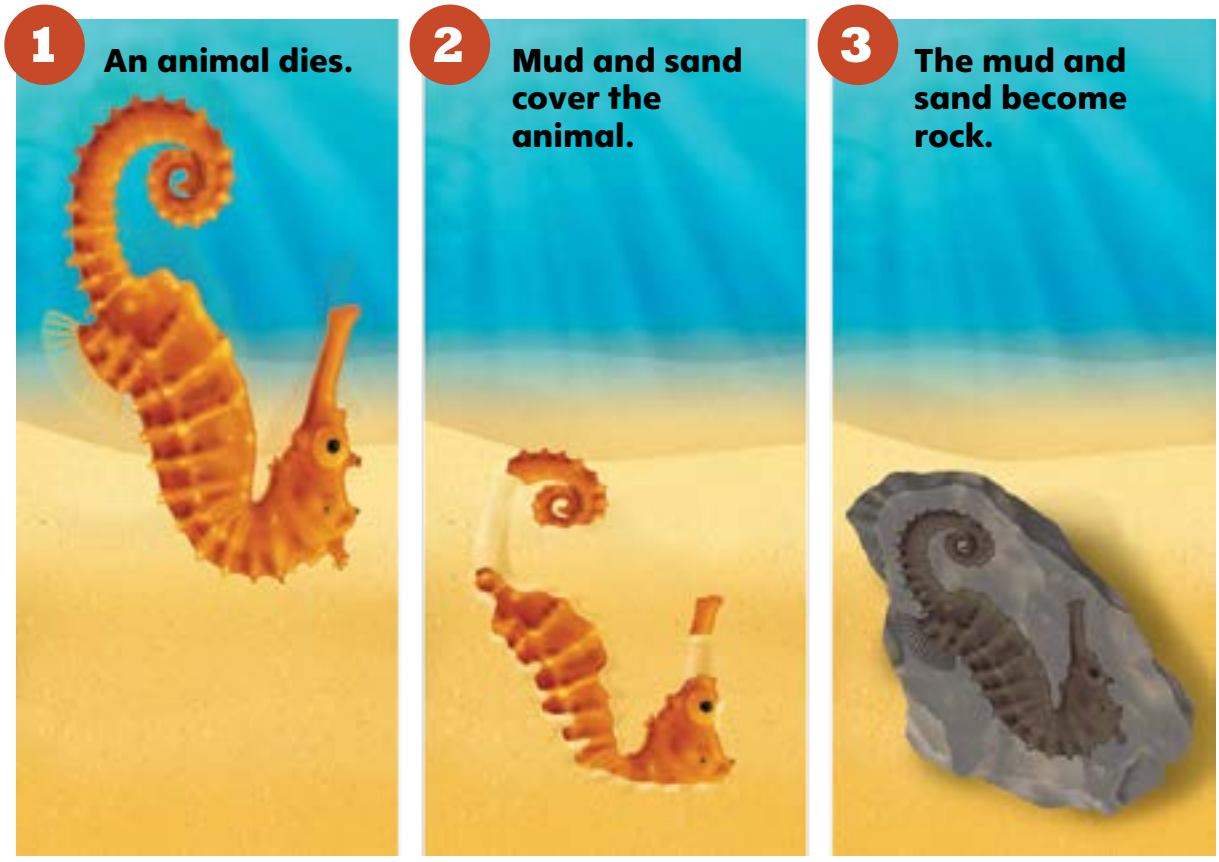
Make Inferences

Highlight the sentences that can help you figure out the main idea of this section.

fossils parts or prints of a plant or animal that lived a long time ago

Rocks and Fossils

13 Rocks help scientists learn about animals from the past. Fossils are what is left of animals and plants that lived long ago. Long ago, some animals were buried in layers of mud or sand. Over time, these layers become solid rock. The animals' bodies break down. The bodies leave shapes in the rock. These shapes show what animals from long ago looked like.



TEKS 2.6.F Make inferences and use evidence to support understanding.

Soil

14 Rock is important because it provides people and animals with food. Soil is made up of small pieces of rock. Soil is the loose upper layer of the surface of Earth. The rock mixes with air, water, and humus to make soil. Humus is tiny pieces of dead plants and animals. The plants that people and animals eat grow in soil.

CLOSE READ

soil the loose top layer of the Earth; dirt

CLOSE READ

Vocabulary in Context

Underline the words in the text that help you understand the meaning of **nutrients**.

15 Soil provides water and nutrients to plants. Nutrients in soil help plants grow. Different kinds of soil have different amounts of water and nutrients. Clay soil is thick and heavy. Clay soil can hold a lot of water. It can also dry out and become hard as a brick. Desert soil is loose and sandy. Clay and sandy soils are not very good for growing plants. Loam is a very rich kind of soil. It holds some water but not too much. Loam also contains a lot of nutrients. The best farmland has loamy soil.

Soil Homes

Soil provides homes to many living things. Earthworms live in soil. So do animals such as prairie dogs.

TEKS 2.3.B Use context within and beyond a sentence to determine the meaning of unfamiliar words.

16 Rock. It's much more important to us than you probably thought. It gives us places to live. It helps us create and build. It gives us the soil to grow our food. It is home to animals. It makes up our entire planet!

CLOSE READ

Identify Main Idea

The topic of a text is what the whole text is about. Underline the topic of this text. Then underline the words that tell the main idea about the topic of this text.

Fluency

Practice reading every word correctly. Read aloud the last two paragraphs several times with a partner.

TEKS 2.4 Use appropriate fluency (rate, accuracy, and prosody) when reading grade-level text; **TEKS 2.9.D.i** Recognize characteristics and structures of informational text, including the central idea and supporting evidence with adult assistance.