



Teacher's Notes: Sedimentary Rock

Learning Objectives:

The students will be able to explain how sedimentary rock is formed.

The students will be able to list different types of sedimentary rock.

The students will be able to identify salt and chalk.

Activities

1. Technology – Use the technology printable to find images related to the book. The main idea words are good ones to use. Students can copy and paste the images into a Word document and type words or sentences about each image or they can create a PowerPoint.
2. Make sedimentary rock with pasta and glue.
<https://abrazoandcoze.com/sedimentary-rock-activity/>
3. Activity to show how different types of sediment settles on the bottom of water. Over time the sediment gets buried. Layers and layers of sediment turn into rock.
4. Look for sedimentary rocks outside. Look for chalkies. Collect them and bring them home to look at.
5. Model layering by taking things you find in the classroom or home to create a good visual for layers. Connect that layering to what happens with sediment layers.
6. Make sidewalk art using chalk. <https://youtu.be/eGhglysrbg>
7. Use chalk to make hopscotch game
<https://www.youtube.com/watch?v=fZzswQaICfM>

General Tips: The goal is to build background knowledge while leading an engaging discussion on any and all information that can be talked about on a given page. The items that you choose to bring up or focus on can be modified for the students you are working with. For example, if you have a student who can point to something in the picture, answer yes/no questions be sure to incorporate a lot more of that as you go through the book. On the same token, be sure to ask a lot of comprehension questions and critical thinking questions at the level appropriate for students. There is something for everyone.

Page 1: Earth has a lot of rocks on it! There are three different types of rocks on Earth. Each one is made different. Today we are going to talk about sedimentary rock and how it is made.

Pointing: rocks, count the circles

Short Answer: How many types of rocks are there?

Yes/No: Are there five different types of rocks? Are there three different types of rocks? Are all rocks made the same way?

Sharing opinion/experiences: Where do you see rocks? What do people do with rocks?

Peer to Peer Interaction: After you read Page 1, ask students, “What type of rock are we studying today?” The answer is the main idea card “sedimentary.” Students will find the main idea card and read it to their partner. Teacher will prompt them to talk about rocks.

Page 2: Sedimentary rock is one type of rock on Earth. Sedimentary rock is made of sediment. Sediment is at the bottom of water.

Pointing Questions: bottom of the ocean, hand with sediment

WH: what is sedimentary rock made of? Where can you find sediment? What is at the bottom of the ocean? What is at the bottom of river

Yes/No: Is sedimentary rock a type of rock? Is sedimentary rock made in volcanos? Is sediment at the bottom of water? Is sediment at the bottom of rivers? Is sediment at the bottom of lakes? Is sediment at the bottom of oceans?

Sharing opinion/experiences: Have you ever walked on sediment? (swimming in ocean)

Peer to Peer Interaction: After you read Page 2, ask students, “What is sedimentary rock made of?” The answer is the main idea card “sediment.” Students will find the main idea card and read it to their partner. Teacher will prompt them to answer some of the questions above.

Page 3: Talking Points: Did you know that sand is made from other rocks breaking into tiny parts? We have different types of rocks. All types of rock break into sand. Sand is at the bottom of water. It’s at the bottom of lakes, rivers, oceans, etc. That means that sand is sediment. It’s one type. There are a lot of things that are sediment. We have a lot of colors of sand. That is because the sand is the color of the rock it used to be.

Pointing Questions: gray sand, white sand, brown sand

Short Answer: Where is one place you can find sand? What is sand made from? Why is sand different colors?

Yes/No: Is sand sediment? Is there only one color of sand? Do rocks break into small pieces?

Sharing opinion/experiences: Have you played in the sand? What do people do with sand at the beach?

Peer to Peer Interaction: After you read Page 3, ask students, “What sediment is very small pieces of rock?” The answer is the main idea card “sand.” Students will find the main idea card and read it to their partner. Teacher will prompt them talk about.

Page 4 When plants and animals die, they decay. That means they turn into dirt. That dirt is at the bottom of water too. Dead plants and animals turn into sediment and are in some sedimentary rocks.

Pointing Questions: dead fish, leaf, bottom of the water.

Short Answer: What happens to dead plants? What happens to dead animals? What does ‘decay’ mean?

Yes/No: Do dead plants turn into dirt? Do dead animals turn into dirt? Is that dirt sediment?

Sharing opinion/experiences: Have you seen a dead animal or dead plants?

Peer to Peer Interaction: After you read Page 4, ask students, “What dies and turns into sediment?” The answer is the main idea card “dead plants and dead animals.” Students will find the main idea card and read it to their partner. Teacher will prompt them to ask some of the questions above.

Page 5: Other things at the bottom of the ocean are shells and small rocks. Shells and small rocks are sediment because they are at the bottom of water. Shells are in sedimentary rock and other small rocks are in sedimentary rocks.

Pointing Questions: shells, rocks

Short Answer: What are small rocks in the water? What are shells? Where are shells usually found?

Yes/No: Are shells sediment? Are shells in sedimentary rock? Are small rocks in sedimentary rock?

Sharing opinion/experiences: Where do you find shells? Have you found shells on a beach?

Peer to Peer Interaction: After you read Page 5, ask students, “What are two more things that are in sedimentary rock?” The answer is the main idea card “small rocks and shells.” Students will find the main idea card and read it to their partner.

Page 6: Sedimentary rocks are made when more and more sediment lands on top of the old sediment. It makes layers. It takes a long time but the layers of sediment turn into rock. It takes millions of years. (model layering something in class by stacking things on top of each other)

Pointing Questions: icons for layers, layers of sedimentary rock, fish

Short Answer: What is a layer?

Yes/No: Does the weight and heat make the rock stay the same? Does the weight and the heat change the rock? Does the weight and the heat change the rock into metamorphic rock?

Sharing opinion/experiences- How can we layer a cake? How can we layer these books (or other items)?

Peer to Peer Interaction: After you read Page 6, ask students, “What does the weight and heat do to the rock?” The answer is the main idea card “change.” Students will find the main idea card and read it to their partner. Teacher will prompt students to ask some of the questions above.

Page 7: There are some types of sedimentary rocks you may have heard of. Coal is one of them. Coal was made millions of years ago from the sediment that was at the bottom of a swamp. Swamps have a lot of plants growing in them. Swamps are dirty. Swamps are not fun to walk in. There is slimy, gross sediment at the bottom from all the dead plants. You can see the scum on the top of the water. That is from plants and will eventually go to the bottom of the swamp. Swamps have a lot of dead plant sediment. That is what coal is made of. Coal is black. Coal is burned to make electricity.

Pointing Questions: alligator, turtle, log, swamp

Short Answer: What is coal made from? Where is the sediment that makes coal found? What lives in a swamp? What color is coal? What can be made when coal is burned?

Yes/No: Was coal made in a swamp? Does it take millions of years to make coal? Are swamps clean? Do alligators live in some swamps? Is coal orange? Is coal black? Is coal used to make electricity?

Sharing opinion/experiences: What are some things you need electricity to use?

Peer to Peer Interaction: What sedimentary rock is burned to make electricity?" The answer is the main idea card "coal." Students will find the main idea card and read it to their partner.

Page 8: Chalk is a sedimentary rock. The rock it comes from is called limestone. This type of sedimentary rock is made from sediment that has a lot of plant and animal sediment. It's made in the ocean. We use chalk to write with.

Pointing Questions: chalkboard, girl writing with chalk, pieces of chalk. Chalk rock

Short Answer: What is chalk? What type of sediment is chalk made of? Where is chalk made?

Yes/No: is chalk a sedimentary rock?

Sharing opinion/experiences: What do people use chalk for? Where can you buy chalk?

Peer to Peer Interaction: After you read Page 7, ask students, "What is one type of sedimentary rock?" The answer is the main idea card "chalk." Students will find the main idea card and read it to their partner. Teacher will prompt them to talk about what chalk can be used for.

Page 9: One type of sedimentary rock is salt. Salt rock is made from the salt in the ocean. This is the salt we eat on our food. There are different types of salt. Some salt is pink, some is white, and some is black. We usually eat the white or pink salt.

Point: salt rock, salt

WH Questions: What is in the boy's hands? What color is this salt?

Yes/No: Does salt come from the ocean? Does the salt in the ocean turn into rock? Do you eat salt?

Sharing opinion/experiences: What are some things you put salt on when you eat?

Peer to Peer Interaction: After you read Page 9, ask students, "What is one type of sedimentary rock?" The answer is the main idea card "salt." Students will find the main idea card and read it to their partner.