

Interested in learning more?

You can learn more with these fun extension activities!

Scan the QR code to play a fun game while learning more about weathering!



or go to: tx.ag/ngeo



Take a closer look at weathering by watching this video:

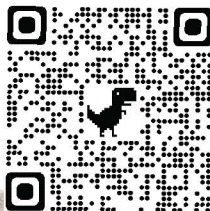


COMING NEXT WEEK!



Rapid changes to Earth's surface: Earthquakes.

For more information about Project VICTORY visit:



TEXAS A&M UNIVERSITY
College of Education and Human Development

Project VICTORY



GEOLOGY EXPLORERS

Family Involvement in Science

Weathering of Rocks

FIELD NOTEBOOK #2

Project VICTORY is funded by the U.S. Department of Education
Grant No. S411B200055

Dear Family,



We are glad you are participating in Geology Explorers. We hope you enjoy these **Family Involvement in Science (FIS)** activities with your child and family. Please try to work through the activities in the next week.

This week's topic:

Your child is exploring the weathering of rocks and how it helps make soil. We are learning science vocabulary that geologists use when describing this process.

Find ways to use these words in everyday conversations. This will help to build your child's science vocabulary.

Did you know?



Living things like lichen also help weather rocks.



Family Science Activity

Now that you have made a prediction about freezing the egg, experiment and record your observations.

Materials:

-  An egg
-  Access to a freezer



What to do?

1. Place the egg in the freezer.
2. Let it freeze overnight.
3. Get the egg out of the freezer and observe what happened.
4. Write down or illustrate and label what you observed in the box below.

Was your prediction correct? Yes No

This egg model helps explain how freezing water expands and causes weathering of rocks.





Scan the QR code or go to tx.ag/weathering to learn more about this model!

Family Science Activity

This week's family challenge is to explore the process of weathering by water.

Materials:

-  An egg
-  Access to a freezer

For this exploration, the egg's shell represents the rocks, while the yolk and egg white represent the water.

Activity

1. What do you think will happen if you place the egg in the freezer overnight?
2. Make your prediction in the box below. You can write down or illustrate your prediction.



Target Vocabulary



Weathering is the process of wearing down or breaking down rock.

Activity

Draw a line to connect the pictures with the cause of the weathering of the rocks.

1.		●	● Water (waves)
2.		●	● Living things
3.		●	● Wind
4.		●	● Water (ice)



Weathering of Rocks Helps Form Soil

Did you know it takes hundreds of years for new soil to form? Soil formation is an example of a slow change to the Earth's surface. We learned that soil is made up of many materials. Soil is made of tiny particles of **decomposed** plants and animals. Soil also contains tiny pieces of rock. Have you ever wondered how nature weathers, or breaks rocks into smaller pieces?

What is Weathering?

Over time, wind and water break down, or wear away rocks. This process is called **weathering**. One way soil is made is by weathering of rock.

Wind causes weathering of rock. First, wind blows bits of sand and dust against rocks. Then, the small pieces of worn rock break into even smaller pieces. Wind also causes the small pieces of rock to move. Slowly over time, the small broken pieces of rock help to form new soil.

Water also causes weathering of rock. One example is when strong ocean waves pound on rocks near the shore. Over time, the force of the water breaks away small pieces of rock. Then, the moving water carries the small pieces to another location.

Weathering can also take place when water freezes inside of rocks. To start, rain water seeps into cracks in rocks. Then, the water gets cold enough to freeze inside the rock. Next, frozen water expands and starts to break the rock apart. This process happens over and over breaking the rocks into smaller and smaller pieces. These small pieces of rock can become part of the soil over time.



What Causes Weathering?

Look at the image below.

There are some labels missing in the image.



Activity

Fill in the blanks to complete the missing labels.

1. _____
2. _____
3. _____

