Interested in learning more about volcanoes?

You can learn more with these fun extension activities!

Scan the QR code to learn more about volcanoes with this interactive resource!

or go to: tx.ag/volcanofacts

Take a closer look at volcanoes by watching this video:

or go to: tx.ag/volcanoes

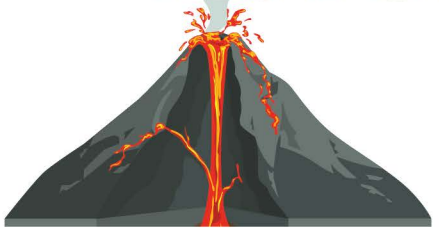
For more information about Project VICTORY visit:

TEXAS A&M UNIVERSITY®
College of Education and Human Development

Project VICTORY
GEOLOGY EXPLORERS

Family Involvement in Science

Volcanoes



FIELD NOTEBOOK #5

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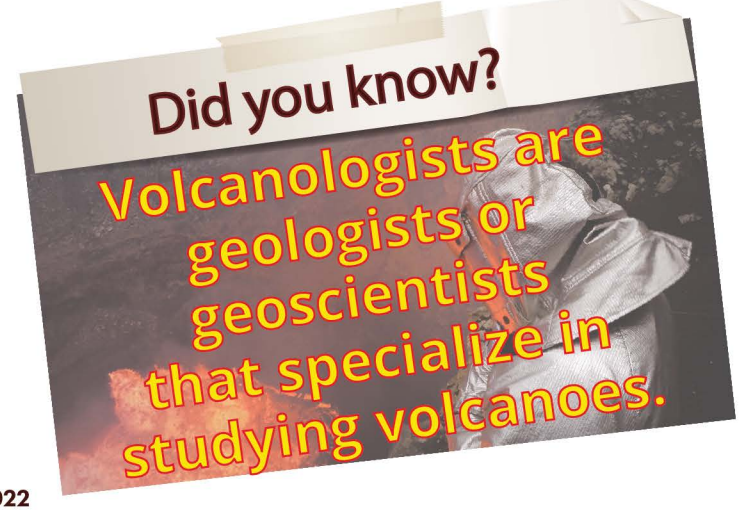
Dear Family,

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 rapid changes to Earth's surface. This week we are focusing on Volcanoes. We are learning science vocabulary that geologists use when describing volcanoes.

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



Family Science Activity

Now that you have made a prediction, complete the experiment and record your observations.

Materials: Volcano kit.

Your kit contains:

1 paper plate
1 bottle cap
1 mini play-dough
1 mini bottle of vinegar
1 bag of baking soda

Instructions

1. Place the bottle cap in the center of the paper plate.
2. Use the play-dough to build a mini volcano around the bottle cap. Ms. Almeida, one of our Project VICTORY teachers, demonstrates in the following picture:

3. Carefully pour baking soda into the bottle cap.
4. Carefully pour vinegar into the bottle cap.
5. Write down or illustrate and label what you observed in the box below.

Was your prediction correct? ☐ Yes ☐ No

Mixing the baking soda and the vinegar causes a chemical reaction. This reaction causes bubbling and fizzing, which models a volcanic eruption in our mini-volcano.

Family Science Activity

This week's family challenge is to explore volcanoes and volcanic eruptions.

Materials: Volcano kit.

Your kit contains:

1 paper plate
1 bottle cap
1 mini play dough
1 mini bottle of vinegar
1 bag of baking soda

For this exploration, we will build a mini volcano and model a volcanic eruption. The paper plate represents the surface of the Earth. We will place the bottle cap in the center of the plate, and we will use the mini play-dough to build the mini volcano around the bottle cap. Then, we model a volcanic eruption by combining the vinegar and the baking soda.

Activity

1. What do you think will happen if you combine the vinegar and the baking soda?
2. Make your prediction in the box below. You can write down or illustrate your prediction.

Target Vocabulary

A **mountain** is a landform that rises high above its surroundings.

A **volcano** is a landform that is created when lava and ash come out from cracks in Earth's crust.

Lava, gases, and ash can come out of a volcano when it **erupts**.

Rapid Changes to Earth's Surface: Volcanic Eruptions

How are Mountains and Volcanoes Formed?

Both mountains and volcanoes are landforms found on Earth's surface. A **mountain** is formed when the plates of Earth's crust collide and land is pushed upwards. A **volcano** may look like a mountain, but a volcano is formed in a different way.

Melted rock under the Earth's crust is called magma. When magma rises above Earth's surface, it is called lava. A volcano is formed when lava and ash come out of cracks in Earth's surface. As the lava and ash cool down, new land is created.

What Happens When a Volcano Erupts?

Unlike mountains, volcanoes erupt. When a volcano **erupts**, more lava and gases come out of the volcano. Volcanic eruptions are sometimes explosive and cause lava, ash, and gases to blast out of the volcano. These explosive eruptions can be very dangerous. Other volcanic eruptions are not explosive. The hot lava spills out of the top of the volcano and flows downhill. A volcanic eruption is an example of a rapid change to Earth's surface.

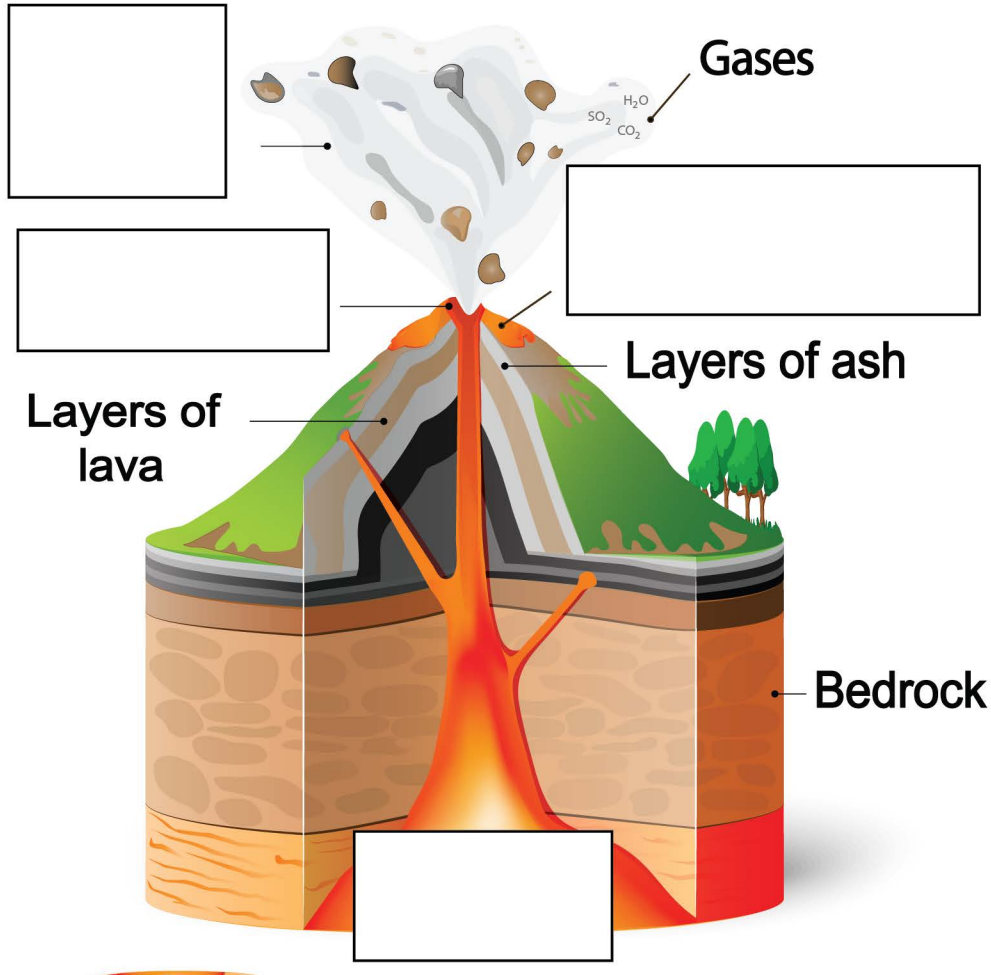
Volcanoes can be classified as active, dormant, or extinct. Active volcanoes are likely to erupt again. Active volcanoes can also trigger landslides. Dormant volcanoes have not erupted in a very long time. Extinct volcanoes are unlikely to erupt again.

Volcanoes

Look at the image below.
There are some labels missing in the image.

Activity

Fill in the blanks to complete the missing labels.



Word bank

Ash cloud
Lava flow
Crater
Magma

Answer key