

Interested in learning more?

You can learn more with these fun extension activities!

Scan the QR code to learn more about how landslides occur with this animation!



Take a closer look at landslides by watching this video:



or go to: tx.ag/landslidedemo

or go to: tx.ag/landslides



**COMING
NEXT
WEEK!**

Rapid changes to
Earth's surface:
Volcanoes.



For more information about Project VICTORY visit:



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Project VICTORY



GEOLOGY EXPLORERS

Family Involvement in Science

Landslides

FIELD NOTEBOOK #4

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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 Landslides. 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.



Family Science Activity



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

Materials:



Moist soil (so that it sticks to the rock or plastic container)



A rock or a plastic container (for example, an empty butter container)



A watering can or a plastic bottle with holes in the cap (or a sprinkler attachment and a hose)

Instructions

1. Go outside and place your rock (or plastic container upside down) on a spot where things can get a little messy.
2. Cover your rock (or upside down container) with moist soil or moist dirt. The soil needs to be moist so that it sticks to the rock or plastic container.
3. Fill up your watering can (or your plastic bottle or connect the attachment to your hose). Pour water over the soil to simulate rainfall on a slope.
4. Write down or illustrate and label what you observed in the box below.

Was your prediction correct? Yes No

This model helps explain how a landslide can occur after heavy rainfall on a slope.

Family Science Activity

This week's family challenge is to explore landslides.

Materials:



Moist soil (so that it sticks to the rock or plastic container)



A rock or a plastic container (for example, an empty butter container)



A watering can or a plastic bottle with holes in the cap (or a sprinkler attachment and a hose)

For this exploration, we will go outside and use a rock or a plastic container (whichever you have available at home) to represent a slope. The moist soil represents the soil on the slope. We will use a watering can or a plastic bottle with holes in the cap (or a sprinkler attachment and a hose) to represent rainfall. You will create the landslide by pouring water over the soil covered slope (moist soil over rock or plastic container).

Activity

1. What do you think will happen if you pour a lot of water over your soil covered slope?
2. Make your prediction in the box below. You can write down or illustrate your prediction.



Target Vocabulary



A **landslide** is a sudden downward movement of rocks and soil down a cliff or mountain.

Examples of landslides in Texas

In 2016, a lakeside landslide occurred in Granbury, Texas.



Photo from NBCDFW



Photo from Fox 4 News

In May of 2018, heavy rainfall and storms triggered a landslide in Shoal Creek, Texas.



Photo from KVUE

Rapid Changes to Earth's Surface

The surface of the Earth is always changing. It takes hundreds of years for new soil to form. Soil is made through decomposition and weathering. These processes take a very long time. But not all changes to Earth's surface are slow. Some changes happen quickly and sometimes, suddenly. Three examples of rapid changes to Earth's surface are earthquakes, landslides, and volcanic eruptions.

What Are Landslides?

Another rapid change to Earth's surface is a **landslide**. A landslide is a sudden downward movement of rocks and soil down a cliff or mountain. The strong shaking movement from an earthquake can cause a landslide. Rain can also cause a landslide. Heavy rainfall can loosen soil, making it easier for soil, rocks, and water to slide down a slope.



LANDSLIDES

— word search puzzle —

Find words from the reading about landslides in this fun puzzle!

e	l	m	o	v	e	m	e	n	t
d	a	a	c	h	a	n	g	e	s
m	o	r	n	b	g	s	i	c	u
o	r	w	t	d	m	o	w	l	d
u	p	t	n	h	s	i	z	i	d
n	d	k	v	w	q	l	c	f	e
t	t	o	b	d	a	u	i	f	n
a	r	o	c	k	s	r	a	d	c
i	f	r	a	p	i	d	d	k	e
n	r	a	i	n	f	a	l	l	e

rapid
 changes
 landslide
 sudden
 movement
 cliff
 soil
 rocks
 rainfall
 mountain
 earthquake
 downward

e	l	m	o	v	e	m	e	n	t
d	a	a	c	h	a	n	g	e	s
m	o	r	n	b	g	s	i	c	u
o	r	w	t	d	m	o	w	l	d
u	p	t	n	h	s	i	z	i	d
n	d	k	v	w	q	l	c	f	e
t	t	o	b	d	a	u	i	f	n
a	r	o	c	k	s	r	a	d	c
i	f	r	a	p	i	d	d	k	e
n	r	a	i	n	f	a	l	l	e

Answer key