

RAPID OR SLOW: A Game On-The-Go!



DALLAS ARBORETUM
Education

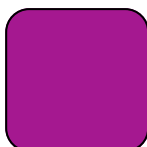
GETTING STARTED

1. Roll a dice to decide who goes first.
Highest number wins.
2. You may choose any color card to begin.

PLAYING THE GAME

1. Each time that you answer the card correctly, you may roll the dice and move that number of spaces. Once you move, the next player goes. Your card for the next turn is the color that you just landed on. If you answer incorrectly, your turn ends and you will answer the same color card next time.
2. The only way to take the fast track is if you land on the green dot and answer the question correctly.
3. The first person to reach the finish line is the winner!

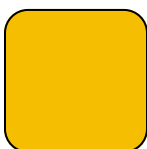
THE CARDS



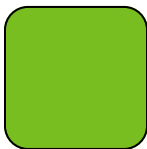
SLOW MO: ASK ANOTHER PLAYER TO READ THE CARD TO YOU. You will answer questions about slow changes to the Earth's surface.



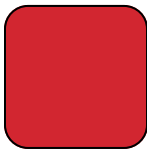
WIND WATER OR ICE: ASK ANOTHER PLAYER TO READ THE CARD TO YOU. You will answer questions about how wind, water, and ice change the Earth's surface.



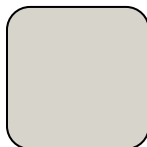
LAND FORMULATE: CHOOSE YOUR OWN CARD. You will draw landforms while other players guess what you are drawing. A timer may be used.



FAST TRACK ACT: CHOOSE YOUR OWN CARD. You will act out slow and rapid processes or landforms and bodies of water while other players guess what you are acting out. A timer may be used.



DANGER ZONE: ASK ANOTHER PLAYER TO READ THE CARD TO YOU. You will answer questions about rapid changes to the Earth's surface.



THE GRAY AREA
The choice is ... well ... yours! So pick any card you would like!

SLOW
MO

SLOW
MO

SLOW
MO

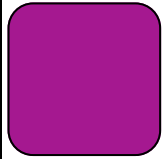
SLOW
MO

SLOW
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SLOW
MO

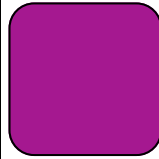
SLOW
MO

SLOW
MO



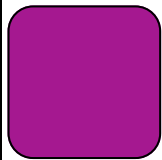
In this process, wind, water, and ice break down features of the Earth's surface.

weathering



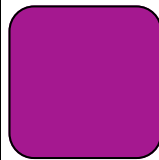
This is the slow process of moving weathered materials to a new location on the Earth's surface.

erosion



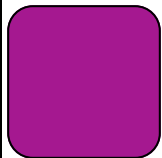
In this process, weathered materials are dropped in a new location on the Earth's surface.

deposition



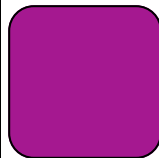
This is the process that formed the Grand Canyon.

erosion



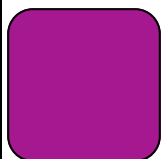
Grasses and other plants planted along rivers and streams help to prevent this change.

erosion



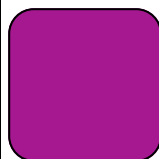
The Mississippi Delta was formed by this process.

deposition



Paint wearing off of a wooden house over many years near a sandy beach is a good example of what slow process?

weathering



This process is responsible for the shaping of our shorelines.

erosion

SLOW
MO

SLOW
MO

SLOW
MO

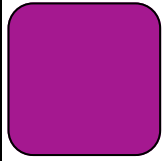
SLOW
MO

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SLOW
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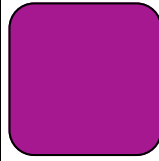
SLOW
MO

SLOW
MO



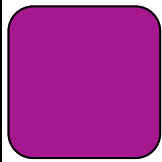
A **moraine** is created by glaciers and which slow process?

weathering



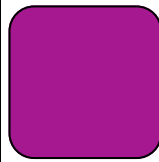
Smooth river rocks being carried downstream is an example of ...

erosion



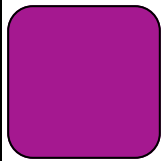
Smooth river rocks piling up at the mouth of a fast moving brook is an example of ...

deposition



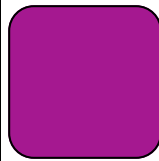
This is the process that forms natural arches.

weathering



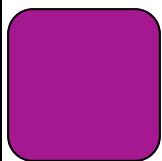
True or False?
Weathering, erosion, and deposition are not caused by the same forces.

False—wind, water, and ice all contribute to each



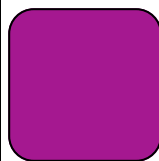
True or False? The effects of weathering, erosion, and deposition can be seen immediately.

False—they take place over millions of years.



Freezing and thawing of water into ice can break rocks into smaller pieces in which slow process?

weathering



A sand dune is created by the results of weathering, erosion, **and** deposition.

True—rock weathers and wind carries and drops the sand.

WIND
WATER
OR ICE

WIND
WATER
OR ICE

WIND
WATER
OR ICE

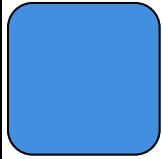
WIND
WATER
OR ICE

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WATER
OR ICE

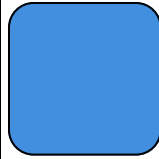
WIND
WATER
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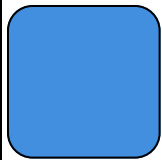
Name the agent of change (wind, water, or ice) for smooth, river rocks.

water



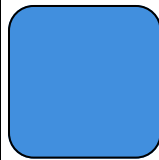
Name the agent of change (wind, water, or ice) for the shape of a river bank.

water



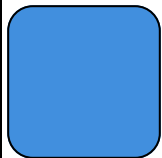
Name the agent of change (wind, water, or ice) for a delta.

water

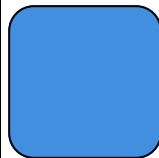


Name the agent of change (wind, water, or ice) for cracked rock.

water

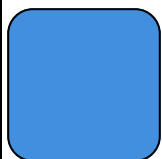


Name the agent of change (wind, water, or ice) for a natural, stone arch.



Name the agent of change (wind, water, or ice) for a sand dune.

wind



Name the agent of change (wind, water, or ice) for formation of a canyon.

water



Name the agent of change (wind, water, or ice) for a dust storm.

wind

WIND
WATER
OR ICE

WIND
WATER
OR ICE

WIND
WATER
OR ICE

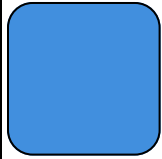
WIND
WATER
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OR ICE

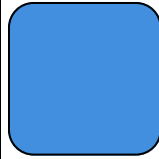
WIND
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OR ICE



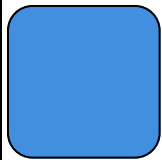
Name the agent of change (wind, water, or ice) for a moraine.

ice



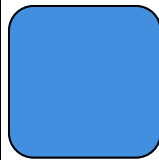
Name the agent of change (wind, water, or ice) for a u-shaped valley.

ice



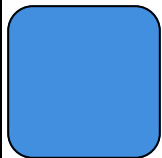
Name the agent of change (wind, water, or ice) for scraped rock.

ice



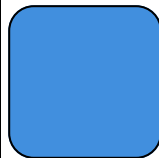
Name the agent of change (wind, water, or ice) for the amount of sand on a beach.

water



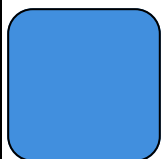
Multiple Choice: At which locations is wind the most dominant force?

- A. *deserts and beaches **
- B. deltas and floodplains
- C. glaciers and moraines
- D. canyons



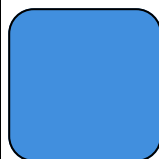
Multiple Choice: At which location is water the most dominant force?

- A. deserts and beaches
- B. *deltas and floodplains **
- C. glaciers and moraines
- D. canyons



Multiple Choice: At which location is weathering **NOT** the most dominant force?

- A. moraines
- B. glaciers
- C. *canyons **
- D. mountaintops



Multiple Choice: Which of the following is **NOT** an example of erosion?

- A. Grand Canyon
- B. river bank
- C. *delta **
- D. u-shaped valley

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

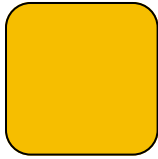
FORMULATE

LAND

FORMULATE

LAND

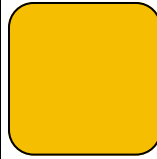
FORMULATE



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

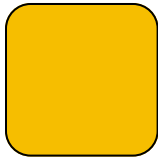
mountains



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

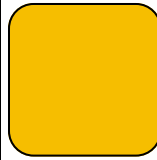
valley



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

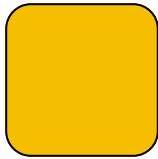
hill



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

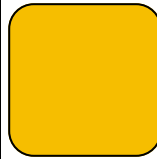
valley



Obstructed View!

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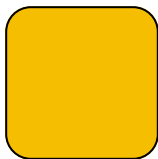
plain



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

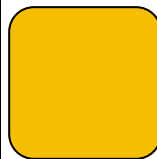
river



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

plateau



Obstructed View!

Draw the following landform with your eyes closed. If someone can guess it, you can roll the dice!

glacier

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

FORMULATE

LAND

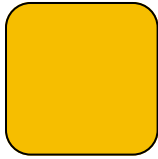
FORMULATE

LAND

FORMULATE

LAND

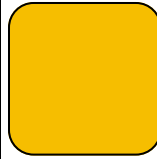
FORMULATE



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

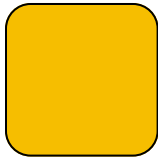
moraine



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

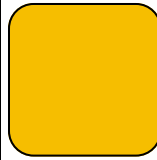
river bank



Squiggle Draw!

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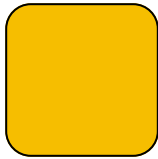
natural arch



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

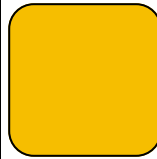
valley



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

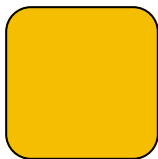
mountain peak



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

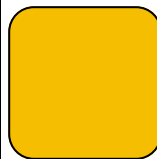
volcano



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

hill



Squiggle Draw!

Use your opposite hand to draw the following landform. If someone guesses it, roll the dice!

lake

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

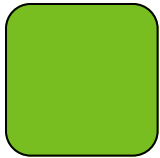
erosion



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

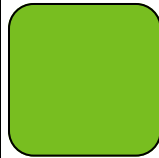
deposition



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

weathering



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

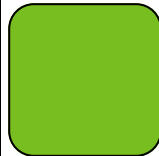
landslide



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

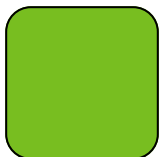
volcanic eruption



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

earthquake



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

hurricane



Duet!

Act out the process below using no words or sounds. Choose one person to guess what you are. If they get it right, you can take the fast track!

tornado

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

ACT

FAST TRACK

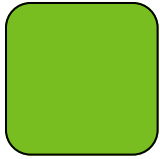
ACT

FAST TRACK

ACT

FAST TRACK

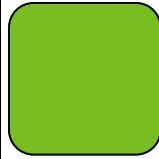
ACT



Lights! Camera! Action!

Act out a landform for the whole group using no words. If they figure it out, you can take the fast track!

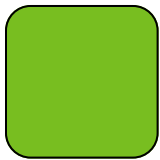
delta



Lights! Camera! Action!

Act out a landform for the whole group using no words. If they figure it out, you can take the fast track!

valley



Lights! Camera! Action!

Act out a landform for the whole group using no words. If they figure it out, you can take the fast track!

mountain



Lights! Camera! Action!

Act out a landform for the whole group using no words. If they figure it out, you can take the fast track!

plains



Lights! Camera! Action!

Act out a body of water for the whole group using no words. If they figure it out, you can take the fast track!

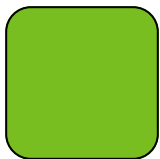
ocean



Lights! Camera! Action!

Act out a body of water for the whole group using no words. If they figure it out, you can take the fast track!

stream



Lights! Camera! Action!

Act out a body of water for the whole group using no words. If they figure it out, you can take the fast track!

waterfall



Lights! Camera! Action!

Act out a body of water for the whole group using no words. If they figure it out, you can take the fast track!

pond

DANGER
ZONE

DANGER
ZONE

DANGER
ZONE

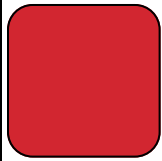
DANGER
ZONE

DANGER
ZONE

DANGER
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DANGER
ZONE

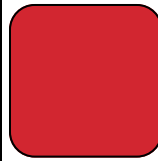
DANGER
ZONE



Define the danger:

This is a series of vibrations of the Earth's crust.

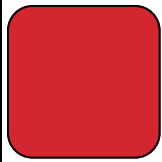
earthquake



Define the danger:

This is the falling or sliding of soil or rock down a hill or mountain.

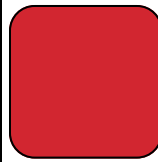
landslide



Define the danger:

This is the falling or sliding of snow or ice down a hill or mountain.

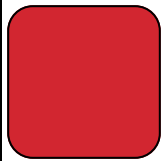
avalanche



Define the danger:

This is when magma reaches the Earth's surface.

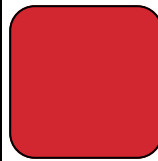
volcanic eruption



Define the danger:

This is a weather event involving heavy rains and winds over water and along shorelines.

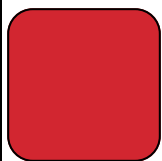
hurricane



Define the danger:

This is a weather event involving destructive winds and often heavy rains on land.

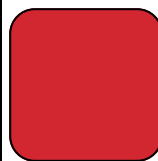
tornado



Define the danger:

This is a giant surge of water that reaches land that is caused by a volcanic eruption or earthquake in the ocean.

tidal wave



Define the danger:

This is a weather event that causes rivers, streams, or other bodies of water to extend into areas not normally covered in water.

flood or flash flood

DANGER
ZONE

DANGER
ZONE

DANGER
ZONE

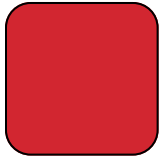
DANGER
ZONE

DANGER
ZONE

DANGER
ZONE

DANGER
ZONE

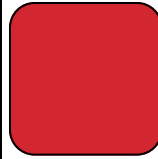
DANGER
ZONE



Get a clue! Read the clues and decide which natural disaster they describe.

Rock or soil, change in location, falling ...

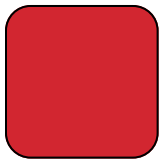
landslide



Get a clue! Read the clues and decide which natural disaster they describe.

Roads or cities erased, landscape transformed, molten rock ...

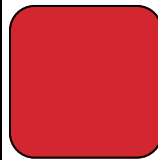
volcanic eruption



Get a clue! Read the clues and decide which natural disaster they describe.

Certain areas at more risk, special buildings needed, lots of shaking ...

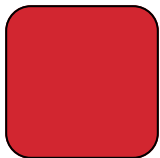
earthquake



Get a clue! Read the clues and decide which natural disaster they describe.

Heavy winds, can have lots of rain, found over land ...

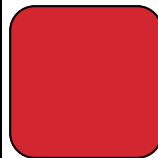
tornado



Get a clue! Read the clues and decide which natural disaster they describe.

Heavy winds, can have lots of rain, found over water ...

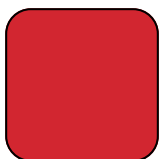
hurricane



Get a clue! Read the clues and decide which natural disaster they describe.

Snow or ice, change in location, falling ...

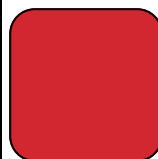
avalanche



Get a clue! Read the clues and decide which natural disaster they describe.

Brings nutrients to crops, can destroy houses, caused by heavy rainfall ...

flood or flash flood



Get a clue! Read the clues and decide which natural disaster they describe.

Can temporarily or permanently change the landscape, animals move on or die, severe lack of water ...

drought