

Name: _____

Unit 3 Study Guide: Constructive and Destructive Forces

Constructive and Destructive Forces

Forces	Destructive	Constructive	Both
Deposition			
Earthquakes			
Volcanoes			
Faults			
Erosion			
Weathering			

1. Label the following picture to show where weathering and erosion has occurred on this creek



True or False

2. The Mississippi River formed the Grand Canyon. T/F
3. Humans cannot prevent erosion. T/F
4. Earthquakes occur along fault lines. T/F
5. Mountains are formed by earthquakes pushing up the Earth's crust. T/F
6. All weathering occurs very slowly. T/F
7. Some forms of weathering occur over millions of years. T/F
8. Gravity can cause weathering, but not erosion. T/F
9. Deposition is when sediment and materials collect in a new place. T/F

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Landform Vocabulary



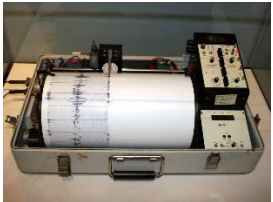
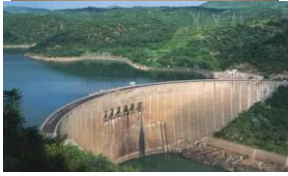


10. For each of the following landforms, identify which process created them, how they are formed, and an illustration of each.

Landform (a physical feature on Earth's surface)	Was it formed by Constructive or Destructive Forces?	How was it formed?	Illustration
Delta			
Hawaiian Islands			
Canyons (Grand Canyon)			
Mountain Ranges			
Beaches			
Sand Dunes			
Sea Arches			

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Matching Human Erosion Defenses

For each of the following technologies or ideas, match them with the picture and definition that shows how they help humans slow down the impact of erosion.

Erosion Defense	Definition	Image
Dams	A natural or artificial wall that blocks water from flooding onto land. They prevent rivers from flooding low-lying land.	
Levees	A human-made wall that stops the destructive power of waves from eroding the coast. Used to stop the ocean from eroding shorelines.	
Storm Drains	A barrier that blocks flowing water or sends it in a new direction. Used to control rivers that may flood and make energy.	
Seawall	An instrument that measures and records details of earthquakes, such as force and duration. Helps scientists warn the public about approaching danger.	
Seismograph	The practice of planting crops in rows on a hill that help lower the impact of soil erosion. Farmers use this strategy to keep soil in place.	
Contour Farming	Designed to drain extra rain and ground water from paved streets, parking lots, sidewalks, or playgrounds. Helps stop water from pooling.	

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Earthquakes

11. What technology is used to study earthquakes?
(Hint: a scientist that studies earthquakes is called seismologists)

12. When an earthquake happens there is an abrupt shift in the earth along a fracture or crack. What is the name of the fracture or crack in Earth's crust?

13. What is a fault? What natural events occur near fault lines? (pg. 52 in textbook)

Weathering and Erosion

14. What is weathering?

15. Name two types of weathering and what makes them different.

16. Mechanical weathering is the process of breaking big rocks into smaller ones through physical force.
 - Some things that cause mechanical weathering are ice inside rocks, roots of plants or trees, the movement of rocks by wind, flowing water.

17. What is erosion?

18. Check all of the following that can cause Erosion:

<input type="radio"/> Gravity	<input type="radio"/> Trees	<input type="radio"/> Scooters	<input type="radio"/> Animals
<input type="radio"/> Wind	<input type="radio"/> Water	<input type="radio"/> Ice	<input type="radio"/> Soil

19. Planting trees and rotating crops are methods that can prevent erosion of topsoil from a flat and open field. Contour plowing is a way to prevent erosion on slightly hilly farmland. Contour Farming is when

20. What constructive or destructive force causes wind to move sand to create sand dunes?

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21. Seawalls are a protective structure of stone or concrete; they extend from shore into the water to prevent a beach from washing away (erosion) and the water from going too high on the land.

Deposition

22. Deposition is the process of eroded materials being dropped off in another place.

23. What landforms are a result of deposition?