Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Destructive & Constructive Processes Study Guide***

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| 1. A destructive process …   tears down | 1. A constructive process….   builds up |
| 1. \_\_\_\_\_\_\_\_\_\_\_ is the dropping or depositing of sediments or soils in a new location by water, wind or ice.   deposition | 1. A sandbar is an example of   deposition |
| 1. Small islands can form during the constructive process called   deposition | 1. Seashells on a beach are an example of   deposition |
| 1. A low plain that forms where a river enters the ocean or lake is a(n)   delta | 1. The process that breaks down rocks into smaller pieces is called   weathering |
| 1. Which process breaks rock into smaller pieces called sediment without changing the type of rock?   mechanical/physical weathering | 1. The moving of sediments and soil to a new location by wind, water, ice, and gravity is called   erosion |
| 1. Which processes form a sea stack?   weathering and erosion | 1. Which can cause weathering, but NOT erosion?     chemicals in rocks reacting with water |
| 1. Here are the instructions for demonstrating how erosion can change a surface feature.   Create a landform in a flat pan.  Pour water over the landform.  Observe how the shape of the land changed after pouring the water.  Record your observations. | 1. Which most likely carved out a canyon’s steep sides?   a river wore away and eroded the rock |
| 1. Mount Everest is the tallest mountain in the world above sea level. It is about 8,850 m high. Brasstown Bald, the tallest mountain in Georgia, is about 7,392 m lower. Subtract the two numbers to find the height of Brasstown Bald. | 1. Each of these sentence describes the impact organisms can make on Earth’s surface.   \_\_\_\_ Lichens and moss make chemicals that soften  rocks and break them into smaller pieces  \_\_\_\_ Large tree roots break apart rocks  \_\_\_\_ Bacteria and fungi change rock into soil  \_\_\_\_ Insects and earthworms add nutrients to the  soil and break apart soil pieces |

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| **Weathering** | **Erosion** | **Deposition** |
| 27. Flood water pounding  against a canyon wall  and wearing it down | 28. A mudslide flowing  down a steep hill | 29. Waves dropping sand  on the beach |
| 30. Water getting into  cracks, freezing, and  breaking the rocks apart | 31. Rain washing away  soil from a hillside | 32. Layers of sediment  collecting at the bottom  of the ocean |
| 33. Wind blasting sand  at rock and carving  out arches | 34. Glaciers scraping  rocks across the  earth’s surface | 35. Deltas forming at the  mouths of rivers |

The following surface features are created by destructive processes. Match each feature with the process that created it.

1.  a tree growing through\* \* An example of mechanical weathering is a tree

a rock growing through a rock

1.  a limestone cave \* \* Chemical weathering can create a limestone cave



1. a canyon \* \* Rapid erosion in a river valley creates a canyon



1. the Great Lakes \* \* Erosion from a glacier carved out the Great Lakes
2.  a sinkhole \* \* The rock above a cave collapses and causes a sinkhole

The following surface features are created by constructive processes.

1.  an alluvial fan \* \* a river rushes down a steep slope and deposits its

sediments on a flat plain to create an alluvial fan

1.  the Hawaiian Islands \* \* huge deposits of lava created shield cones that

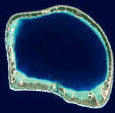
formed the Hawaiian Islands

form



1. the Himalayan Mountains \* \* Huge sections of the Earth’s crust, called plates moved

into each other to create the Himalayan Mountains



1. an atoll \* \* Deposits of coral skeletons called coral reefs form in a

ring shape to create an atoll



1. a sand dune\* \* wind blows sand until it hits an obstacle and piles up to

create a sand dune