

Unit Test- Earth Science



Number of Incorrect: _____

Final Grade: _____

Parent Signature: _____

Top Tips for Success on a Test

1. **Read** the following statements at least two times.
2. **Circle** the key words in each question/ or statement. (*Remember no more than four key words!)
3. **Eliminate** the answers you know are incorrect answers.
4. **Circle** the correct answer.
5. **Write** the answer on the line.

1. Scientists have found evidence of sand dunes on Mars. These sand dunes suggest that Mars has had:
 - a. Rain
 - b. Wind
 - c. Rivers
 - d. Glaciers

2. What is the most likely reason a delta forms at the mouth of a river?
 - a. Dam construction blocks the mouth of the river.
 - b. Ocean tides push against the river and stir up sand.
 - c. The river deposits material collected along its path.
 - d. A shortage of rain causes river levels to lower and exposes mud.

3. Which land form is the result of the constructive force of a glacier?
- a. Valleys carved by a moving glacier
 - b. Piles of rocks deposited by a melting glacier
 - c. Grooves created in a granite surface by a glacier
 - d. Bedrock hills roughened by the passing of a glacier
4. How does ice help form different shapes in rocks?
- a. It dissolves the rocks by pooling on surfaces.
 - b. It breaks the rocks by expanding in openings.
 - c. It smooths the rocks by colliding with them.
 - d. It moves the rocks by pressing on them.
5. Some events on Earth happen instantly while others take thousands of years to occur. Which process takes the longest time to complete?
- a. Rivers rising due to storms and floods
 - b. Evaporation of water from the leaves of a plant
 - c. Weathering of a rock to form small rocks and sand
 - d. Movement of small pieces of rock by flowing water

6.



Which process is most responsible for these rock formations?

- a. Weathering
- b. Earthquake
- c. Volcanic activity
- d. Sediment deposition

7. The sediment found in a riverbed is most likely the result of which action on nearby rock?
- a. Heat
 - b. Faulting
 - c. Pressure
 - d. Weathering
8. Which term best describes the process responsible for cave formation that results from rock being dissolved by groundwater?
- a. Chemical weathering
 - b. Glacial movement
 - c. Sedimentation
 - d. Abrasion
9. Which event can cause a large rock to become soil over time?
- a. Decaying
 - b. An earthquake
 - c. A landslide
 - d. Weathering
10. The students watch ocean waves crash on a beach. Which statement describes what will most likely happen because of the waves?
- a. Grass will grow on the beach.
 - b. Sand from the beach will wash away.
 - c. Salt from the ocean will be left on the beach.
 - d. Currents in the ocean will become stronger.

11. Marshall researched some of the changes on Earth that happen over a long time. Which event most likely causes the slowest change to the Earth's surface?
- a. Earthquake
 - b. Landslide
 - c. Volcano
 - d. Wind
12. When rocks are exposed to wind, rain, heat, ice, or wave, the rocks:
- a. Fold
 - b. Erode
 - c. Contract
 - d. Melt
13. The shape of a riverbed changes over time as a result of which gradual process?
- a. Erosion
 - b. Dissolving
 - c. Plate Shifting
 - d. Compaction
14. Which statement best describes how a mountain range changes over time from wind and water erosion?
- a. The mountain range will become faulted.
 - b. The mountain range will be lifted.
 - c. The mountain range will form craters.
 - d. The mountain range will become rounded.

15. Today's limestone caverns were once solid rock. Acid rainwater seeping through the rock over hundreds of years dissolved part of the rock, forming caverns. This is an example of:
- Erosion
 - Deposition
 - Physical weathering
 - Chemical Weathering

16. Seismological studies deal with which of the constructive/destructive forces?
- Volcanoes
 - Erosion
 - Earthquakes
 - Floods

17. The table below shows data a scientist collected about two geologic processes. Which processes are MOST LIKELY described in the table?
- Process 1 is a volcanic eruption, and Process 2 is deposition.
 - Process 1 is deposition, and Process 2 is a volcanic eruption.
 - Process 1 is a volcanic eruption, and Process 2 is an earthquake.
 - Process 1 is an earthquake, and Process 2 is a volcanic eruption.

Geologic Processes		
Process	Rate of Increase in Thickness of Earth's Surface	Amount of Heat Produced
1	Fast	A lot
2	Slow	Very Little

18. Two processes are involved in the formation of a sand dune. Which two processes best describe how a sand dune forms?
- Wind erosion then deposition
 - Plate movement then deposition
 - Wind erosion then water erosion
 - Water erosion then plate movement

Use the following chart to answer question 19.

Changes in Earth's Surface

Slow Changes	Fast Changes
wind erosion of mountains	volcanic eruption
sea flooring spreading	

19. Destructive changes to the Earth's surface can happen slowly or quickly. What is an example of a fast change that will complete the chart above?
- a. Slump
 - b. Landslides
 - c. Sand dune build up
 - d. Water erosion of canyon

20.



- Which statement best describes how this cliff formed?
- a. Warm air melted the rock.
 - b. Sunrays evaporated the rock.
 - c. Ocean waves washed away rock.
 - d. Plant roots pushed away the rock.

21. The Sahara Desert in Africa has a landscape of huge sand dunes. This landscape is constantly changing. Which force in nature causes this constant change of the desert landscape?

- a. Earthquakes
- b. Hurricanes
- c. Lightning strikes
- d. Wind storms

21. Beach Reclamation is:

- a. Humans littering on the beach
- b. Humans restoring the beach
- c. Animals laying their eggs in the sand dunes of the beach
- d. Building amusement parks and shops along the beach

22. How could human interaction decrease the destructive force of hurricanes on coastal areas?

- a. Create levees to control water flow
- b. Research the impact of organisms in the Mississippi Delta region
- c. Study storm drain management in the South America rain forests
- d. Assess the effects of seismological activity on metropolitan areas

23. Which of the following causes erosion?

- a. Ocean waves
- b. Sunlight
- c. Rust
- d. Rain clouds

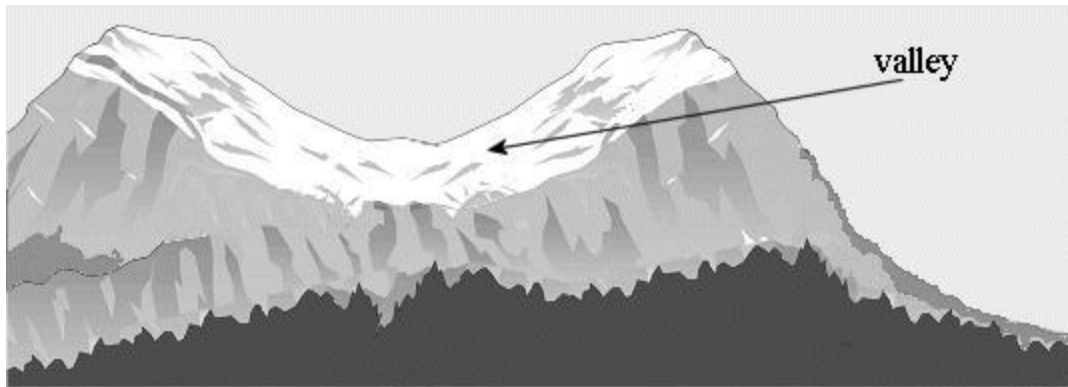
24. A levee is used to:

- a. Absorb water
- b. Chemically react with water
- c. Change the state of water
- d. Redirect water

25. Over many years, a river slowly became wider. What probably caused this widening to happen?

- a. Each year it rained, so the river held more water over time.
- b. Over time, the wind blew away dirt from the river's edges.
- c. A dam was built downstream of the river.
- d. The moving water eroded the river banks over time.

26. Look at the picture and then answer the question.



How was this valley most likely formed?

- a. By ocean waves
- b. By glaciers
- c. By a river
- d. By wind

27. Constance and Jason studied deserts. They saw a picture of a sand dune in a desert. What most likely made this sand dune form?



- a. Rain
- b. Wind
- c. Flood waters
- d. Strong sunlight

28. Which of the following is similar to the Earth's crust?

- a. The shell of an egg
- b. The yolk of an egg
- c. A peach pit
- d. The white of an egg

29. What causes a delta to form?

- a. Deltas form at mouth of a river when wind deposits sand.
- b. Deltas form on the bank of a river when glaciers move past.
- c. Deltas form at the mouth of a river when water slows down and deposits sediment.
- d. Deltas form on the banks of a river when water moves faster and deposits sediment.