

## Earth Science Questions and Answers

1. True or False? The Earth's surface features are constantly changing.	1. True.
2. True or False? The processes that shape the Earth's surface can be either constructive or destructive, but not both.	2. False. Processes can be both constructive AND destructive.
3. True or False? Changes to the Earth's surface always happen quickly.	3. False. While volcanoes and earthquakes can be fast, weathering is usually very slow.
4. True or False? Earth's forces can only destroy.	4. False. Earth's forces can destroy (destructive), or they can build (constructive).
5. Why does the Ring of Fire exist?	5. The Earth's crust is broken into "plates" that move. The Ring of Fire is where plates are pulling apart.
6. How is a volcano a constructive force?	6. The lava from a volcano makes new land. (Think of Hawaii)
7. How is an earthquake a constructive force?	7. Earthquakes can be a constructive force because earthquakes allow the earth's tectonic plates to move, building mountains and moving continents.
8. What is "deposition?"	8. Deposition happens when wind or water drops soil, dirt, or rocks in a different place from where they started.
9. What is a fault?	9. A fault is a break in the rocks that make up the Earth's crust, along which rocks on either side have moved past each other.
10. Give three examples of deposition.	10. deltas, sand dunes, rocks and dust that are thrown out of a volcano, lake mud, glacier remains
11. True or False? Rocks are here to stay!	11. False. Rocks, concrete, metal, and so on, are all subject to weathering, earth's destructive forces, and the rock cycle.
12. What two things can cause weathering?	12. water and wind
13. True or False? Weathering and erosion are the same thing.	13. False. Weathering <i>breaks down</i> rock into sediment. Erosion <i>wears down</i> the earth's surface by carrying sediment away.
14. Can organisms impact the Earth? Explain.	14. Yes. People, animals, and plants can all change the way the Earth's surface looks.
15. Why does an earthquake happen?	15. Two tectonic plates slip past each other, or pull away from each other to cause an earthquake.
16. Will Stone Mountain always exist?	16. No, earth's destructive forces (weathering and erosion) will cause it to slowly wear away.
17. Why do Georgia's coastal islands need sand reclamation?	17. The sand is constantly being eroded away by the ocean.
18. What is a glacier?	18. An mass of ice that moves very slowly across land. It pushes rocks and carves out trenches and valleys in the land.
19. Geologic theory says that the Earth started as one land mass. What made the land look like it does today on a globe?	19. Continental Drift
20. What is a seismograph?	20. A machine that measures the strength of an earthquake.
21. What do dams, levees, and storm drain management try to control?	21. floods

22. Why are some people afraid to live in California?	22. California is located where two plates are sliding past each other. The San Andreas Fault goes right through the middle of California.
23. What is a tsunami?	23. A large destructive ocean wave caused by an underwater earthquake or another movement of the Earth's surface.
24. How can water break rocks apart?	24. When water freezes in the rocks, it takes up more space so it pushes the rock apart, breaking it up.
25. Why do some places have more weathering and erosion than other places?	25. There is more wind or water in some places than in other places.