

# EARTH'S STRUCTUE STUDY GUIDE

NAME \_\_\_\_\_ TEST DATE: Thursday, 2/9/12

1. The Earth is constantly changing.
2. Some changes in the Earth, such as erosion and mountain building, happen in small increments over long periods of time; others such as landslides, volcanoes, and earthquakes are rapid events.
3. The Earth consists of four layers: an outer crust, the mantle in which hot materials move, a liquid outer core, and a dense, metallic inner core.
4. The Earth's outer layer consists of large separate plates that rest on the molten mantle layer. These are called tectonic plates.
5. Even though plates appear to be moving independently and at different speeds, the entire system of plates is interconnected so that individual plate movements affect all others.
6. Major geological events, such as earthquakes, volcanic eruptions, and mountain building, occur at plate boundaries when plates scrape against each other or move apart.
7. At a convergent boundary two plates collide. The overriding plate forces the other down into the mantle through a process called subduction and is itself lifted to produce a mountain range.
8. At a divergent boundary where plates move away from each other, the mantle rises through cracks in the Earth's crust to create mid-ocean ridges.
9. Volcanoes occur where molten material erupts through the Earth's surface because pressure from gases within molten rock beneath the crust becomes too great.
10. At transform boundaries, also called faults, plates slide past each other and plate material is neither created nor destroyed.
11. Most earthquakes occur along fault lines.
12. Fold mountains occur at or near plate boundaries where two plates crash into each other and force layers of rock into folds.
13. Fault-block mountains form along fault lines. Rock either breaks off, split and slip sideways, or is either pushed upward or downward.
14. Dome mountains form when magma pushes up on Earth's crust but does not break through.