

Trimester Test 8th Grade Earth Science Unit Study Guide

Interior of the Earth, Plate Tectonics, Earthquakes, Volcanoes, Carbon Cycle, and Earth Spheres

I have helped you by listing where you can find the information for each topic. You need to use your notes, journal, readings on my weebly, and assignments to prepare for the test:

1) Be able to describe the interior of the earth (in terms of crust, mantle, inner and outer cores)

- **Journal 4 & page 232 (section 10.2)**

2) Understand the differences between oceanic and continental crust (including density, age, and composition) Know the type of rock and its properties for each crust

- **Book page 234 and 251 (section 10.3)**

3) Describe how plate tectonics causes seafloor spreading, mid-ocean ridges, subduction zones, earthquakes, volcanoes, mountain ranges, island chains/archs and the type of magma/lava found at each location

- **Book page 249 – 253 (section 11.2) & Harry Hess Close and Critical Reading assignment.**

4) Know what continental drift is and the evidence Wegener used to explain this.

- **Book page 246 & 247 book (section 11.1) & Alfred Wegener Close and Critical Reading assignment.**

5) Be able to explain why tectonic lithospheric plates move by convection currents in the lower mantle

- **Book page 252 (section 11.2)**

6) Distinguish each plate boundary (convergent, divergent, and transform, stick-slip) and be able to describe what happens when they interact

- **Book page 255 -261 (section 11.3) & Clay model assignment & Journal 7**

7) Understand the different scales that are used to rate earthquakes (Richter, Moment Magnitude, and Modified Mercalli) and what their values represent

- **Journal 8 (earthquake vocab) & Book page 278-279 (section 12.1) & Earthquake power point notes.**

8) Understand the differences between primary (P) and secondary (S) waves in terms of speed and damage

- **Journal 8 (earthquake vocab) & Book page 275-277 (section 12.1) & Earthquake power point notes.**

9) Be able to identify the points above and below the surface of the earth as it relates to earthquakes (focus, fault, and epicenter)

- **Journal 8 (earthquake vocab) & Book page 271 (section 12.1) & Earthquake power point notes.**

10) Know what device measures an earthquake's strength and how many stations are needed to determine the epicenter and what it measures

- **Book page 271 (section 12.1) & Earthquake power point notes & Earthquake webquest**

11) Know all the parts of a volcano (magma, vent, sill, conduit, dike, magma chamber, lava lake, resurgent dome, and caldera)

- **Journal 9 & Book page 282 and 283**

12) Know the stages of a volcano's life

- **Book Page 284 & Adopt a volcano project**

13) Use eruption history to predict which volcanoes will erupt and know the types of eruptions each one will have (cinder cone, composite, Shield), be able to give regional examples of each type of volcano

- **Book page 282 – 294 (section 12.2) & Adopt a volcano project & Journal 10.**

14) Understand silica and gas content, pressure, and temperature in relationship to rock (magma) composition

- **Book page 282 – 294 (section 12.2) & Adopt a volcano project & Journal 10.**

15) Know what carbon is and its characteristics both positively (why it is important to us) along with knowing the negative effects of carbon

- **Movement of carbon poster project & Carbon footprint assignment & Carbon Cartoon**

16) Be able to explain the four major earth systems (spheres) and how they work together

- **Movement of carbon poster project**

17) Understand which earth system represents the air, solid and molten rock, solid, liquid, and gaseous water, and life of all kind

- **Movement of carbon poster project, & back bulletin board**

18) Be able to identify the two-way cause and effect relationship between an event and a sphere

- **Movement of carbon poster project**