

Explain how P and S wave arrival times are used to locate an earthquake's epicenter.

Discuss the concept of a "hot spot".

Explain the difference between the focus and the epicenter

List the differences between oceanic and continental crust.

Describe the types of stress that can occur in rocks and which type of faults they each form.

Explain the relationship between continental drift, sea-floor spreading, and plate tectonics.

Explain what the Richter scale is and provide an example of how it is mathematically logarithmic/exponential.

Describe the difference between lava and magma.

Explain how convection currents contribute to plate movement

List the differences between mafic and felsic/sialic lava.

Construct a chart describing the 3 major types of plate boundaries and what occurs at each.

Construct a chart describing the 3 major types of convergent plate boundaries. Provide an example of each.

Draw and label a diagram of the earth's interior. Include all the layers, their depths, their compositions, their temperatures, and whether they are solid or liquid. Also include the Moho and the asthenosphere.

Make a chart of the differences between P, S, and L waves. Include speed, vibrational direction, type of wave, and what they travel through.

List and explain all the factors that affect volcanic eruptions.

Using a diagram, explain the difference between a normal fault and a reverse fault. Indicate the hanging (head) wall and the foot-wall for each.

Make a chart of the 5 types of pyroclastic material.

Draw and label a diagram of P and S waves passing through the earth. Indicate which parts of the earth are "shadow zones" for each wave.

Make a chart showing the differences between shield cones, cinder cones, and composite volcanoes. Be sure to include examples of each.

List and describe at least 5 types of evidence for plate tectonics.