

1. Sketch the features of a **Continent/Ocean Convergent** plate boundary.
2. Your drawing should show two plates, and one plate should be higher than the other. Explain why.
3. When we are drawing this sort of diagram, how do we know which plate will dive under the other? Why will it dive under the other plate?
4. What causes the plates to move?
5. What causes the rising and sinking mantle currents in this area?
6. What causes the horizontal (sideways) mantle currents in this area?

6. Your diagram should include a volcano. Describe the shape of the volcano. Explain why it has that shape.

7. Describe this volcano's eruptions (gentle or explosive). Explain why it has those types of eruptions.

8. Describe the lava that is found here. What are the sources of that lava?

9. What types of earthquakes happen here? Are they shallow, deep, or both? Why?

10. Where is the seafloor sediment thickest? Explain why it is thickest in that location.

11. How are density and temperature related to one another in the Earth's mantle? Explain why.