

Unit
3Handout
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Lesson 6: Plate Boundaries Research

Purpose: To research one of the three plate boundary types and share this information with other students in the class.

Guiding Questions: - How are plate boundaries responsible for geologic features and events on earth's surface?

Instructions: You will become an expert in one of the three types of plate boundaries. It is your job to research information (see below) about this boundary and share it with other students in the class. This is not a formal presentation. Instead, you will be split into groups with other students who researched the other boundaries. Together, all of you will be able to discuss the three plate boundaries.

Required Information.

Here is what you will need to discuss with your small group when you share your research.

- **Definition.** Provide a definition of the type of boundary.
- **AKA.** Does your boundary go by any other names? If so, say what it is/are. Most boundaries have a second name!
- **Types of boundaries.** Boundaries are all interactions of crust. This means you can have continental-oceanic, oceanic-oceanic, or continental-continental. What type(s) of interaction does your boundary have?
- **What happens?** Discuss what happens when these crusts meet. This is limited to if one sinks below the other, if neither sinks, etc.
- **Constructive Effects.** What geologic features form at this boundary? How do these features form?
- **Destructive Effects.** What features or land are lost at this boundary? How does this happen?
- **Diagrams.** Provide diagrams (sourced) that show examples of your boundary. You will need this to help your group understand what is happening. You may also find animated diagrams.
- **Example.** Find a location on the planet where your type of boundary is found.

General Key Terms

The following are key terms that *may* be applicable to your boundary. Not all of them are. This is just a list to help you should you get stuck.

Continental volcano arc
Island volcano arc
Subduction zone

Fracture Zone
Continental Rift

Linear Sea
Oceanic Ridge

Sourcing

Please provide sources for your information. This can be as simple as providing a URL for a website. Be sure to use credible sources only. In our case this means primarily using .edu or .gov resources. Other sites can be credible, too. Look for what sources they use.

General Questions (After Presenting)

Everyone should be able to answer the following questions after the small group presentations.

1. Which type of boundary is known as a subduction zone?
Convergent (all types)
2. Which type of boundary is primarily destructive?
Convergent (all types)
3. Which type of boundary results in the formation of island volcano arcs?
Convergent (oceanic-oceanic)
4. Which type of boundary creates a linear sea?
Divergent (continental-continental)
5. Which type of boundary does not result in the formation of volcanoes?
Transform (all types)
6. Which type of boundary results in the formation of mountains?
Convergent (continental-continental, continental-oceanic)
7. Which type of boundary is known as a continental rift?
Divergent (continental-continental)
8. Which type of boundary is primarily constructive?
Divergent (all types)
9. Which type of boundary is neither constructive nor destructive?
Transform (all types)
10. Which type of boundary results in the formation of continental volcano arcs?
Convergent (continental-oceanic)