

# Plate Tectonics Centers

## I PADS

*\*Skip Level 1*

### Puzzling Plates App Level 2

How many volcanoes did you find? \_\_\_\_\_

How many total volcanoes are there on earth? \_\_\_\_\_

How many earthquakes did you find? \_\_\_\_\_

How many total earthquakes have been recorded on earth according to the app? \_\_\_\_\_

What did you notice about the location of most of the earthquakes and volcanoes?

\_\_\_\_\_

\_\_\_\_\_

Were there any clusters of earthquakes and volcanoes that were NOT shown along plate boundaries? If so, what continent did those clusters appear?

\_\_\_\_\_

\_\_\_\_\_

### Puzzling Plates App Level 3

What was your score? \_\_\_\_\_

Circle the type of plate boundary the west coast of the United States sit on?

Transform          Divergent          Convergent

The largest mountain range are the Andes in South America. What type of plate boundary created the Andes Mountains?

Transform          Divergent          Convergent

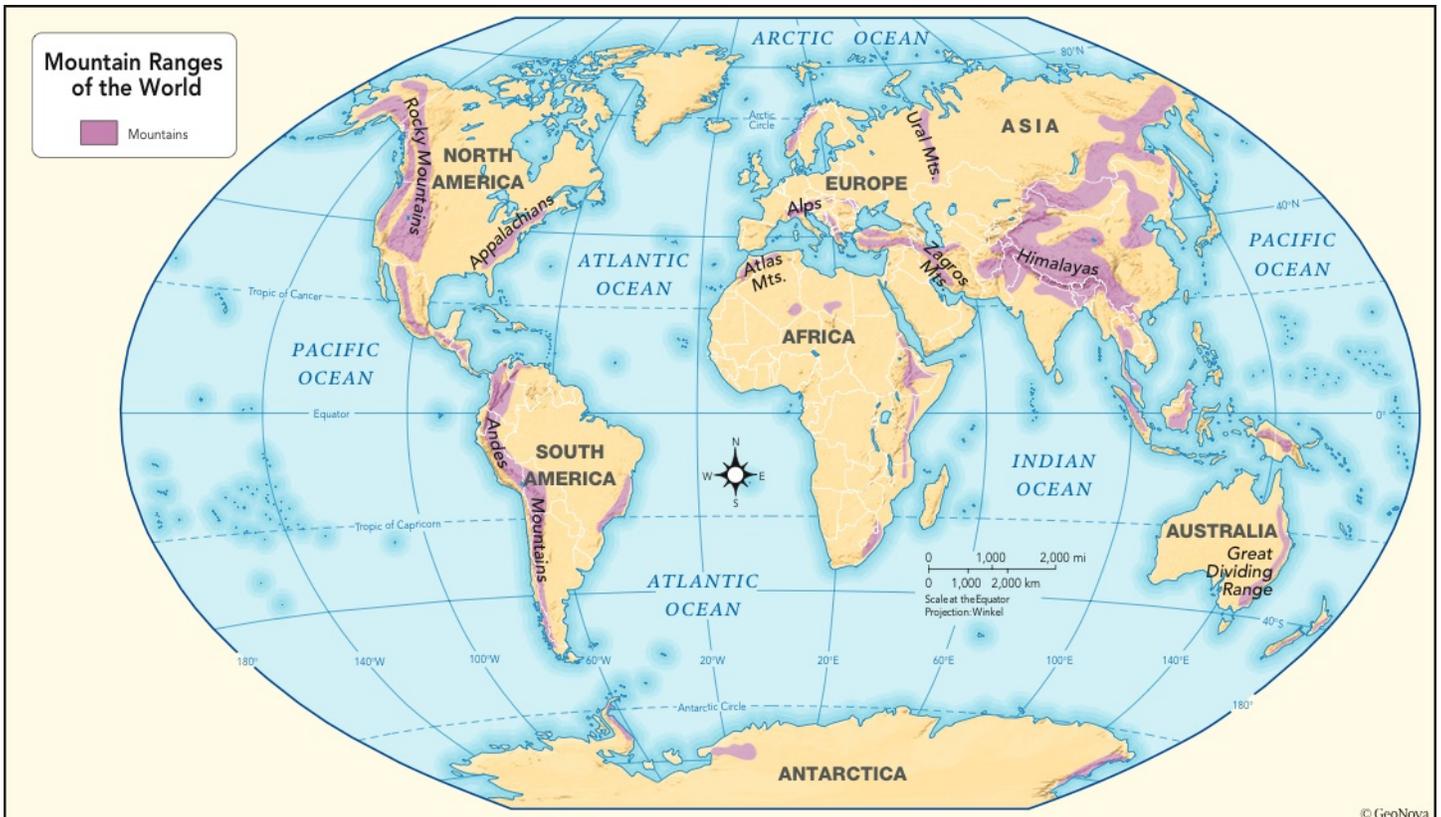
#### BONUS ROUND

What type of plate boundary most often leads to the creation of volcanoes?

Transform          Divergent          Convergent

What type of plate boundary most often leads to the creation of mountains?

Transform          Divergent          Convergent



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## ACTIVITY

**Writing Prompt - You will only have 20 minutes to respond to the passage below. Use a separate sheet of paper and staple it to this page.**

Continental drift and plate tectonics was a theory that explained how continents shift position on Earth's surface. Set forth in 1912 by Alfred Wegener when he discovered identical plant and animal fossils, and similar rock formations were found on different continents. But geologists denounced Wegener's theory of continental drift. Part of the opposition was because Wegener didn't have a good model to explain how the continents moved apart. Though most of Wegener's observations about fossils and rocks were correct, he was outlandishly wrong on a couple of key points. For instance, Wegener thought the continents might have plowed through the ocean crust like icebreakers smashing through ice. Decades later, scientists would confirm some of Wegener's ideas, such as the past existence of a supercontinent joining all the world's landmasses as one (Pangea).

**Put yourself in Alfred Wegner's position. You have just made an important scientific discovery. You know that what you have discovered is correct, but people are not accepting your theory as possible. What would you do to make people understand your discovery and accept your theory?**

USE THE SPACE BELOW FOR ANY PRE-WRITING BEFORE YOU WRITE YOUR ACTUAL RESPONSE ON YOUR NOTEBOOK PAPER.