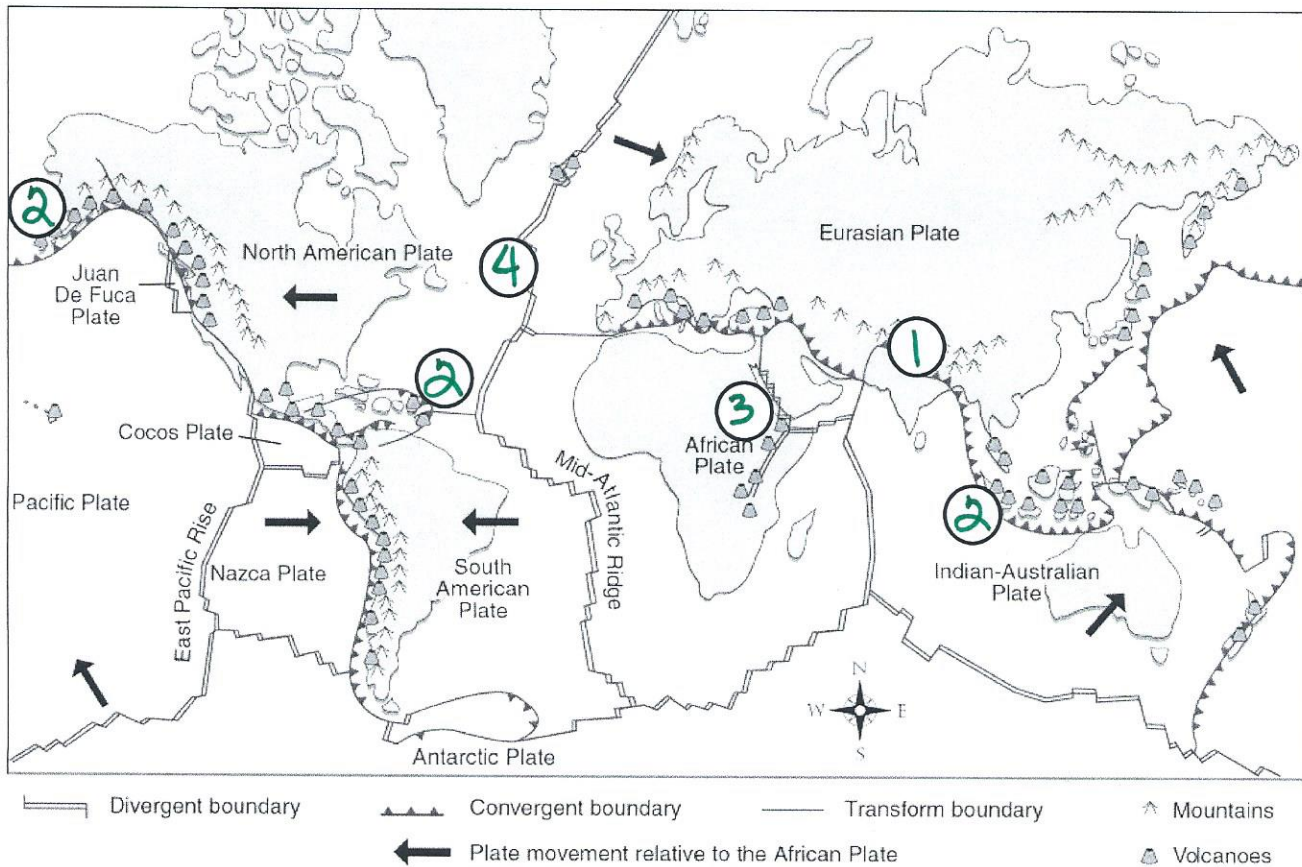


## How Plates Move Answer Key



**Directions:** Refer to the diagram above to answer the following questions.

1. What are the three types of plate boundaries?

**Convergent, Divergent and Transform**

2. Using both words and arrows, describe the type of movement that occurs at each type of plate boundary.

**Convergent – Towards each other** → ←

**Divergent – Away from each other** ← →

**Transform – Slide by each other side by side** → ←

3. What will likely occur when two continental plates collide? On the map circle a number 1 where you think this has occurred. **They will form a mountain chain.**
4. What will likely occur at a plate boundary where oceanic crust collides with continental crust? **Subduction, the oceanic crust will subduct (sink, slide) under the continental crust**  
**Trench will form, volcanoes or volcanic mountain chain will form.**

5. In what direction is the part of the plate carrying Washington State moving?

To the left, or west, or 

6. In what direction is the Pacific plate moving?

To the northwest, or 

7. As the North American plate and Juan de Fuca plate move, what type of plate boundary is between them? **Convergent Boundary**

8. What features would you expect to occur at or near the boundary between the Juan de Fuca plate and the North American plate? **A trench and a chain of volcanoes**

9. As the Juan de Fuca plate and the Pacific plate move, what type of plate boundary is between them? **Divergent Boundary**

10. What features would you expect to occur at or near the boundary between the Juan de Fuca plate and the Pacific plate? **A mid-ocean ridge with volcanoes and a rift valley**

11. On the map, write and circle the number 2 where an island arc occurs. What kind of boundary is this? What kinds of crusts are involved? **Convergent. Oceanic and oceanic**

12. On the map, write and circle the number 3 where rifting is occurring on land. What features would you expect to find here? **A rift valley and volcanoes**

13. On the map, write and circle the number 4 where rifting is occurring under the ocean? What is this process called? **Sea Floor Spreading**

14. Today, the Mediterranean Sea lies between Europe and Africa. But the African plate is moving toward the Eurasian plate at a rate of a few centimeters per year. Predict how this area will change in 100 million years. In your answer, first explain how the Mediterranean Sea will change. Then explain what will happen on land.

**The Mediterranean Sea will slowly get smaller and then disappear.**

**After the Mediterranean Sea disappears, the two continents will crash into each other creating a mountain chain.**