

Dynamic Earth Interactive

Directions: Google search “Learner.org Dynamic Earth”. Make sure you READ OUT LOUD so your partner is exactly where you are. Wrong answers are GOOD. If you are wrong, just stop and talk. Don’t keep going until you figure out **WHY** you were not correct.

1. **Inner Core:** Describe Earth’s middle (hot, cold, solid, liquid, thickness, metal or rock):
2. **Outer Core:** Describe the outside part of the Core (hot, cold, solid, liquid, thickness, metal or rock):
3. **Mantle:** Describe the part above the Core (hot, cold, solid, liquid, thickness, metal or rock):
4. Each continent is on a giant plate. Which layer is the liquid that continents move on?
5. **Plate Tectonics:** The _____ part of the Earth moves on the liquid _____
6. Describe the findings of Alfred Wegener:
7. How long ago were all the continents together in Pangaea?
8. How long ago did India break away from the South Pole?
9. How long ago did India SMASH into Asia creating the Himalayas and Mount Everest?
10. Put the Earth pictures in the correct order. What will happen to the continents in the FUTURE and what makes them move?
11. **Convergent Boundary:** Define and draw a picture→

12. **Divergent Boundary:** Define and draw a picture→

13. **Transverse Boundary:** Define and draw a picture→

14. Use the map online (red, white, pink) to complete your map hard copy. After you put the colors on your map, draw the missing arrows for each type of boundary (Convergent, Divergent, Transverse)

15. Next Section: **Plates and Boundaries.** (You can use your map, but REALLY think about what it happening on each place on Earth)

16. Next Section: **Slip, Slide, and Collide.**

a) Explain what happens at a **Subduction** Zone:

b) What happens to the Ocean plate?

c) Magma turns into Lava when it explodes out of a Volcano. Where does Magma come from?

d) Explain what happens at a **Collision** Zone:

e) What kind of plates smash together to make mountains?

17. **Divergent Boundaries:** Explain what happens when plates Diverge (move apart). Draw this also.

18. **Transform Boundaries:** Explain what happens during Transform (side-to-side). Draw this also.

19. **Challenge Game:** What kind of Plate Boundary is in Africa? (circle one)

Convergent (smash together), **Divergent** (move apart), **Transform** (side-to-side)

How do you know? (circle one)

Deep Valley & Long Lakes BIG Earthquakes from plate rubbing Plates Smash make Mountains & Volcanos

20. What kind of Plate Boundary is in New Zealand? (circle one)

Convergent (smash together), **Divergent** (move apart), **Transform** (side-to-side)

How do you know? (circle one)

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21. What kind of Plate Boundary is in South America? (circle one)

Convergent (smash together), **Divergent** (move apart), **Transform** (side-to-side)

How do you know? (circle one)

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22. Take the quiz and read your answers to see which questions you got wrong.

23. Try to make all the types of Plate Boundaries on the interactive on the PhET website. Google search: phet plate tectonics.

