

UNDERSTANDING CONTINENTAL DRIFT AND PLATE TECTONICS

Brief History: (text p. 114-117)

1858: Antonio Snider-Pellegrino and others observed the jigsaw fit between the continents (most notably between South America and Africa).

1912: Alfred Wegener developed the theory of _____ which states that continents themselves had shifted away from an ancient single massive super-continent called _____. He used fossil evidence from _____ and _____ to support his theory.

Why did scientists of his day disagree with Wegener's theory?

1928: Arthur Holmes proposed that Earth's mantle contained _____ that moved the Earth's continental plates.

1960: Harry Hess found that the Atlantic ocean floor was widening along the mid-Atlantic Ridge; a concept called sea-floor spreading.

Briefly explain the theory of Plate Tectonics: _____

Define Convergent, Divergent, and Transform Boundaries:

Convergent: _____

Divergent: _____

Transform: _____

Using the map of Earth's Tectonic Plates on the reverse side of this page complete the following. (Use p. 124 of the Canadian Oxford Atlas for plate boundary locations and p. 114-119 of your text).

1. Highlight the Transform Boundaries with a blue pencil.
2. Highlight the Convergent Boundaries with a green pencil.
3. Highlight the Divergent Boundaries with an orange pencil.
4. Highlight the Ring of Fire around the Pacific Plate with a red pencil.
5. Colour the Juan de Fuca plate with purple pencil.

Which plate(s) is/are converging with the North American plate? _____

What do you notice about the location of the volcanoes? Where are they concentrated? ____

How many plates are there? _____

Name the 7 largest plates:

1. _____ 2. _____

3. _____ 4. _____

5. _____ 6. _____

7. _____

Why are most earthquakes and volcanoes located near plate boundaries? _____

The movement of Earth's plates has shaped Canada in many ways. Explain. _____
