Name _____

Why does PW have earthquake drills?

Plate Tectonic Theory explains why Ottawa and Paris are getting farther apart, why there may be more Hawaiin Islands in the future and why parts of California may be visible from Tofino.

Owning my learning

Below is a list of learning intentions. Place a check mark in the box that best describes your learning level at the beginning of the learning and after we have learned together.
"B" stands for beginning, "A" stands for accomplished.

I Can Use:

B	A	
○	○	a scaled map of the Atlantic Ocean floor to determine the rate at which the sea-floor is spreading
○	○	a scaled map of the Hawaiian Islands to determine the direction and rate at which the Pacific Plate is moving
○	○	a geological time line to determine the length of eras, periods and epochs as well as when significant changes in Earth's history occurred
○	○	map symbols to determine the type of plate boundary and the direction of plate movement

I Can Describe:

B	A	
○	○	evidence for the Theory of Continental Drift (6 pieces)
○	○	evidence for the location of plate boundaries (4 pieces)
○	○	evidence for the Theory of Plate Tectonics (3 pieces)
○	○	a geological hot spot
○	○	geological features associated with a divergent plate boundary on the sea floor
○	○	geological features associated with a divergent plant boundary on land
○	○	geological features associated with a convergent plate boundary when oceanic and continental plates meet
○	○	geological features associated with a convergent plate boundary when 2 oceanic plates meet
○	○	geological features associated with a convergent plate boundary when 2 continental plates meet
○	○	geological features associated with a transform fault
○	○	3 types of volcanoes (rift eruptions, composite cones and shield volcanoes)
○	○	damage causing events associated with earthquakes
○	○	the Richter Scale

I Can Determine:

B	A	
○	○	the relative age of rock by its distance from a spreading ridge
○	○	the type of volcano from the type of plate boundary
○	○	the epicenter of an earthquake using data from 3 seismographs and a travel-time graph

I Can Define:

B	A	
○	○	tectonic plates
○	○	seismology
○	○	seismogram and seismograph
○	○	seismometer

I Can Identify:

B	A	
○	○	4 layers in the Earth's crust
○	○	P, S and L waves on a seismogram

I Can Explain:

B	A	
○	○	the difference between Continental Drift and Plate Tectonics
○	○	the relationship between paleomagnetism and the age of rocks on the Atlantic Ocean floor
○	○	the relationship between seafloor spreading and the Mid-Atlantic Ridge
○	○	the difference between continental and oceanic crust
○	○	the difference between the lithosphere and asthenosphere
○	○	the movement of Earth's plates using ideas of convection currents, slab pull and ridge push
○	○	why some types of volcanic eruptions are more explosive than others
○	○	the difference between the focus and epicenter of an earthquake
○	○	the difference between P, S and L waves in terms of their movement through or on the Earth, speed and amount of damage

I Can Classify:

B	A	
○	○	a volcano as either shield, composite (strato) or rift eruption from a picture or diagram