Earthquake Quiz Review Relay Race 1

1) What plate boundary is an earthquake most likely to happen? ———————————————————————————————————
2) What is an earthquake?
3) What is the difference between an epicenter and a focus?
4) What instrument records seismic waves?
5) What is the difference between the Richter scale and the Modified Mercalli scale?

Earthquake Quiz Review Relay Race 2

6) Name the 2 types of seismic waves.				
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7) Fill in the chart:				
Wave Feature	P - Waves	S - Waves		
What material do they travel through?				
Type of motion they create				
Speed				
8) What is the name of the seismic wave that: reach the earth's surface, are the slowest, cause the most damage, and can cause a side to side motion or an up and down motion? 9) What is a fault?				
10) What is stick-slip motion?				

Earthquake Quiz Review Relay Race 3

11) What is the difference between a foreshock and aftershock?				
12) As you increase numbers on the Richter scale, how many times stronger is each magnitude change?				
How many times stronger would a 7 be than a 4?				
13. How many seismic stations do you need to locate the epicenter of an earthquake?				
14) How is the Richter scale and Moment Magnitude scale similar?				
15) What type of energy builds up to cause an earthquake?				

Earthquake Quiz Review Answers Relay Race 1

- 1) What plate boundary is an earthquake most likely to happen?
 - Transform
- 2) What is an earthquake?
 - The movement of the earth's crust resulting for the release of built up potential energy between two stuck plates.
- 3) What is the difference between an epicenter and a focus?
 - The focus is below the earth's surface and the epicenter is at the earth's surface.
- 4) What instrument records seismic waves?
 - Seismograph
- 5) What is the difference between the Richter scale and the Modified Mercalli scale?
 - The Richter scale measures earthquakes according to the size of their seismic waves & the Modified Mercalli scale measures the damage caused by earthquakes.

Earthquake Quiz Review Answers Relay Race 2

- 6) Name the 2 types of seismic waves.
 - Body wave & Surface waves
- 7) Fill in the chart about body waves:

Wave Feature	P - Waves	S - Waves
What material do they travel through?	solids & liquids	solids only
Type of motion they create	back and forth movement (push/pull)	side to side movement
Speed	travel the fastest of all waves	travel slower than P waves but faster than surface waves.

- 8) What is the name of the seismic wave that: reach the earth's surface, are the slowest, cause the most damage, and can cause a side to side motion or an up and down motion?
 - surface waves
- 9) What is a fault?
 - A region on the earth's surface that is broken and where movement occurs.
- 10) What is stick-slip motion?
 - An earthquake is a form of a stick-slip motion. This means as the plates slide past each other, one gets stuck. Eventually the stuck plate slips free and causes an earthquake.

Earthquake Quiz Review Answers Relay Race 3

- 11) What is the difference between a foreshock and aftershock.
 - Foreshock a small burst of shaking that occurs before a large earthquake.
 - Aftershock- a small tremor that follows an earthquake.

12) As you increase numbers on the Richter scale, how many times stronger is each magnitude change? Each Richter magnitude change increases the strength of the earthquake by 10 times. Ex: a 5.0 magnitude earthquake is 10 times stronger than a 4.0 magnitude earthquake.

How many times stronger would a 7 be than a 4? 1,000 times stronger

- 13. How many seismic stations do you need to locate the epicenter of an earthquake? 3
- 14) How is the Richter scale and Moment Magnitude scale similar? They both rate the energy released by an earthquake.
- 15) What type of energy builds up to cause an earthquake? Potential energy