Chapter 12.1 Quiz Review

1) What plate boundary is an earthquake most likely to happen?
   - Transform

2) What causes an earthquake?
   - The build up and release of potential energy.

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.

6) What are seismic waves? – (know about P & S waves)
   - Seismic waves spread the earthquakes energy throughout the earth's crust.
   - P – Waves = fast, arrives first, wave travels in the same direction, compression wave, motion is a forwards and backwards motion (like a slinky). Travels through both solid and liquid.
   - S-Waves = slower wave, travels from side to side, transverse wave, travels through solids but not liquid. More destructive than P waves but not as destructive as surface waves.

- Surface Waves – waves 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.

7) What is a fault?

- A region on the earth's surface that is broken and where movement occurs.

8) 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.

9) Know 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.

10) Know the difference in strength between each magnitude change in the Richter scale.

- 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.