4: Can This Actually Happen? San Andreas Movie

Directions: As you watch the movie, think about what you've learned in Chemistry about Earth's interior, plate tectonic movements, and natural phenomena that occur due to that movement.

- 1. In the movie, scientists discover a way to **predict** earth quakes. Is this actually possible? Why or why not?
- 2. Based off our knowledge of why earthquakes occur, list **one** type of plate movement that would cause such a massive quake.
- 3. The Earthquake that hits the Hoover Dam moves the ground **up and down**. What kind of energy wave would this represent in real life?
- 4. **IN REAL LIFE--**If the San Andreas fault released massive amounts of energy, which region of California will likely undergo more destruction? Why?
- 5. When an Earthquake happens- what should you do?
- 6. Is it possible for California to have a 9.0 Richter scale earthquake? What kind of boundary is would cause such a large earthquake? Is that the type of boundary San Andreas is?

7. As the Earthquake moves across Los Angeles, we see the ground move up and down almost in a wave fashion. What kind of wave is this: S wave or P wave? Which one moves faster? Which one can cause more damage?