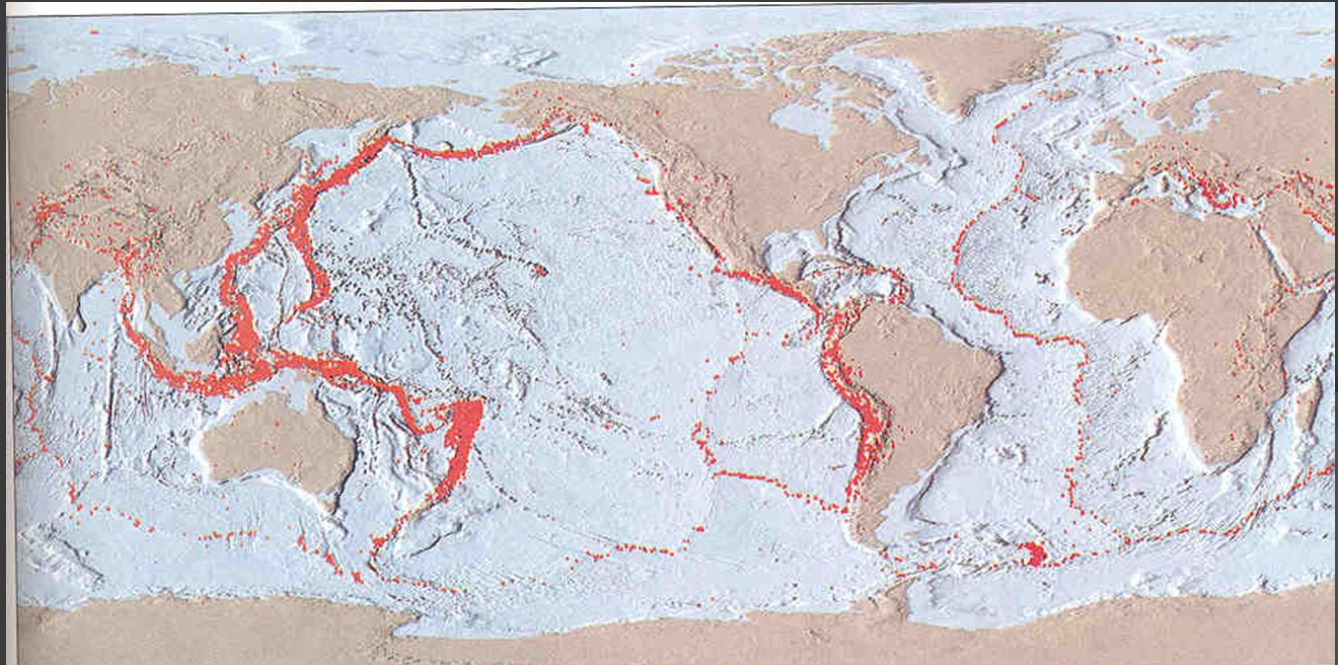


**SEISMIC WAVES  
AND  
EARTHQUAKES**

# Earthquakes

- Most earthquakes are the result of movement of Earth's crust produced by plate tectonics

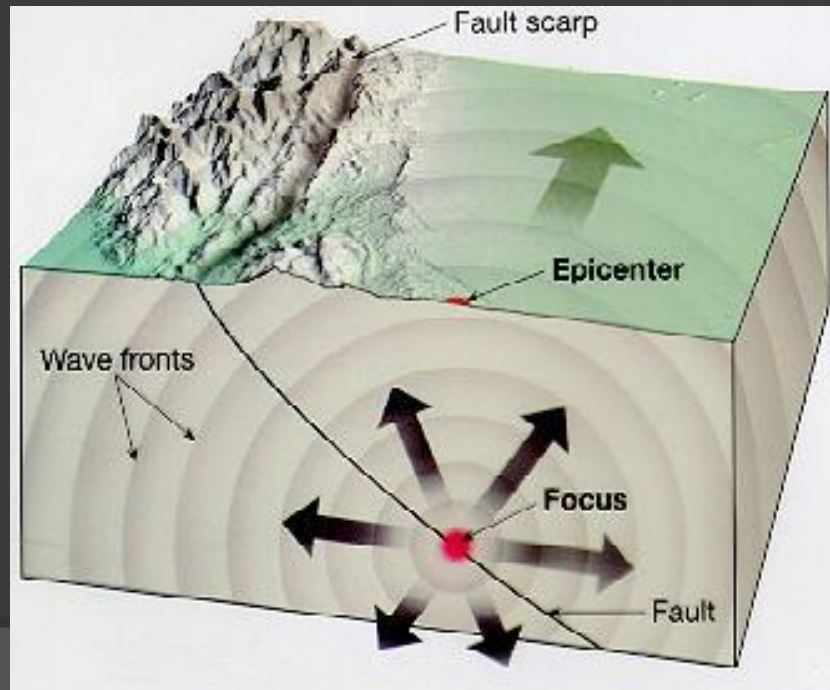


# Earthquake Vocab

- ⦿ **Seismic waves** – vibration of the ground caused by plate movement
- ⦿ **P-waves – Primary waves**
  - compression/longitudinal wave
  - Faster
  - Travels through solid and liquid
- ⦿ **S-waves – Secondary waves**
  - Transverse waves
  - Slower
  - Travels through solid only
- ⦿ **Surface waves – only travel on Earth's surface**
  - Slowest

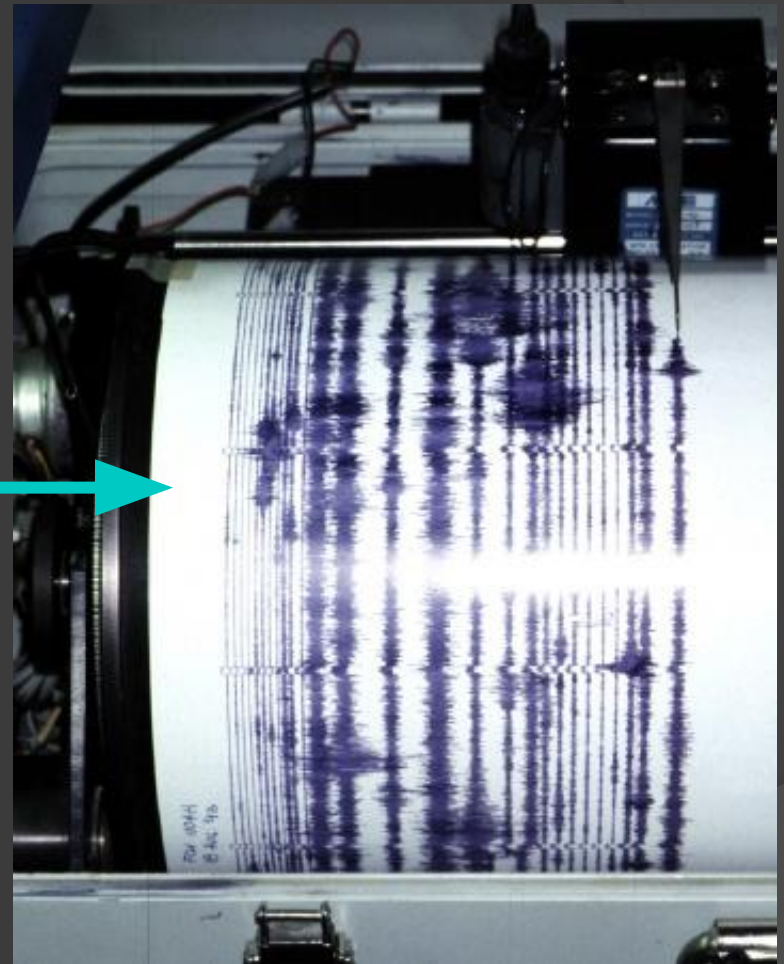
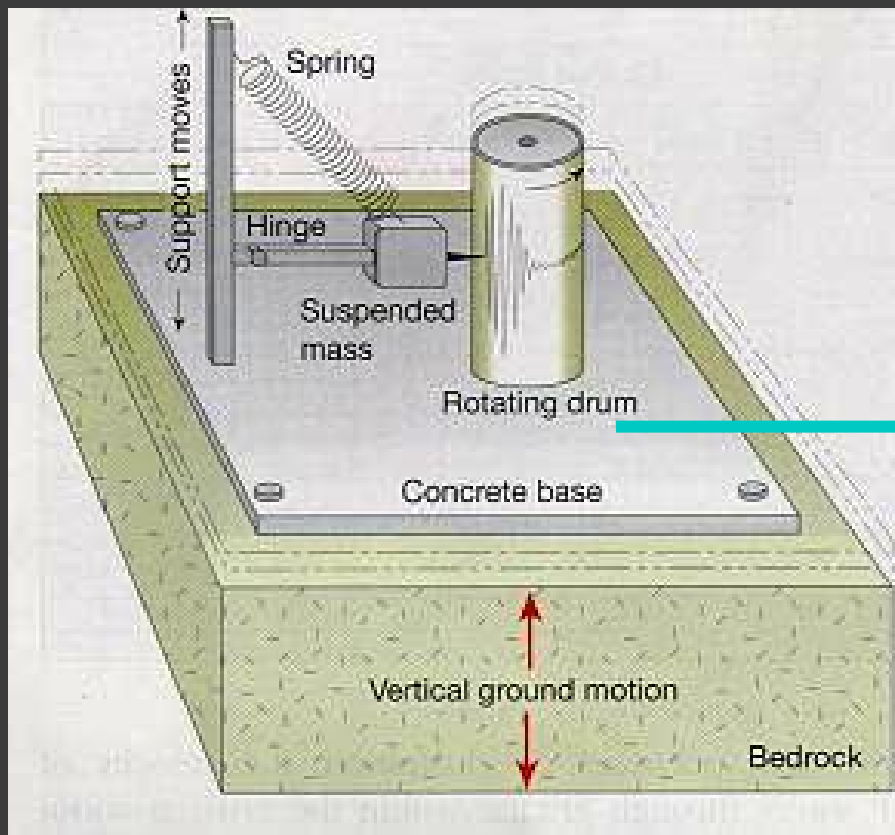
# Earthquake Vocab

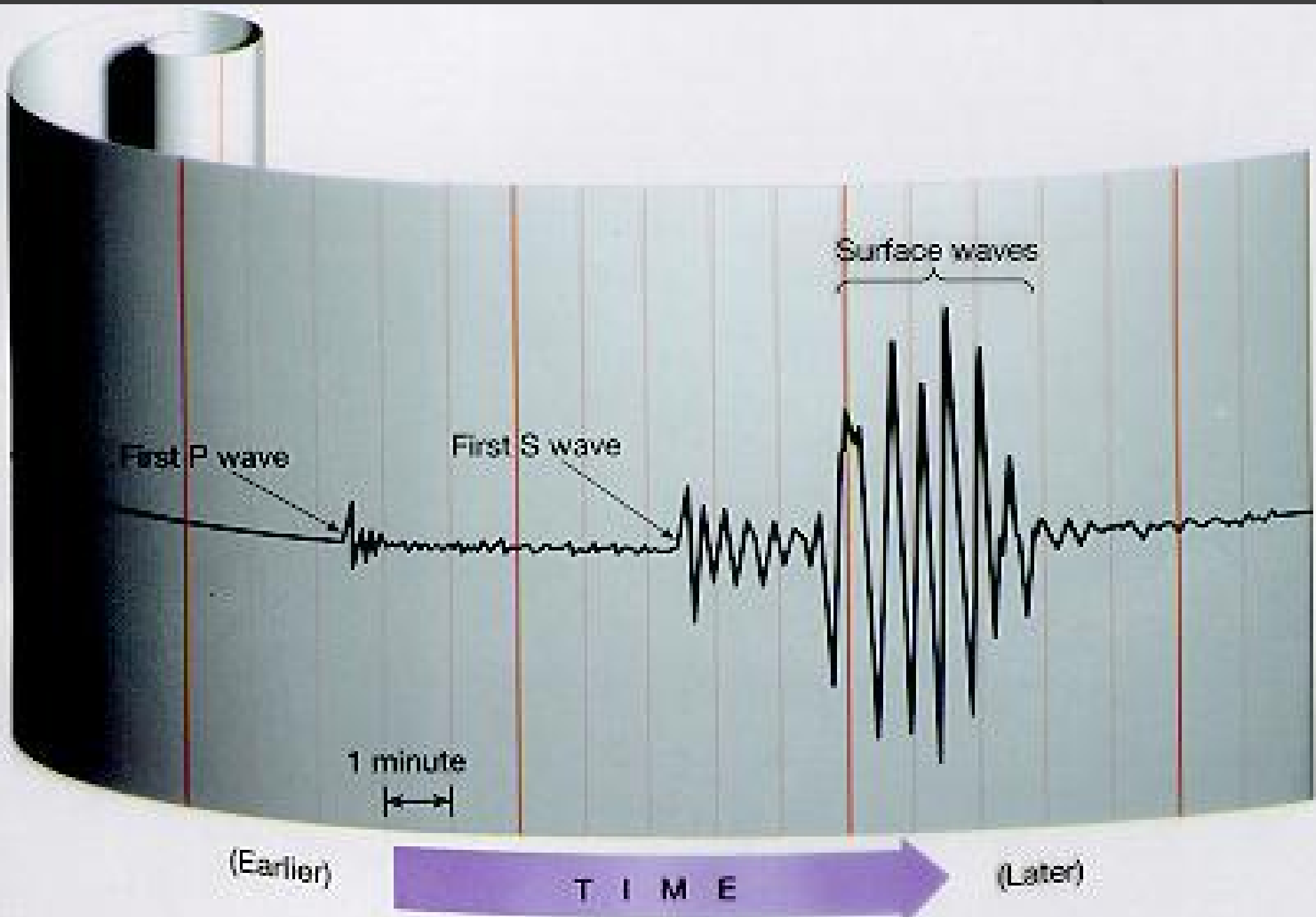
- **Focus** – the point below the Earth's surface where the earthquake begins
- **Epicenter** - point on the surface of the Earth directly above the focus



# Earthquake Vocab

- ⦿ **Seismograph/Seismometer** – instrument that measures earthquakes
- ⦿ **Seismogram** – the record produced by the seismometer
- ⦿ **Magnitude** – amount of energy in a seismic wave
- ⦿ **Amplitude** – the height of a measured wave on the seismogram
- ⦿ **Richter scale** – scale that measures the strength of an earthquake





First P wave

First S wave

Surface waves

1 minute

(Earlier)

T I M E

(Later)