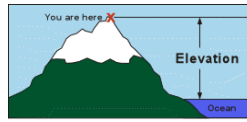
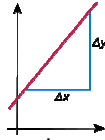


## Movement Along Faults



- Elevation: height above sea level
- Tilt: vertical movement of ground
- Creep: slow, horizontal movement of ground



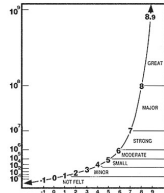
## Instruments

### What does each instrument measure?

- Seismometer / Seismograph: measures seismic waves
- Tiltmeter: measures vertical ground movement, tilt
- Creepmeter: measures horizontal ground movement, creep
- LR Devices: uses lasers to measure creep
- GPS Satellites: measure elevation, tilt, & creep

## Measuring Magnitude

- Magnitude: power/strength of earthquake
- Mercalli Scale: measures level of damage
- Richter Scale: measures size of seismic waves, most common scale, used in news broadcasts
- Moment Magnitude Scale: measures total energy released



## Types of Earthquakes

- Microquake: so small people cannot feel it, occur frequently, 0 – 2.0 on Richter Scale, associated with slow-slip
- Megathrust: very powerful and destructive earthquakes, 9.0 or higher on Richter Scale, caused by subduction at convergent plate boundaries