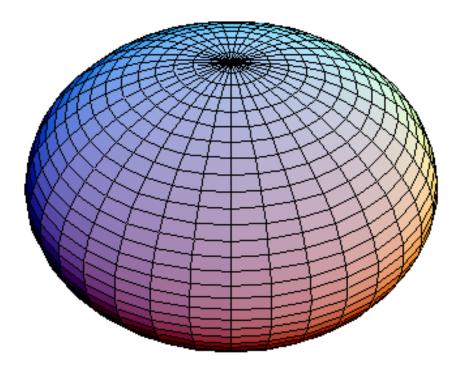
# GEOLOGY

# Earth Basics

- The Earth is Round
  - Support:
    - The North Star moved in an arc in the sky as sailors sailed north or south. (higher in the sky as they sailed north and lower in the sky as they sailed south)
    - The mast of a ship is the first thing you see over the horizon as it sails toward you and the last as it sails away.
    - The shadow of the Earth on the Moon is circular regardless of the position of the Moon.

### Earth Basics

- The Earth is <u>NOT</u> a sphere, it is an oblate spheroid.
  - The Earth bulges at the equator and flattens at the poles.
  - This difference in distance from the core means that you weigh slightly more at the poles than you do at the equator.

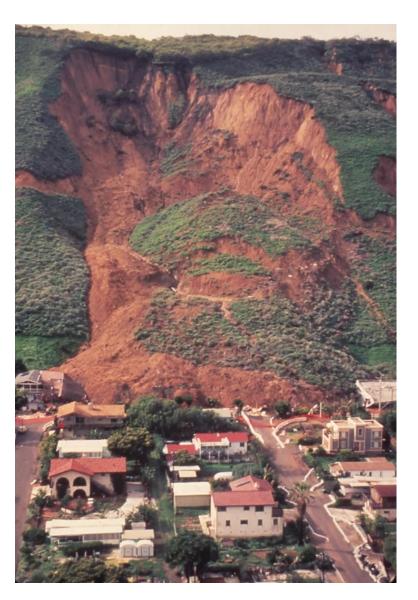


• <u>Tectonic</u> – caused by an earthquake



• <u>Volcanic</u> – caused by a volcanic eruption





#### Gradational – caused by a change in grade (Slope)

 <u>Impact</u> – caused by an object colliding with the Earth



# **Basic Geology**

- Relative Dating determining how old a geologic feature is compared to others.
- Principle (Law) of Superposition
  - In any undisturbed sequence of rocks the oldest are on the bottom



# **Basic Geology**

- Cross-Cutting Relationships
  - Any object cutting through a rock layer is younger than the rock layer itself



### **Basic Geology**

• Impact Cratering – area that the crater is in is older than the crater itself

