## Phases, Eclipses, and Tides

#### **Moon Facts**

- 27.3 days to revolve around its own axis
- 27.3 days to revolve around Earth
- What does that mean for us?
  - We always see the same side of the moon!

### Phases of Moon

- Phase of moon that we see depends on how much of the sunlit side of the moon faces Earth
- Terminology
  - Waxing growing/ "born"
  - Waning shrinking/ "dying"
- Cut out and do your best to put the moon pictures in order
- Tape them in to your science notebook, and number them in the correct order

## **Eclipses**

- Caused by the shadow of one object hitting an area on another object
- Draw or write these into your notebook
  - Solar Eclipse
    - Sun Moon Earth
    - Moon small compared to Earth so happen infrequently and cover small area on Earth
  - Lunar Eclipse
    - Sun Earth Moon
    - Earth is so large compared to Moon that they happen more frequently and can be seen from larger areas

## Solar Eclipse





# Lunar Eclipse





### **Tides**

- Caused by moon pulling on Earth and Earth's water
- Area right under moon is having high tide
- Area at 90 degrees from moon is having low tide
- Area across moon is having high tide

