Our final unit is Astronomy. This unit covers a large amount of information in a short amount of time. I will teach you about the Earth, Moon, Sun, and the planets. You will have the opportunity to teach the class about other concepts such as black holes, supernova, the Big Bang Theory and many other topics to choose from for a presentation. We will also finish our unit with water rockets and talk about physics (Newton's laws and momentum) again. There will be a final on this unit - Astronomy. This is what the final will cover:

The Earth: (based on the notes from the powerpoint)

- **Age**, average **distance** from Earth → Sun, what is an **A.U.**, rate of **rotation**, rate of **revolution**, what causes **seasons**, two things that the **tilt** affects (_____ and _____), summer **solstice** and winter **solstice** (dates and length of day), **Equinoxes (autumnal and Vernal)** – date and length of day and what season each one is

The moon: (use your powerpoint worksheet)

- **Facts on the moon:** when did it form, size of the moon, the moon causes _____, what is the gravity of the moon
- **Motions of the moon**: rate of rotation, rate of revolution
- **Phases of the moon:** first phase, be able to know all 8 phases and names of them
- **Lunar Eclipse**: how the earth, moon, sun align, which phases of the moon does a lunar eclipse occur.
- **Understand** which phases are visible from certain locations on Earth.
- **Tides** – spring and neap:
  - What is the orientation of the moon, earth, and sun for each tide (spring & neap)
  - Which phase of the moon occurs during a spring and neap tide, which tide has a highest high tide

US Space Travels:

- Space race dates and missions, NASA, use your notes from the powerpoint

The Sun:

- **color, distance** from Earth, rate of **rotation**, rate of **revolution,**
- History of the sun: **Ptolemy's** views, **Copernicus'** views, and **Galileo's** views
- **Solar Eclipse** – how the sun, earth, moon align, in which phase of the moon does a solar eclipse occur?

ALL VOCABULARY