

# HONORS GEOLOGY/ASTRONOMY

Honors is for students who are ready for a little bit more challenge. Focusing on Geology and Astronomy specifically allows for a more comprehensive look at those topics. Each semester, students will have the opportunity to complete 2 or 3 individual or group projects in addition to typical class activities.

## GEOLOGY – 1<sup>ST</sup> Semester

- Weather and Climate
  - Sample in-depth studies:
    - Present Day Weather – Hurricanes
    - Past Climate – Clues from Ice Cores
    - Future Climate - Community Resiliency
      - Ways communities can prepare for climate change

## *Are you ready for a deep dive?*

- Chemistry
  - Chemistry of Cell Phones
  - Periodic Table of Elements
- Plate Tectonics
  - Movement of Hawaii Islands and Yellowstone
  - Formation of Magma
  - Development of WA Geology

# HONORS GEOLOGY/ASTRONOMY

## ASTRONOMY – 2<sup>ND</sup> Semester

- The Universe
  - History & Scale of the Solar System
    - Scaled Distance/Size Project
  - Earth-Moon System
    - The Moon and D-Day
  - Orbits & their Effects
    - Shells and Fish in the Sahara
  - Impact Events
    - Greenland Craters and Inuit Knives
  - The Sun
    - Sun Spot Cycles

## *There is a whole lot going on out there!*

- Current NASA Sun missions
- Electromagnetic Radiation
  - Waves in space
  - Telescopes and Deep Space
- Life and Death of Stars
  - Black Holes
- Exoplanets
  - Planets around Distant Suns
- Women (and Men) of Space
  - Career Exploration