**Standards and Goals**

* Model and illustrate how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun causing changes in seasons
* Demonstrate and predict the sequence of events in the lunar cycle
* Relate the position of the Moon and Sun to their effect on ocean tides

Students will know…

* that planets of different size, composition, and surface features orbit around the Sun
* the role of the Sun in our solar system.
* how the tilted Earth rotates on its axis, causing day and night, and revolves around the Sun

*Students will be able to...*

* Demonstrate the use of units of measurement in astronomy such as light year and Astronomical Units
* Identify the approximate mass, size, motion, temperature, structure, and composition of the Sun
* Identify the source of energy within the Sun and explain that the Sun is the major source of energy for the Earth
* Compare the planets in terms of orbit, size, composition, rotation, atmosphere, moons, and geologic activity
* Identify the effects of the moon on tides

*Students will understand….*

* The gravitational pull of the moon and the effects it has on our oceans
* Phases of the moon
* How we measure distance in space
* Characteristics and parts of the sun
* Planetary motion around the sun
* Difference between terrestrial and jovial planets

**Essential Questions:**

What is the difference between rotation and revolution?

Why do we see phases of the moon?

What would happen if earth’s axis were not tilted?

How does the Moon and Sun affect the ocean tides?

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**Self Assessment Activities:**

Student’s will self assess through warm ups which review prior knowledge and allow students to use strategies to come up with solutions. Students will also self assess through, research based projects, think pair share, cooperative learning activities and use of technology.

**Performance Tasks:**

What are the big assessments that will assess student learning? Ex. Test, projects, etc.

**Tests:**

Planets Test

Moon Phases

**Major Projects:**

 Parts of the Sun

Planet Research Presentation

**Other Evidence:**

* Weekly topic assessment quizzes
* Exit slips
* Daily Warm Ups
* Powerpoint notes check
* Modeling moon phases
* Note/Binder check