**Science Unit** Solar System **Name** Annika Schul

**Enduring Understandings:**

**1.** How the solar system would be impacted if Earth did not orbit the Sun.

**2.** How rotation of the orbit impacts Earth.

**3.** How astronomers play a vital role in the solar system. 4. How to assume the role of an astronomer.

4.

**Essential Questions:**

**1.** Why do we study the solar system?

**2.** What are the planets in the solar system?

**3.** What does it mean to orbit? 4. How is the moon involved?

**Big Ideas:**

Planets Earth Astronomy

Orbit Sun Moon

**Goals:**

1. Students will be able to identify all the planets in the correct order.

2. Students will be able to describe how the Earth orbits the sun and its relation to the moon.

3. Students will be able to understand the role and job of an astronomer. 4. Students will be able to create their own solar system.

**PA Standards: 4th Grade** (numbers and type entire standard)

Standard - 3.3.4.B1

Identify planets in our **solar system** and their basic characteristics.

Describe the earth’s place in the **solar system** that includes the sun (a star), planets, and many moons.

Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars.

**Students will be able to:**

1. Identify characteristics of each planet.
2. Create their own solar system.
3. Construct a statement on how the sun, moon, earth and orbit are related.
4. Analyze the planets as an astronomer.

**Students will know:**

1. Vocabulary associated with the Solar System.
2. What all the planets are.
3. How orbit and the sun/moon are related to Earth.
4. The importance of an astronomer.