Name: ______________________

**Astronaut on a Mission**

**Background**
In this lesson, you will take on the role of an astronaut for NASA. Your mission is to find a planet that is most like planet Earth. You will need to research each planet, looking for physical properties of each. In addition to researching the planets, you will also need to research what resources humans need to survive.

**Questions**
These vocabulary words should be studied before the activity. These are words that they will need to know for the activity. Define each in the space provided below:

- **Galaxy:**
- **Planet:**
- **Solar system:**
- **Revolve:**
- **Rotate:**
- **Atmosphere:**
- **Biome:**
- **Astrology:**
- **Telescope:**
- **Celestial:**
- **Seasons:**
- **Sun:**
Procedure

1. You will play the role of an Astronaut. In this role, you are the person at NASA that is in charge of researching and gathering data on each planet to ultimately sustain life on another planet.

2. You will need to research and identify the physical properties of each planet: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

3. You will be in charge of presenting your findings in front of the NASA space exploration committee who are expecting to learn about the following:
   - Temperature of the planet
   - Weather and seasonal information of the planet
   - A comparison of each planet to Earth
   - What resources are needed to sustain life, and why they are necessary
   - What types of gasses make up the atmosphere of this planet?
   - Is there oxygen on the planet?
   - (Optional) Determine the following: Mass, Diameter, Density, Distance from the Sun, Identify how long one day is in Earth days (Ex. 1 Mercurian Day = approximately 59 Earth days).

4. Make a group decision on which presentation method to use: Poster or Digital

5. Discuss and record your “know” and “need to know” using a T Chart with your group. Then, gather data/information and put it into a well-organized presentation.

6. Refer to rubric for grading information.