

Our Solar System – Planet Research

Name _____

Topic _____

Period _____

- 1) Using clay, you will be creating a scale model of EACH planet in the solar system as a table group. You will need to know the actual diameter and the scaled diameter as well as finding the MOST INTERESTING fact about each planet for your video.
- 2) You will be assigned a specific planet that you will be researching in more depth and telling the class about in your video. Use your science book, library books, and the links provided to do research on your assigned objects. If you stick with the science book, library books, and the links provided, you don't need to make a bibliography! Yay!
 - ◆ At least 3 times when discussing your assigned planet you need to explain cause and effect relationships. Include more than 3 explanations if you are able. Make sure your cause and effect explanations are **really obvious** in your presentation.
- 3) Individually, you will be making a video, in solar system order, of your scale models + real photos of the planet, their scaled and actual diameters, and the interesting fact

The following questions should be answered and included in your video:

* The name of the planet you are studying. Is this an inner or outer planet? Gas or rock?

• Explain how and why the name of the planet is connected to Mythology.

• What is your object's relative distance from the sun (ie Earth is the 3rd planet from the sun)

- Spaceships travel at varying speeds, but a reasonable average speed is 35,000 mph. Assuming a constant speed of 35,000 mph, how long would it take a spaceship to travel from the sun to your planet (if you are studying a moon, use the distance to the planet)? Use dimensional analysis to find your answer! You decide what units (seconds, minutes, hours, days) make the most sense for your results.

- Provide the average temperatures on this planet (include the difference between daytime and nighttime temps, if available). Include other interesting information about the weather. Cause/Effect opportunity!

- Describe what the atmosphere of the planet consists of. Cause/Effect opportunity!

- What is the planet composed of? Describe any signs of water and/or ice on the planet. Describe surface features. Is there volcanic activity?

- If the planet has moons, tell how many there are, and give information about some of them.

- Determine how much a 100 pound person would weigh on this planet. (What causes the difference?) Cause/Effect opportunity!

- Determine how old a person would be on this planet if they were 14 years old on Earth. What causes this difference? Cause/Effect opportunity!

- Compare the length of a day and the length of year to a day and a year on Earth. What causes these differences? Cause/Effect opportunity!

- Describe past, current and pending (upcoming) space missions to explore and/or photograph your planet.

- Other interesting, unique facts/characteristics of your planet/asteroid/moon.