

Planet Project in Google Sky

Directions: Students are to research one of the planets or major objects on our solar system and create a placemark in Google Sky. Each placemark should discuss general statistics about the planet and also information about its evolution, geology, atmospheric composition, water, and the possibility of microbial life. Students should sign up for their planets using the class workgroup on the school's course management system. A list of solar system objects is given below. One student will be assigned the task of putting the probes into our composite layer and making sure that each is of a consistent format. This student will receive an extra credit grade as the project coordinator.

Time: 2 cycles (10-14 days)

Deliverables: Google Sky layer about various solar objects.

Total Points: 15

Solar Objects:

- Planets – Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune,
- Moons – Earth's Moon, Titan, Europa
- Kuiper Belt Objects: Eris, Pluto
- Asteroids: Ceres
- Comets: Hale-Bopp

General Questions: (Who, What, Where, When, Why)

1. Where is its location in space?
2. What is its revolutionary period?
3. What is its rotational period?
4. What is its size?
5. What is its mass?
6. Is it a terrestrial or gas planet?
7. What is the composition of its atmosphere?
8. What are some of the major geological features of the planet?
9. Does it have any rings, and what are their composition?
10. Does it have any moons and are any of them notable?
11. What do we know about its evolutionary history?

Discovery Questions:

1. What are some of the current research questions being asked about the planet and its moons?
2. What are some interesting facts about the planet and its moons?
3. Why should the planet or one of its moons be a priority for us to visit, either with a probe or a manned space flight?

Rubric

Item	Points Possible	Points Earned
<p>Content: Each placemark contains 1-2 paragraphs of 5-7 sentences each that answers the general and discovery questions. Placemark content is arranged logically and the student's writing is compelling, enticing the reader to use the links to learn more. The writing is free of errors.</p>	5	
<p>Icons: An appropriate icon for the subject matter was used. The size, color and style of the icon are easily noticed in Earth. Icon labels are clear, concise and have no spelling or grammar mistakes. Title case was used. Custom icons can be found at: http://www.iconarchives.com</p>	1	
<p>Links: The student has provided at least one link to an outside source for each paragraph. These links could connect the reader with research facilities, journal article, or online image databases.</p>	2	
<p>Pictures: Images are not larger than 400 and not less than 200 in width. Images are clear, not fuzzy and compliment the text of the placemark. Appropriate attribution for each image taken from the internet or an online research database is given under the image.</p>	2	
<p>File Management: Students have created a folder on the schools' network drive for the project and have saved their work to the project folder. Students have appropriately saved all objects in the layer as a KMZ file. Students will upload their project to the First Class workgroup for their class.</p>	1	
<p>XHTML Code: Students have appropriately used code to layout their placemark including page layout tags, line break tags to separate pictures from text, paragraph tags to separate paragraphs, and image tags to adjust the size of the image to fit the placemark and to provide appropriate attribution for the image. No code errors are visible in the placemark when viewed in Earth.</p>	3	
<p>Total</p>	15	