



Name: _____

NASA: Eyes on the Solar System

Eyes on the Solar System lets you explore the planets, their moons, asteroids, comets and the spacecraft exploring them from 1950 to 2050. Ride with the Curiosity Rover as it lands on Mars or fly by Pluto with the New Horizons spacecraft all from the comfort of your home computer.

1. Go to this website created by NASA:

<https://eyes.jpl.nasa.gov/eyes-on-the-solar-system.html>

2. On the right, under "Get Started," press "Download App" and follow the directions to download onto your Chromebook.
3. Once you have the application open, click on "Simple" in the "Eyes on the Solar System" box.
4. Next, click on the "Destinations" button at the bottom. Images of different planets in our solar system should appear.
5. Click on the "Sun" image and complete the questions by reading through the paragraph under the "Info" tab.

The Sun: Remember, this is not a planet, it is a _____!!!!

- a. What tribes/groups created mythological stories about the sun?

- b. Many cultures believed that the _____ was immovable and the sun, other planets, and stars revolved about it. _____ astronomers and philosophers knew this _____ concept from as early as the 6th century BCE. (_____ = a solar system that orbited around the Earth.
- c. The sun is the _____ to Earth, at a mean distance from our planet of _____ (miles). This distance is known as an _____ (abbreviated AU), and sets the scale for measuring distances all across the solar system.
- d. At the core, the temperature is about _____ (degrees Fahrenheit), which is sufficient to sustain thermonuclear _____.
- e. How long does it take for sunlight to reach the Earth? _____.
- f.

Now, click the "Home" icon in the upper right-hand corner and then click on the "Destinations" button at the bottom right screen. Next, go through each planet and complete the backside of this page.



_____ Planets:

Mercury:

- Top temperature on Mercury reaches _____ (degrees Fahrenheit) and at night time it reaches _____ (degrees Fahrenheit). Why do the temperatures become so cold at night? _____.
- Mercury makes an appearance in Earth's sky _____ every century. This event is called _____.
- Mercury travels around the Sun every _____ days and is currently traveling _____ miles per second.
- What celestial body (object in space) does Mercury's surface resemble? _____.
- Why does Mercury's surface look the way it does? _____.

Venus:

- Venus has a size, mass, density, composition, and gravity that is similar to _____.
- What is Venus' atmosphere like?

_____.
- Venus is the _____ planet in the sky.
- Venus is _____ (degrees Fahrenheit) because the thick atmosphere traps solar heat in.
- Why are there no signs of impact or craters on Venus' surface? (Why does it have a smooth appearance?) _____.

Earth:

- Earth is the only planet known for what? _____.
- The _____ separates us from the cold, airless void of space.
- NASA satellite observations help study and predict _____, _____, _____, and _____.
- Earth is the _____ planet from the Sun. How big is Earth compared to the rest of our solar system? _____.
- Why do we experience summers and winters on Earth?
_____.
- Atmospheric composition (%): _____ Nitrogen and _____ Oxygen.

Mars:

- Mars is _____ the size of Earth.
- What alters Mars' surface? _____.
- Does Mars have seasons? _____.
- What is the name of the largest volcano on Mars? _____. This volcano is roughly 6.5 miles high (Think, Mt. Everest ~5.4 miles high!).
- Does Mars have seasons? _____. Why do you think so? _____.