Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period# \_\_\_

**Our Solar System 101 – Nat Geo** <https://www.youtube.com/watch?v=libKVRa01L8>

Our Solar System is one (1) of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ “known” solar systems in the entire Milky Way Galaxy.

About \_\_\_\_\_\_\_\_\_\_\_ years ago, our galaxy came into existence. Our Solar System is currently located on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ arm of the Milky Way. Only 15% of stars host planetary systems.

In our solar system there are \_\_\_\_\_\_\_\_\_ planets. The four planets closest to the sun are categorized as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planets. The four planets farthest from the sun are categorized as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planets.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet is made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ material, it’s surfaces are \_\_\_\_\_\_\_\_\_\_\_\_\_, they do not have any \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, they usually have only a few or no \_\_\_\_\_\_\_\_\_\_\_ and they are relatively small.

MERCURY - is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet in the solar system and has the shortest \_\_\_\_\_\_\_\_ of all of the planets in the solar system.

VENUS - is the hottest planet with surface temp of \_\_\_\_\_\_\_\_\_\_\_\_ degrees Fahrenheit. The atmosphere consists mostly of carbon dioxide and the surface has many \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

EARTH - is the only planet that has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that helped create and now sustains life for all of its inhabitants.

MARS - might have supported life over 3.7 billion years ago. It once had a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and icy surface.

The Jovian planets have two main differences. Jupiter and Saturn are called \_\_\_\_\_\_\_\_\_\_ giants. The nature of their atmosphere is predominantly \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Uranus and Neptune are called \_\_\_\_\_\_\_\_\_\_\_ giants. Their surfaces contain rock and ice where the ice could be a mix of \_\_\_\_\_\_\_\_\_\_\_\_, methane and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

JUPITER - is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ planet in the solar system.

SATURN - is the \_\_\_\_\_\_ largest gas planet. It also has a visible \_\_\_\_\_\_\_\_\_ system that is wide enough to fit between the earth and the moon’s orbits. However the width of the ring system is barley one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ thick.

URANUS - rotates on its \_\_\_\_\_\_\_\_\_\_\_\_\_.

NEPTUNE - is the \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ planet and it’s also the coldest at minus \_\_\_\_\_\_\_\_\_ degrees Fahrenheit.

Another significant part of our solar system orbits between the orbit of Mars and Jupiter. It’s called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ belt. This section contains everything from dust particles to small planetoids like \_\_\_\_\_\_\_\_\_\_\_\_\_ which is about the same size as the State of \_\_\_\_\_\_\_\_\_\_.

Orbiting beyond the outer-most gas giants is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ belt. It’s also home to many dwarf planets like \_\_\_\_\_\_\_\_\_\_ and it’s the birthplace of many \_\_\_\_\_\_\_\_\_\_\_\_\_.

Beyond the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ belt is something called the \_\_\_\_\_\_\_\_\_ cloud. It’s a collection of icy debris and rocky \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and is considered to be the very \_\_\_\_\_\_\_\_ of our solar system. It’s also where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ influence of our Sun ends.

FILL IN CHART BELOW

|  |  |  |  |
| --- | --- | --- | --- |
| Terrestrial Planets – list characteristics below then list each planet | | | |
| Characteristics: | | | |
| 1- | 2- | 3- | 4- |
| Jovian Planets – list characteristics below then list planets under correct sub-title | | | |
| Characteristics: | | | |  |
| Gas Giants | | Ice Giants | |
| Characteristics: | |  | |
| 5- | 6- | 7- | 8- |