

Name \_\_\_\_\_

### Astronomy Packet 4

1) The Solar System formed from a \_\_\_\_\_ that was disturbed by a \_\_\_\_\_ and began to \_\_\_\_\_. As the disk of material began to \_\_\_\_\_ most of the material collected in the \_\_\_\_\_ due to the force of \_\_\_\_\_. As more and more material collected it began to \_\_\_\_\_ up and more and more material was pulled in. Eventually the temperature reached \_\_\_\_\_ and nuclear \_\_\_\_\_ occurred. This process was known as \_\_\_\_\_. Our solar system consist of \_\_star\_\_ planets \_\_dwarf planets\_\_ moons \_\_\_\_\_asteroids and \_\_\_\_\_comets.

The Sun rotates once every \_\_\_\_\_ and revolves around the Milky once every \_\_\_\_\_. The core has a temperature of \_\_\_\_\_ and is the site of \_\_\_\_\_ where approximately \_\_\_\_\_ tons of \_\_\_\_\_ is converted into \_\_\_\_\_ tons of \_\_\_\_\_ with the missing portion turned into \_\_\_\_\_. This \_\_\_\_\_ takes \_\_\_\_\_ years to travel from the core to the surface. Above the core the sun is separated into the \_\_\_\_\_ and \_\_\_\_\_ zones where heat and light rise through huge \_\_\_\_\_ cells to the \_\_\_\_\_ commonly called the solar surface. The temperature of this layer is approximately \_\_\_\_\_. This layer is the location \_\_\_\_\_ which are areas of cooler temps caused by the strong \_\_\_\_\_ field of the sun. These occur in a \_\_year cycle. The surface is also the location of various forms of solar seismic activity such as. \_\_\_\_\_ and \_\_\_\_\_.

These often result from large plumes known as \_\_\_\_\_ if they remain connected to the surface or \_\_\_\_\_ if they form large loops. The lower solar atmosphere is known as the \_\_\_\_\_ and the upper atmosphere is known as the \_\_\_\_\_ and often is the site of \_\_\_\_\_ or C.M.E.'s. The temperature in this outer layer can reach up to \_\_\_\_\_. Humanities main observatories for solar activity are known as \_\_\_\_\_ or \_\_\_\_\_ for short.

The planets originally formed from the cloud around the proto-sun in what is known as a \_\_\_\_\_. The planets began as small pieces of \_\_\_\_\_ which became attracted to other clumps of \_\_\_\_\_ due to the force of \_\_\_\_\_ and as they got larger due to the force of \_\_\_\_\_. As the proto-planets grew they collected more and more material eventual resulting in a solar system with many small proto-planets the number was decreased as the proto-planets \_\_\_\_\_ and \_\_\_\_\_. It was one of these \_\_\_\_\_ that resulted in the formation of our \_\_\_\_\_ when a proto=planet called \_\_\_\_\_ struck Earth. After this initial period the inner planets heavy elements such as \_\_\_\_\_ sunk into the \_\_\_\_\_ which allows for the creation of these planets \_\_\_\_\_. The Liquid h2O which would shape the inner planets would be delivered by \_\_\_\_\_ and \_\_\_\_\_ from the outer solar system. This would become known as the period of \_\_\_\_\_.

2) The innermost planet of the Solar System is \_\_\_\_\_, it also the \_\_\_\_\_. Its period of rotation is \_\_\_\_\_ and its period of Revolution is \_\_\_\_\_. It is located \_\_\_\_\_ away from the sun. The surface temperature ranges from \_\_\_\_\_ to \_\_\_\_\_ the widest swing in the solar system. This planet differs from most the inner planets in that most of its mass consists of its \_\_\_\_\_ with a very thin \_\_\_\_\_ and \_\_\_\_\_. The surface is marked by large amounts of \_\_\_\_\_ and jagged cliffs known as \_\_\_\_\_. The largest of this crater is the \_\_\_\_\_, which generated the geologic features known as \_\_\_\_\_. An interesting fact about the craters along the poles is that \_\_\_\_\_ has been located in them. This planet is also the only other planet with a \_\_\_\_\_ which allows for this kind of weather phenomena: \_\_\_\_\_. The primary missions to this planet were \_\_\_\_\_ and \_\_\_\_\_ missions. Due to its \_\_\_\_\_ to the Sun this planet \_\_\_\_\_ be viewed by the Hubble Telescope.

3) The second planet from the Sun is \_\_\_\_\_ and is located \_\_\_\_\_ away from the Sun. It is often referred to as \_\_\_\_\_ and \_\_\_\_\_ by many ancient societies. Many astronomers believed it to Earth's \_\_\_\_\_ albeit a hotter version. When it was first visited by the Soviet mission's \_\_\_\_\_ and \_\_\_\_\_ it was discovered that that idea was totally \_\_\_\_\_. In fact this planet is actually the solar systems \_\_\_\_\_ with an avg. surface temperature of \_\_\_\_\_. These horrific conditions are due to a runaway \_\_\_\_\_ which \_\_\_\_\_ most of the \_\_\_\_\_ this planet \_\_\_\_\_. This results in an atmospheric pressure \_\_\_\_\_ times that of Earth. It takes this planet \_\_\_\_\_ to rotate on its axis which it does in a \_\_\_\_\_ motion which is

different from all the other major planets. It takes this planet \_\_\_\_\_ to revolve around the Sun. The atmosphere of Venus consists of primarily \_\_\_\_\_ and \_\_\_\_\_ which gives the sky its yellow-orange color. In fact this chemical actually comes down as \_\_\_\_\_ but it never reaches the ground due to the high temperature. The surface of Venus is covered in \_\_\_\_\_ and \_\_\_\_\_. The largest of which is \_\_\_\_\_. In fact it is the high amount of \_\_\_\_\_ that maintains the thick atmosphere.

4) The phases of the moon are \_\_\_\_\_. The Smooth area on the moon is called \_\_\_\_\_ while the elevated area is called \_\_\_\_\_. The more heavily cratered side of the moon is the \_\_\_\_\_.

5) The fourth planet from the Sun is \_\_\_\_\_ which is located \_\_\_\_\_ away from the Sun. It takes \_\_\_\_\_ to rotate on its axis and \_\_\_\_\_ to revolve around the Sun. This planet is known as the \_\_\_\_\_ due to the high amount of \_\_\_\_\_ in the rocks on its surface. The atmosphere consists of mostly \_\_\_\_\_ but is incredibly \_\_\_\_\_ due to the low \_\_\_\_\_ this causes the daytime sky to appear as \_\_\_\_\_. This also causes the temperature to be approximately \_\_\_\_\_ at the surface. The only really weather patterns that exist are massive \_\_\_\_\_ which roll across the plains leading to \_\_\_\_\_. It is believed that the surface of \_\_\_\_\_ was once covered by \_\_\_\_\_ evidence for this is show in the \_\_\_\_\_ end \_\_\_\_\_ of the rocks of the

surface. This \_\_\_\_\_ is now locked in \_\_\_\_\_ at the polar region and underground as  
\_\_\_\_\_ it is possible that the \_\_\_\_\_ of this planet may  
contain vast reservoirs of \_\_\_\_\_. The largest \_\_\_\_\_ in the solar system exist on  
this planet, it is called \_\_\_\_\_ and stands \_\_\_\_\_ high. The two moons  
are \_\_\_\_\_ and \_\_\_\_\_ which are most likely \_\_\_\_\_. The current  
mission studying this planet is \_\_\_\_\_.