**Astronomy Study Guide: Due Wednesday,9/19 Test date Friday,9/21**

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Model states that the sun is the center of the universe. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ was the astronomer that first published this theory.
2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Model states that the Earth is the center of the universe.
3. The theory that the universe began with a tremendous explosion / expansion is called the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** 
   1. According to the theory, 13.7 billion years ago all the contents of the universe was compressed under extreme pressure, temperature, and density in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   2. Then, the universe rapidly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. We know the universe is expanding because we can see that the galaxies are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_ galaxies have a bulge at the center and spiral arms. The spiral arms are made up of gas, dust, and new stars that have formed in these denser regions of gas and dust.
6. Put the following in order from smallest to largest: (Word Bank: super cluster, planet, cluster, universe, galaxy))
7. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a dust covered ball of ice and rock with a tail.
8. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are chunks of rock and metal that are smaller than Earth’s moon.
9. Meteoroids, Meteorites, and Meteors are the same thing (chunks of rock and metal that are smaller than asteroids). The difference is where they are located. You can find \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in space, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are found in Earth’s atmosphere, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are found on Earth’s surface.
10. Complete the information on gravity.

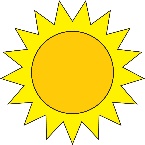
The more massive the object= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ pull.

Less massive objects = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ pull.

The greater the distance = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ gravitational pull.

The smaller the distance = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ gravitational pull.

1. Inertia is the tendency of an object to stay in motion unless something \_\_\_\_\_\_\_\_\_\_\_ \_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ its direction.
2. Together, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_ keep the planets in an elliptical orbit.
3. Illustrate and label the planets and the asteroid belt in order from the sun.



1. What is the smallest planet? \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_ Largest planet? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the hottest planet? \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_ Coldest planet? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Create a table that compare the inner and outer planets.

Inner planets Outer planets

1. Which planet is similar in size to Earth? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Aside from Earth, which planet once had liquid water on its surface? \_\_\_\_\_\_\_\_\_\_\_\_
   1. What evidence was found? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. The asteroid belt is between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. What is Mars’ atmosphere made of? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Gravity and inertia work together to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. A comets tail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the sun and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as it get nearer the sun.