Name_____ Date _____ Period _____

Astronomy Test Study Guide: Part 1

Vocabulary

DEFINE/DESCRIBE EACH WORD BELOW

Heliocentric: this theory states that the sun is the center of the universe/solar system

Geocentric: this theory states that the earth is the center of the universe/solar system

Universe: everything that is in space

Solar System: sun is the center all of space bodies orbit around it

Milky Way galaxy- spiral galaxy; and our solar system is located in Orion's arm (outer arm)

Terrestrial: another name for all the inner planets that mean Earth-like

Inertia: the force that keeps objects in motion that have always been in motion

Gravity: the force that attracts to objects together

Big Bang: the theory that explains the creation of the universe and it there was an explosion from a Singularity

Asteroid: large space rock made of rock, dust, some metals that normally orbits the sun in the asteroid belt

Meteoroid: small space rock that can be broken from an asteroid.

Meteor: meteoroid that enters the earth's atmosphere and starts to burn up because of friction

Meteorite: a meteoroid that strikes the earth and makes a crater

Comet: a space object that is made of ice, dust, rock, and gases that orbit the sun.

S6E1a: Describe the historical scientific models that can explain the formation of the solar system. Describe how the Big Bang theory accounts for the formation of the universe.

Short Answer

1. What is the heliocentric view of the Universe?
   This theory states that the sun is the center of the universe/solar system

2. Which scientists (2) believed to the heliocentric view? HCG
   Copernicus and Galileo

3. Describe the evidence observers may have used to support the heliocentric theory.
   Galileo saw that Jupiter has 4 moons and that Venus goes through moon phases

4. What is the geocentric view of the Universe?
   this theory states that the earth is the center of the universe/solar system

5. Which scientists (2) believed to the geocentric view? GAP
   Aristotle and Ptolemy

6. Describe the evidence observers may have used to support the geocentric theory.
   Believed that everything in space was in motion around the earth

S6E1.b Describe the relationship between gravity, position, and formation of heavenly bodies. Compare and contrast the characteristics of the planets in our solar system.

7. List the eight planets in order of their distance from the sun.
   Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

8. What two forces keep the solar system in its current formation? Why?
   Gravity and inertia

9. What factors affect gravitational force and how?
   Mass and distance

10. List the planets from smallest to largest in size.
    Mercury, Mars, Venus, Earth, Uranus, Neptune, Saturn, and Jupiter

11. What are two other names for the outer planets?
    Jovian or gas giants

12. How does planet distance from the sun affect the period of revolution?
    Farther the planet is away from the sun, the longer the period of revolution

13. Which planet is called Earth's sister? Give two reasons why?
    Venus, because of the same size and shape

14. What characteristics do the inner planets all share?
    All inner planets are rocky and small

15. What are the main differences between asteroids and comets?
    Comets have ice and asteroids do not

16. What are the main differences among meteors, meteoroids and meteorites?
    The position in the sky, meteors are in earth's atmosphere, meteoroids are still in space

17. What is the difference between an asteroid and meteoroid?
    Asteroid is bigger and meteoroid is smaller

18. What are the two main locations of asteroids and other debris from the origins of the universe?
    Asteroid belt and pieces of other planets

19. What are two likely reasons why more meteorites and dust debris collide with the other planets and moons than they do with Earth?
    Because the earth has an atmosphere that protects it

20. What is the shape of the Milky Way galaxy?
    Spiral galaxy

21. Draw and label where we are located in the Milky Way galaxy.

22. Define rotation.
    When the earth spins on its axis

23. Define revolution.
    When the earth orbits around the sun