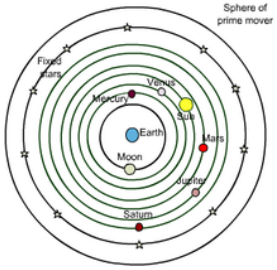
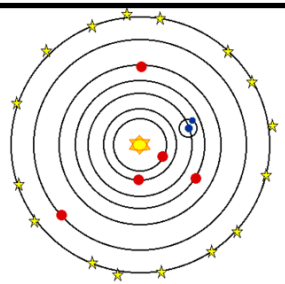
Name:_____ Class:_____ Date:_____

Astronomy Study Guide

Learning Target: I can ask questions to determine changes in models of Earth's position in the solar system, and origins of the universe as evidence that scientific theories change with the addition of new information.



The _____ Model



The _____ Model

Learning Target: I can develop a model to represent the position of the solar system in the Milky Way galaxy and in the known universe.

Draw a picture of the Milky Way Galaxy and indicate the position of our solar system below:

What is the Big Bang Theory?

What evidence supports the Big Bang Theory?

Learning Target: I can analyze and interpret data to compare and contrast the planets in our solar system in terms of size relative to Earth.

Which planets have 0 moons?

Which planet has the most moons?

What are Saturn's rings made of?

Characteristics of Inner Planets:

Characteristics of Outer Planets:

What planets can support life?

What characteristics must a planet have to support life?

Which other inner planet has evidence of liquid water?

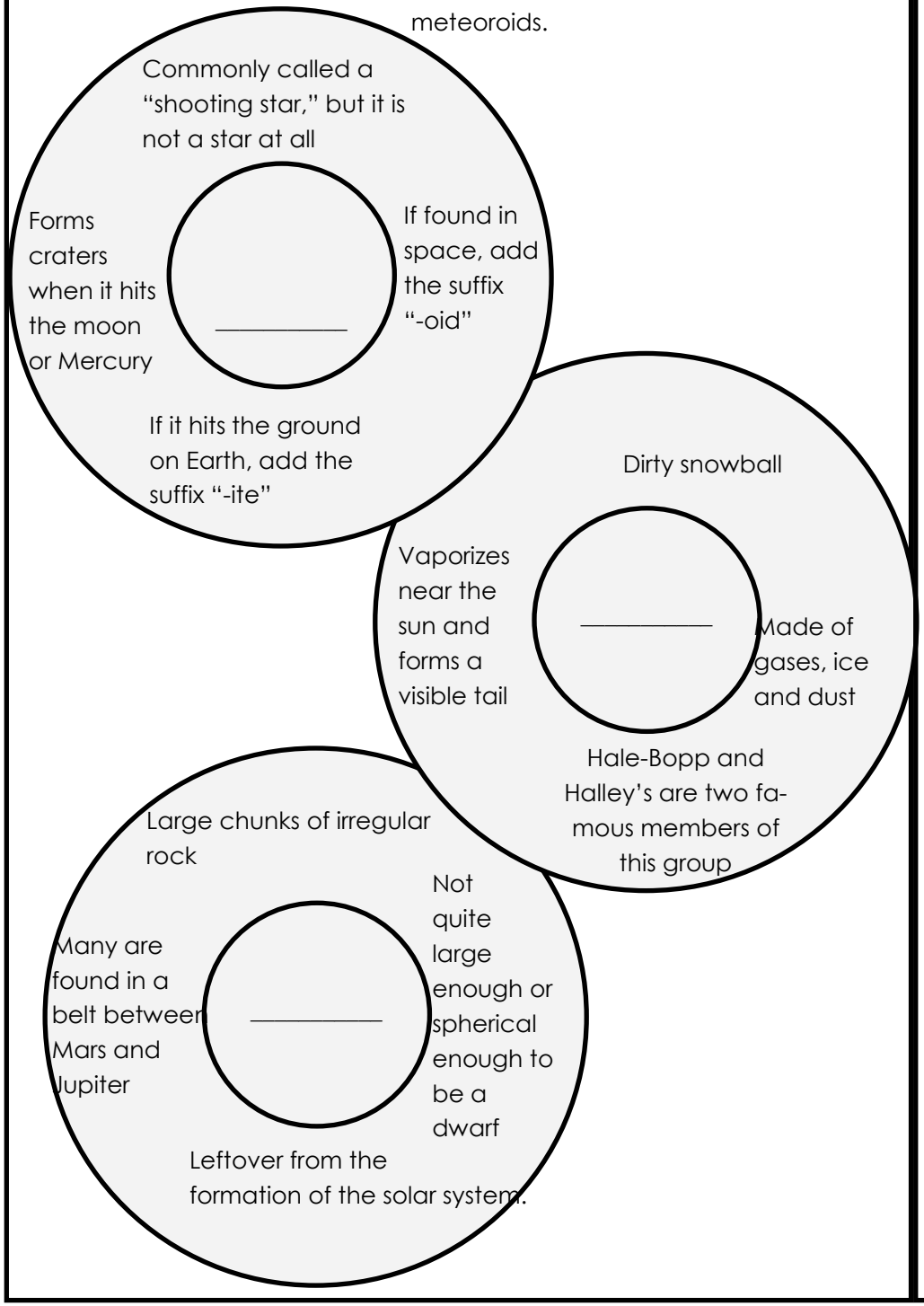
Why is Venus called Earth's Twin?

Describe rotation vs. revolution:

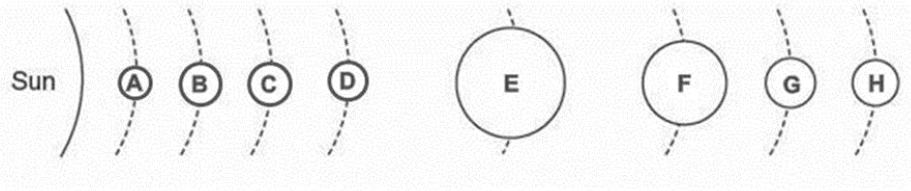
What makes Uranus unique?

Name and Describe the gas giants:

Learning Target: I can ask questions to compare and contrast the characteristics, composition, and location of comets, asteroids, and meteoroids.



Label the planets and draw the location of the asteroid belt:



Learning Target: I can develop and use a model to explain the interaction of gravity and inertia that governs the motion of objects in the solar system

1. Without the Sun, the planets would travel in a straight line. This fact represents Newton's law of _____: an object stays in motion unless an outside force acts on it.

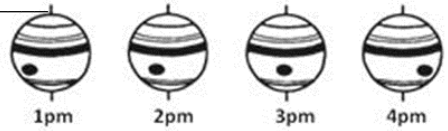
2. What would happen to the planets if there were no inertia, but only gravity acting on the planets?

3. What two opposing forces are responsible for keeping our Solar System together? _____ and _____

Rotation or Revolution? _____

How can you tell? _____

_____

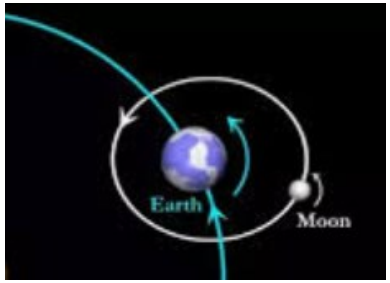


Rotation or Revolution? _____

How can you tell? _____

_____

_____



Rotation or Revolution? _____

How can you tell?

_____

_____

_____

Rotation or Revolution?

_____

How can you tell? _____

_____

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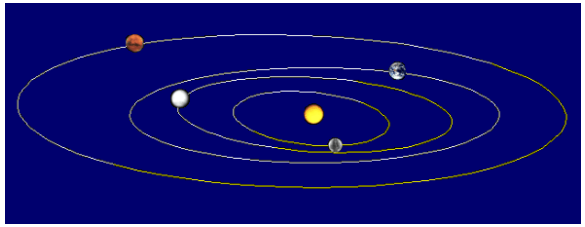


Put the following in order from smallest to largest:

Solar System, Universe, Milky Way Galaxy

_____ _____ _____

Orbiting the Sun:

What is the shape of a comet's orbit? _____

What is the shape of the planets' orbits around the sun? _____

Asteroids, Meteors and Comets part II:

1. Which body is made primarily of rock or iron that enters Earth's atmosphere and touches the ground? _____
2. Which body is made mostly of ice? _____

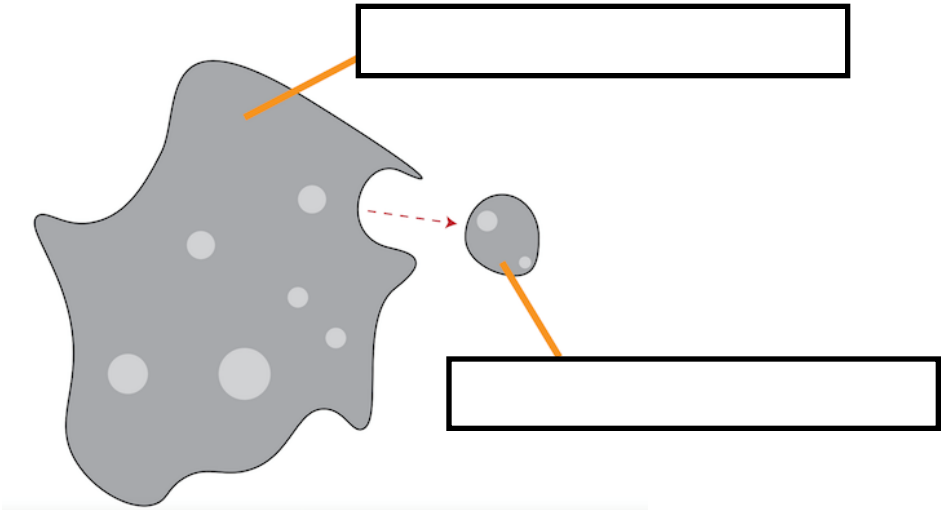
3. When a meteoroid enters Earth's atmosphere, it produces a streak of light called a _____

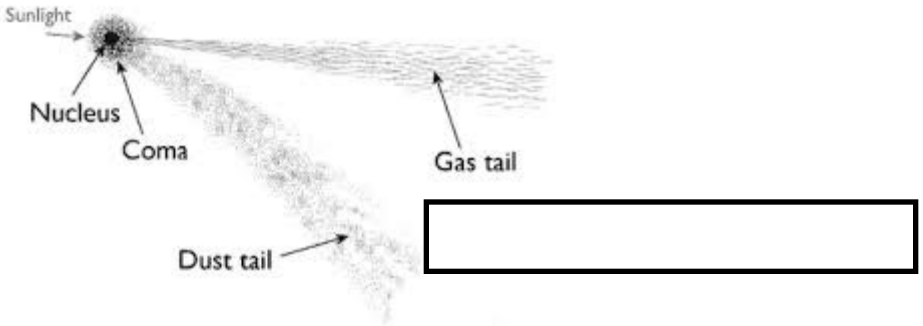
4. Meteoroids usually come from _____

Label the diagrams below:

Word Bank:

Comet Meteoroid Asteroid





Fill in the double bubble comparing and contrasting the inner and outer planets.

Suggestions for filling in bubbles (you may not use all of them, or you may have to add more bubbles to one side)

Have Rings	Made of Rock	Made of Gas	Have 0-2 moons	Have >10 Moons
Smaller in size	Larger in size	Have a solid core	Closer to sun	
Orbit the sun	No rings	Farther from sun	Located in our solar system