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**Unit 8: Astronomy STUDY GUIDE**

***Part 1 – Seasons***

1. What causes a planet to have seasons?
2. How long is Earth’s rotation?
3. How long is Earth’s revolution?
4. What is the date and name of the first day of each season?

***Part 2 – Early Models***

1. Heliocentric vs Geocentric Models of the universe/solar system.
2. According to the big bang theory, how old is our universe?

1. What does the **Big Bang Theory** state about our universe? Is the universe currently expanding or contracting?

***Part 3 – Galaxies***

1. What is the name of our **galaxy**? What does it look like?

1. Where are we located in our galaxy?

***Part 4 – Planets***

1. List the planets in order, starting from the Sun? (remember the sun is a star, and moons are not planets)
2. What two forces allow the planets to stay in their orbit?

1. What do all inner planets have in common?
2. What do all outer planets have in common?
3. List the inner planets and give 3 distinguishing characteristics for each.

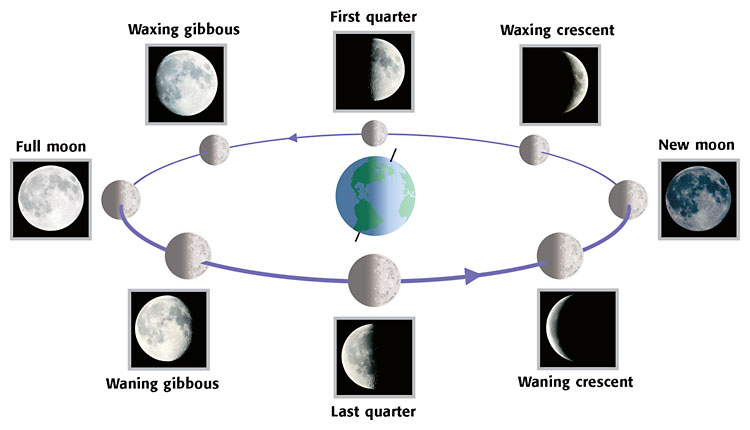
***Part 5—Outer planet***

1. List the outer planets and give 3 distinguishing characteristics for each.

***Part 6—Moon Phases: Make a double bubble for each (or list three differences and three similarities)***

1. waxing and waning
2. crescent and gibbous
3. full and new moon
4. quarter moons (1st and third/last)

**PHASES OF THE MOON**

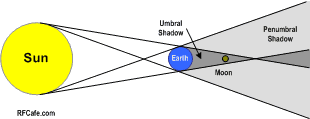


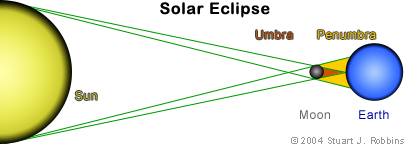
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**Part 7–Eclipses**

1. What type of eclipse is seen when a new moon moves in front of the sun (unsafe to look at directly)?
2. What type of eclipse is seen when the Earth’s shadow moves in front of the full moon (safe to look at)?
3. Is this a solar or lunar eclipse? What phase of the moon would it be?



1. Is this a solar or lunar eclipse? What phase of the moon would it be?

*Part 8—Other objects in our solar system*

1. What does a comet look like, and how does it form?
2. What creates craters?
3. What does a meteor look like, and how does it form?
4. What are asteroids, and where are most found?
5. Meteoroid, meteor, meteorite (where are each found?)