Part Three: The Solar System

Vocabulary: all planet and dwarf planet names, Kuiper, asteroid, atmosphere, revolution...

1. Spelling and capitalization count: Name ALL the <u>planets and</u> <u>dwarf planets</u> in order from CLOSEST to FARTHEST from the sun.

Mercury, Venus, Earth, Mars, Ceres, Jupiter, Saturn, Uranus, Neptune, Pluto, Haumea, Makemake, Eris

2. Explain the general pattern in the <u>distances between the</u> <u>planets</u> of our Solar System.

Each inner planet is generally closer together than outer planets and the same distance apart from each other. The outer planets get progressively farther apart.

3. Compare and contrast a <u>dwarf</u> planet and a regular planet. **Compare: both spherical, both orbit the sun** 

Contrast:

Planet - bigger, less crowded area, flat orbit, more gravitational pull

Dwarf Planet – smaller, more crowded area, tilted orbit, less gravitational pull

Name the two most crowded areas of our solar system.
 Spelling counts.
 Kuiper Belt and Asteroid Belt

5. Name four differences between the <u>inner</u> and <u>outer</u> planets. Inner – smaller, rocky, shorter revolution, longer rotation, fewer moons, closer together

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## Outer – larger, gaseous, longer year, shorter day, more moons, farther apart

List the planets that are similar in size. (there are three pairs)
 Earth and Venus
 Mars and Mercury
 Uranus and Neptune

7. <u>Why</u> are dwarf planets found in the asteroid belt and Kuiper Belt?

They do not have enough gravitational pull to clear their area of other objects.

8. List the five <u>dwarf planets</u> and where each are located in the solar system.

**Ceres – Asteroid Belt** 

Pluto, Makemake, Haumea, and Eris – Kuiper Belt

9. True or False: All planets are solid, rocky objects. **FALSE** 

10. True or False: All planets have at least one moon. **FALSE** 

11. What is an asteroid and where are most of them found? Big, irregularly shaped space rock found in the Asteroid Belt.

12. What's the difference between a meteor and a meteorite?
Meteor – in Earth's atmosphere
Meteorite – if it lands on the surface

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13. What is a comet and what does it orbit? What is different about their orbits?

Rock and ice, has a tail, orbits around the sun. Their orbits are "off-center".

14. Where is the Kuiper Belt located? What is located here? Outside the orbit of Neptune. All KBO's (Kuiper Belt Objects) are located here:

comets, ice, rock, dust, dwarf planets, asteroids, meteoroids...

15. What does the word "composition" mean when talking about solar system objects?

What something is made out of.

## $\rightarrow$ Be sure your agenda is up to date!

Possible Extra Credit Questions:

\*Why do things weigh less on the moon than on Earth? \*What is an Astronomical Unit? Why are they used to measure Solar System distances?