Name _____ ReTEST Date _____ Hour ____

- ❑ All Practice work MUST be completed prior to the first test date
- ❑ ReTest Practice must be completed and checked by the day prior to retesting
- ❑ You must schedule a retest time with your teacher

Astronomy #3 - The Solar System

ReTest Practice

1. Give 5 examples of celestial bodies in our solar system. _____

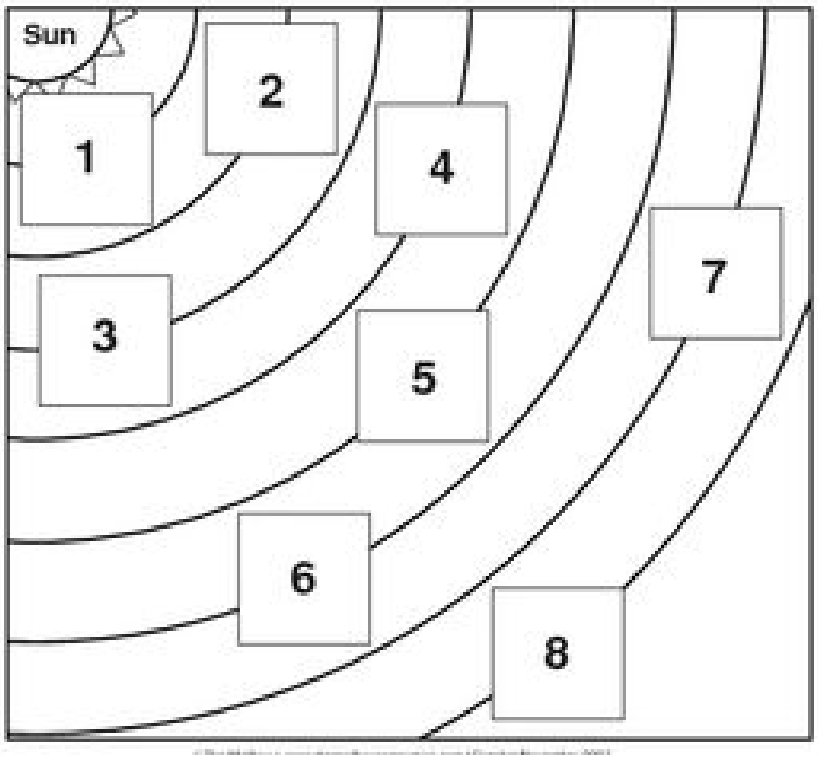
_____

2. What celestial body is at the center of our solar system? _____

3. Write the names of the Inner Planets in order from the center of our \solar system out and THEN the Outer Planets, from the center of our solar system outward.

Inner Planets	Outer Planets
1.	5.
2.	6.
3.	7.
4.	8.

4. Use your answers from Question #3 to complete our solar system chart.



Place a check in the appropriate box for characteristics of Inner to the Outer Planets.

Characteristics	Inner Planets	Outer Planets
5. Closer to each other		
6. Gas Giants		
7. Further from the sun		
8. Has many more moons compared to the others		
9. Rocky planets		
10. Smaller in comparison to the four other planets		
11. Can have rings		

12. The inner and outer planets are classified into their groups based on two main characteristics which are _____ and _____

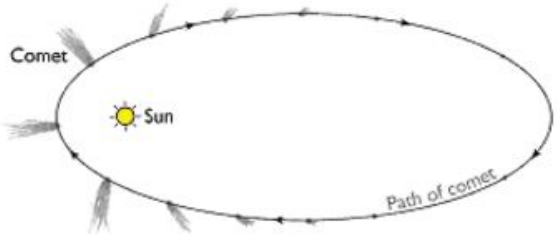
13-14. Identify two ways in which Comets and Asteroids are SIMILAR.

15-16. Identify two ways in which Comets and Asteroids are DIFFERENT.

17. WHEN and WHY does a comet SPEED UP in its orbit.?

18. WHEN and WHY does a comet orbit SLOWER?

19. Use an arrow to show the area where a comet is SPEEDING UP.
20. Use an arrow to show the area where a comet is SLOWING DOWN.



21. What Law explains the speed changes of a comet in its orbit? _____.

Complete the chart on Planets, Asteroids, and Comets. You may have multiple columns checked.!

	Descriptions	Planets	Asteroids	Comets
22.	**small rocky bodies orbiting the sun**			
	orbit perpendicular to the planets			
	rotate while they revolve			
23.	**have somewhat elliptical orbits**			
	has its own belt with many more like it			
	orbits between Mars and Jupiter			
24.	**a shooting star**			
	dirty snowballs			
	can have rings			
25.	**distance from the sun changes from really close to really far**			
	extreme elliptical orbits			
	can have moons			
26.	**orbit in the same plane as planets**			
	have tails			
	large bodies orbiting the sun			

27. On the diagram below, follow the instructions given.

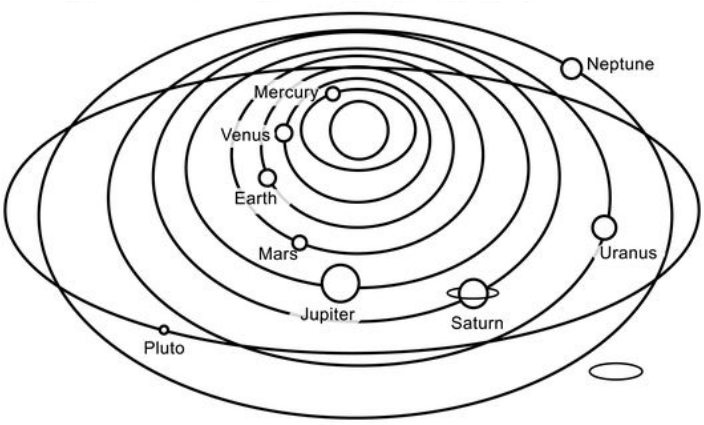
a. **Add a comet with its orbit around the sun**

b. **Draw in the Asteroid belt**

c. **Star the Inner planets**

d. **Shade in the Outer Planets**

e. **Cross out Pluto**



Use the Solar System Data Chart to answer the questions below.

Solar System Data

Celestial Object	Mean Distance from Sun (million km)	Period of Revolution (d=days) (y=years)	Period of Rotation at Equator	Eccentricity of Orbit	Equatorial Diameter (km)	Mass (Earth = 1)	Density (g/cm^3)
SUN	—	—	27 d	—	1,392,000	333,000.00	1.4
MERCURY	57.9	88 d	59 d	0.206	4,879	0.06	5.4
VENUS	108.2	224.7 d	243 d	0.007	12,104	0.82	5.2
EARTH	149.6	365.26 d	23 h 56 min 4 s	0.017	12,756	1.00	5.5
MARS	227.9	687 d	24 h 37 min 23 s	0.093	6,794	0.11	3.9
JUPITER	778.4	11.9 y	9 h 50 min 30 s	0.048	142,984	317.83	1.3
SATURN	1,426.7	29.5 y	10 h 14 min	0.054	120,536	95.16	0.7
URANUS	2,871.0	84.0 y	17 h 14 min	0.047	51,118	14.54	1.3
NEPTUNE	4,498.3	164.8 y	16 h	0.009	49,528	17.15	1.8
EARTH'S MOON	149.6 (0.386 from Earth)	27.3 d	27.3 d	0.055	3,476	0.01	3.3

28. What is an Astronomical Unit? _____
_____

29. Rank the planets from the **SMALLEST mass** to the **LARGEST** mass in our Solar System.

_____, _____, _____, _____, _____, _____, _____, _____

30. Which has more mass, the Inner or Outer planets? _____

31. What planet has the smallest diameter? _____

32. Which planet has the smallest period of rotation? _____
Largest? _____

33. What percentage of mass does the sun make up in comparison to other planets in our solar system? _____

34. Which planet has the slowest period of revolution? _____

35. _____ is called Earth's twin, because... _____
_____