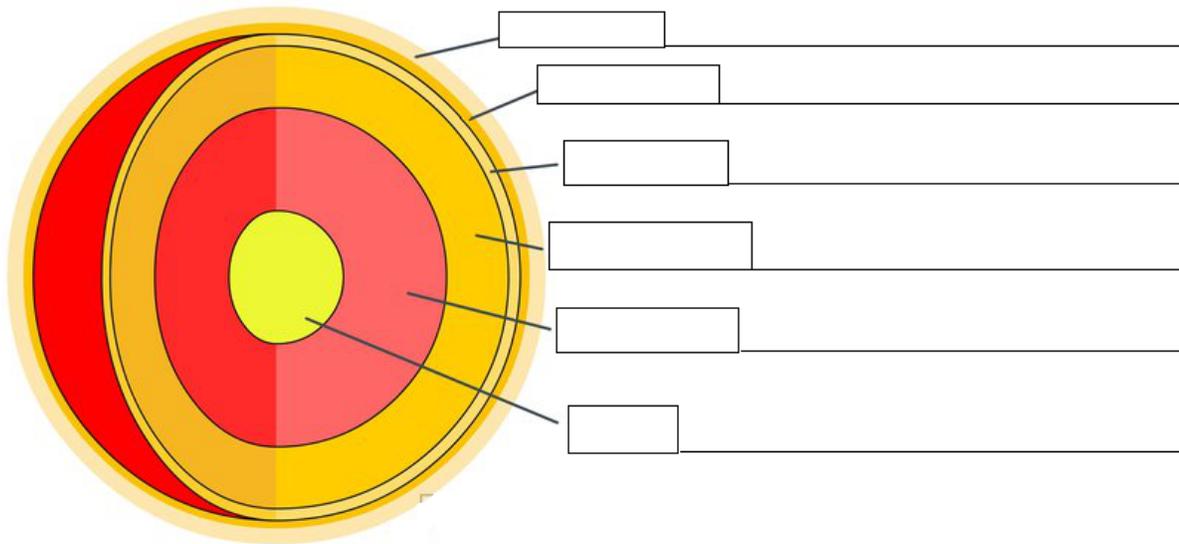


REVIEW PLANETS AND SUN

name _____

1. What is the best definition for our sun?
Burning ball of gas / star of average age and temperature / source of solar flares
2. How does fusion work?
3. How would you describe the amount of matter that goes into the reaction compared with the energy that comes out of the reaction?
4. What are the 2 most common elements in our star?
5. Which elements can the sun make?
6. As the sun ages, how will the concentration of elements change?
7. What elements can only be made in a supernova explosion? (which numbers?)
8. Label the sun's layers, then tell what each layer does.



9. What is sunspot maximum? Minimum?
10. During which one is there more cell phone, radio, and TV interference?
11. If solar wind could hit earth, what would be the result?
12. Why doesn't solar wind hit earth?
13. How does the equator of the sun rotate compared to the poles?

Fill in the table

	Ejects material? (how much?)	Comes from? (caused by?)	Shape?	Size?
CME/ prominence				
Solar flare				
Coronal loop				
sunspot				

14. What does a light year measure?

15. How far is a light year?

16. Compare and contrast the Kuiper belt and the Oort cloud

Alike	different

17. Name the solar system object:

_____ Polar ice caps of frozen carbon dioxide and water. Red color caused by iron oxide. Has the biggest volcano in the solar system, Olympus Mons.

_____ Almost no atmosphere allowing meteors to make many craters. Temperature range from 450 degrees C to -170 degrees C. (very hot, then very cold)

_____ 90 times greater atmospheric pressure than Earth. Sulfuric acid clouds. Rocks so hot they are like melted chocolate.

_____ Tilt of axis almost completely sideways. 27 moons, one called Miranda. Methane gas gives it blue green color.

_____ Found in the Kuiper belt. Composed of rock and ice. Has a very elliptical orbit that is not in the same plane as the other planets. Called a planetesimal.

_____ 1 1/2 times greater volume and 2 times greater mass than all other planets combined. 62 moons (4 we are interested in) and has a red spot.

_____ Second-largest planet, but lowest density so would float in water. Has Moon called Titan which has a nitrogen atmosphere and maybe life? Very large rings.

_____ Frozen methane gas gives it green blue color. 13 moons (one we are interested in called Triton), God of the Sea.

How do some scientists believe the solar system formed?(11pts)

WORD BANK

- | | | |
|---------|----------|-------------|
| star | friction | temperature |
| dust | gases | inner |
| gravity | million | giants |
| gas | winds | |

First a nebula (cloud of _____ and _____) began to spin. Then _____ began to pull the dust and gas toward the center of the cloud. All of the atoms began to hit each other and created a lot of _____. This caused the _____ in the center of the cloud to reach 10 _____ degrees Celsius. At this point a _____ was born. Next, the solar _____ blew back the rocks a little and blew back the _____ a lot. Collisions between rocks created the _____ planets and collisions between gases created the gaseous _____.

18. What is the cycle of solar activity?
19. What are the fancy names for the northern and southern lights?
20. Explain how the northern lights happens.
21. What is the difference between a moon and a planet?
22. Define asteroid belt

Fill in the chart

	Size?	Made of ?	Located where?
Asteroid			
Meteoroid			
Meteor			
meteorite			

23. Name three differences between a nuclear and chemical reaction.

1]	2]	3]
----	----	----
24. Name three similarities between a nuclear and chemical reaction.

1]	2]	3]
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25. What is a comet made of ?
26. When does a coma form?
27. Where does a comet's ion/gas tail point?
28. What prevented the asteroids from becoming a planet?
29. What is the difference between a terrestrial planet and a gaseous giant planet?

Name the nine planets in order from the sun outwards. Label each planet as being terrestrial (T), gaseous giants (G), or planetesimal (P). Put an arrow to locate where the asteroid belt is (19pts)

	1st object from Sun	2nd object from Sun	3rd object from Sun	4th object from Sun	5th object from Sun	6th object from Sun	7th object from Sun	8th object from Sun	9th object from Sun
Name									
Type									

Which planet do these moons belong to?					
	Planet it is from (extra credit)		Planet it is from (extra credit)		Planet it is from (extra credit)
Phobos		Europa		Titan	
Deimos		Callisto		Triton	
Ganymede		Io		Charon	