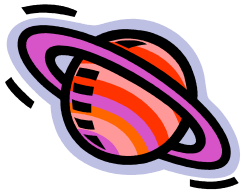
How the Universe Works: Extreme Planets

Name _____

1. State whether the planet is a rocky planet or gas giant.

Mercury Venus Earth Mars Jupiter Saturn Uranus Neptune



2. When was the birth of the solar system?

3. T/F The planets are all made of the same stuff but the conditions they formed under where different.

4. Elements in the solar system are like the ingredients in a _____.

5. Why are only rocky planets able to form close to the sun?

6. What planet lost it's atmosphere and became a barren wasteland?

7. What planet heated up tremendously over time?

8. There were once thousands of planets in our solar system. True or False?

9. The process of small rocks smashing into each other and gaining mass to make bigger rocks is called _____

10. How wide must a rock be to have a chance to turn into a planet?

11. Each collision causes the rocks to heat up and melt and then _____ starts to work to make all the heavy materials sink to the middle.

12. How can SOLAR WIND (super charged energy particles from the sun) affect astronauts? (Space radiation is serious business!)

13. What is the Earth's protection from the solar wind? What would happen if we didn't have it?

14. What did the rovers Spirit and Opportunity find evidence for on the surface of Mars? What is the evidence?

15. Why did the gas giants become so huge?

16. The larger the gas giants got the more _____ they have.

17. Jupiter and Saturn have over _____ moons each. They formed from the massive amounts of gas and dust that the planets were able to collect because of their gravity.

18. All gas giants have rings. True or false?

19. What is the theory for where the rings came from?

20. Why won't Saturn ever have more and larger moons?

21. What is the proof that gas giants have magnetic fields?

22. _____ and _____ are the two important forces in planet building. But _____ is also extremely important.

23. The Earth is actually quite a dry planet. True/False

24. The Earth exists as it is because comets and asteroids delivered just the right amount of _____ to the planet about 4 billion years ago.