

Name: _____

Period: _____ Date: _____

Formation of the Planetary Systems Review
Astronomy

Terminology:

1. Interstellar Cloud –
2. Interstellar Grains –
3. Solar Nebula –
4. Condensation –
5. Accretion –
6. Planetesimals –

Review:

1. First, why is the history of the solar system challenging to figure out? Explain.
2. What all has to be supported in order for the theory behind the solar system's development to be accurate?
3. What is the headlining scientific theory behind the development of the solar system and what does it state?
4. What all does this theory support?
5. What do other solar systems have to do with astronomers determining the history of our own solar system? Explain.
6. Sketch out the four stages of the solar system development according to the star nebula theory.

7. Describe an interstellar cloud.
8. Where would astronomers find these?
9. How many stars out there have planets orbiting around them? Explain.
10. What did both the stars and the planets originate from?
11. How big was the interstellar cloud that the solar system was derived from?
12. What are interstellar grains and how do they compare to the cloud? Explain.
13. What all is found in interstellar grains? Where else do we see the same proportions of materials?
14. What initiated the cloud to begin converting into the Sun and planets and both on the large scale and the small scale? Explain.
15. What is the solar nebula and how does it compare to the interstellar cloud and grains? Explain.
16. How long did it take the solar nebula to occur and around what size was it? Explain.
17. What was the temperature like in the solar nebula?

18. What does condensation have to do with the development of the solar system?
19. The condensation of the nebula is direct evidence of what key characteristic(s) of the solar system?
20. What is accretion and how did that process develop planetesimals? Explain.
21. Did all collisions produce planetesimals? If not, what happened to the others?
22. What actually developed in to the planets that we have today?
23. When astronomers talk about a planet's satellite system, what are they referring to?
24. How did some planets end up with a lot of moons, while others have very few if any at all?
25. What was the last part of development?
26. What was the development for the inner's atmospheres compared to the outer's atmospheres?
27. Create a small timeline that shows the development of the solar system. (This is a great way to get the big picture and keep everything in order). Be sure to label it with the events and proper terminology!