

Westfall

Name _____

Pd _____

How the Earth Formed

1. Large cloud of _____ was transformed into the planet we know today.
2. Regions of dust and gas are called _____ clouds. They are vast, cover hundreds of _____ across.
3. Nebulas are made up of _____ from dead stars.
4. When a star dies, it's called a _____.
5. _____ is the force that drives creation.
6. The gas cloud _____ under the force of gravity.
7. The cloud starts to spin _____ as the material moves towards the _____.
8. The spinning cloud became our _____.
9. Just like salt or sugar clumping, the dust or gas clumped attracted by it's _____ charge.
10. The forming planets _____ with each other, reducing it to just a few planets.
11. The early earth would have been way too _____ for human existence, plus deadly _____ from the sun would have bombarded the Earth as well.
12. The solar wind can travel towards the Earth at _____ miles per hour.
13. _____ is evidence that the solar wind can strip away an atmosphere.
14. The _____ elements sank to the center of sphere to form the iron core.
15. The spinning action of the core creates a _____ that deflects the solar wind.
16. The early Earth had no _____ or _____.
17. _____ turned out to be very dry.

18. The moon resulted from a _____ with the early Earth that threw material into orbit around the Earth. The ground remained _____ from years after the impact.
19. The collision could have also tilted the Earth on its _____, which gave us the _____. Without the formation of the moon, we wouldn't have beautiful fall colors!
20. 4.5 bya, _____ did not yet exist.
21. The water came from the _____ where it was frozen.
22. Meteorites contain _____ minerals, which trap water molecules. As you move farther from the sun, the meteorites contain _____ water.
23. As _____ crashed to Earth, they exploded and released their water.
24. We think water arrived in about _____.
25. The sea was full of _____, which would have appeared _____, and the atmosphere would have had a reddish tinge.
26. Still at this point, there was no _____ in the atmosphere to breathe.
27. Stromatolites are primitive life-forms of _____. They're made of blue green bacteria, and photosynthesize, giving off _____ in the process.
28. Stromatolites are 15 times older than the _____.
28. For the first billion years, most of the oxygen they produced was converted to rust that _____ out and turned into rock.
29. Then the oxygen levels started to rise to higher levels due to _____.
30. To sum it up, so the water came from _____ colliding with the Earth, and the oxygen came from _____ photosynthesizing. The collision that formed the _____ tilted the Earth, and gave us seasons.