

History Channel's *How the Earth was Made* Video Questions

Name: _____ Period: _____ Date: _____

1. How old is the Earth according to the church? (:04)
2. How did the discovery of tilted rocks by James Hutton lead to his idea that the Earth was very old? (:05)
3. How old did Lord Kelvin say the Earth was? (:07)
4. How has radioactive dating developed by Arthur Holmes in 1911 revolutionized our concept of how old the Earth really is? (:08)
5. What is the accepted age for the Earth? (:09)
6. What is thought to be the source for most of the Earth's water? (:15)
7. What kind of rock started to form continents 3.4 billion years ago? (:18)
8. How does the density of basalt (oceanic crust) compare to the density of granite (continental crust)? (:20)
9. What are stromatolites and how did they make life on our planet possible around 2 billion years ago? (:21)
10. Who was Alfred Wegener and what did he propose? (:29)
11. Why is the video wrong when it says that Alfred Wegener had a **theory**?
12. What is happening to the plates on either side of Iceland in the middle of the Atlantic Ocean? (:33)
13. What did the evidence of fossils on opposing continents mean?
14. What is the average rate of continental drift?
15. What is the name of the first supercontinent formed 1 billion years ago?
16. How did the position of Rodinia 700 million years ago form snowball Earth?

17. What caused Rodinia to thaw out and break apart 650 million years ago?
18. What did the fossils in the Burgess Shale indicate that happened around 500 million years ago?
19. How did the formation of the ozone layer lead to life?
20. What covered the continents 300 million years ago during the carboniferous period?
21. Where do coal, oil, and gas come from? (:50)
22. What caused the Permian Extinction 250 million years ago when 95% of species perished?
23. What was Pangaea? When did it exist? (:54)
24. How did volcanic activity lead to the split of Pangaea 120 million years ago? (:59)
25. Where do diamonds form? How do diamonds form? (1:02)
26. What happened on the Earth 65 million years ago? (1:04)
27. What does the finding of Iridium at the Cretaceous-Tertiary boundary indicate? (1:07)
28. How big was the asteroid that is thought to have caused the extinction of the dinosaurs? (1:08)
29. What kinds of evidence found in the Alps give validity to plate tectonics? (1:13)
30. What two opposing forces dictate the height of a mountain range?
31. What two major forces contributed to the formation of the Grand Canyon? (1:17)
32. What caused the last ice age over 11,000 years ago? (1:18)
33. What are two pieces of evidence that glaciers covered the surface of the Earth? (1:23)
34. What will happen to the Earth's plates 200 million years from now? (1:28)
35. What may happen to the Earth 2 billion years from now? (1:30)