

# How the Earth Was Made Video Viewing Guide

As you view the video, answer the following questions (in order).

1. What was the significance of James Hutton's discovery at Siccar Point, Scotland, in 1788 regarding the estimate age of the Earth?
2. How did Lord Kelvin believe the Earth had formed, and what was his estimate for the age of the Earth?
3. Who developed radiometric dating? What age did he assign to the oldest rock?
4. How and when did the Earth form?
5. According to Dr. Durda, where did the water that now covers our oceans come from?
6. Why were the oceans green?
7. The continents (cratons) formed how long ago?
8. What contribution did the stromatolites make that made nearly all future life possible?
9. What is Rodinia and when did it form?

10. How did the Earth recover from being covered in ice?
11. The Burgess Shale documents the Cambrian explosion of life. What kinds of organisms were found that did not exist prior to this event?
12. What did the increased levels of O<sub>2</sub> in the atmosphere set the stage for?
13. At 400 mya to 300 mya, what important development occurred on land?
14. What was bizarre about early land animals?
15. When did Pangea assemble?
16. When did Pangea break apart? What happened to the global climate at that time?
17. What group of animals came to dominate the land after the mass extinction?
18. How and when did the Alps form?
19. Describe New York City during the Ice Age.
20. What is Pangea Ultima?