

Part 4 - <http://www.youtube.com/watch?v=QoA-uT6JKW8>

1.5 BYA

18. What was the paradox raised by *Paradoxides*?
19. What did findings from WWII show related to “continental drift”?
21. What happens to the crust directly above the upwelling convection currents.
22. If the crust is breaking apart at rifts, won't this make Earth bigger? Explain.

23. The rate of plate movement is about the same as _____

1.4 BYA

24. Rodinia originally was made of what 2 countries? _____ and _____

Part 5 - <http://www.youtube.com/watch?v=NJTCd7qYWI8>

650 MYA

25. Earth was covered by ice _____ thick and was _____ °F

26. How many years did it take to melt most of the ice? _____

Part 6 - <http://www.youtube.com/watch?v=9FrooHXO83Q>

27. What is cool about the Burgess Shale and during what geologic period was it deposited?

28. Why was life finally capable of developing on land when before it could survive only in the oceans?

400 MYA

29. Why is what happened in the Carboniferous period significant for us today?

250 MYA

Part 7 - <http://www.youtube.com/watch?v=QgpM8MbQR4k>

30. Explain what happened in Siberia at this time and how that event affected life. (What % of all life died?)

a.

b.

31. What started happening by 180 MYA and what was the result?

32. Write your theory as to how diamonds formed.

Part 8 - <http://www.youtube.com/watch?v=Zig8Vx4d9jM>

33. What is unusual about the Kimberlite volcanoes?

35. Dino bones are found in sedimentary rocks dating from _____ to _____ MYA then _____

36. What were the Alvarez findings and that did those findings suggest?

37. Is there any evidence for that proposal?

38. The meteorite that formed Meteor Crater was 50 m across. How does this meteor compare.

Part 9 - <http://www.youtube.com/watch?v=5yVQulFwqVM> <- Ja, dis is gud stuff, you betcha. (You'll see what I mean.)

39. *Draw* what happened when Africa bumped into Europe. ("Excuse me, Europe" said northern Africa.) Add the Alps.

40. About _____ tons of material are removed from the Alps every year by erosion and this equals _____

41. If the Colorado River and the Mississippi were having an erosion contest, the Colorado would win. Why?

2 MYA

42. What two things, one biologic, were happening about this time.

43. Prior to this time, could a Forrest Gump-like polar bear have run from the Arctic to Peru to eat a llama? Why?
(*Run, Forrest, run!*)

What? Accurate to only 2 cm?

Part 10 - <http://www.youtube.com/watch?v=F35b4cRPT88>

44. How did Louis Agassiz explain those erratic boulders?

45. How did those grooves form?

45. How has the climate in the last 10,000 years been good for humans?

Thought Questions

A. Do you think humans have been the most important species Earth has seen? If so, why? If not, what was and why?

B. Discuss how quickly we are using resources that have taken billions of years to form at least one example.

C. Write one thoughtful geo-question that your professor should have asked along the way - one that the film answers.

D. Write one thoughtful geology question you still have related to this series.