

“How the Earth was formed”

Short Answer: (2 points a piece)

- 1) Who was the man that stated the Earth was 6000 yrs old?
- 2) Hutton determined that this age was incorrect, what lead him to a much later date?
- 3) How did the earth begin or made up?
- 4) How hot was the early earth?
- 5) What did the Lord Kelvin theorize?
- 6) By the laws of Thermodynamics, how long would it take the earth to cool to its present temperature?
- 7) What was the source of heat with in the early earth to continually supply high temperatures?
- 8) What were the 3 sources of radioactivity that were present on the Earth?

- 9) In 1911, Arthur Holmes used radioactivity to date rocks and fossils, what was this process called?
- 10) Radioactive Uranium decays into which other element?
- 11) What is relative dating?
- 12) What is absolute dating?
- 13) From the molten Earth, what was the next step of Earth's evolution?
- 14) Which continent contains the oldest rocks on Earth?
- 15) What is the name of the 3.5 billion year old rock?
- 16) Where are these rocks normally found?
- 17) How old was the Earth, when water first formed?
- 18) What is the name of the crystals that helped to date the Earth?

- 19) What type of gas did the surface rock spew out?
- 20) At what age did thick clouds first form in the atmosphere?
- 21) How old was the Earth when it became a water world?
- 22) What percentage of the planet was covered in water?
- 23) The seas were what color, because of the high levels of iron?
- 24) How long did the hot water world exist?
- 25) The renewed volcanic activity, created what?
- 26) What rock type were the continents made from?
- 27) Which of the rocks is greater in density?
- 28) Granite and Basalt are examples of what type of rock?

- 29) Which type of rock is typical for continental crust?
- 30) Which type of rock is typical for oceanic crust?
- 31) Name the 3 types of plate boundaries.
- 32) What is produced at an oceanic to continental plate boundary?
- 33) The appearance of what organism along the coastline transformed the Earth?
- 34) What did this organism produce?
- 35) Where can these organisms be found today?
- 36) What did the organisms form from?
- 37) What is the process that converts sunlight into oxygen?

- 38) How long ago did the early Earth resemble the present-day Earth?
- 39) What are plate tectonics?
- 40) What was the name of the scientist who hypothesized continental drift?
- 41) Which fossil type was found in both N.America and Great Britain?
- 42) Which continent sparked the possibility of plate tectonics?
- 43) List the 4 pieces of evidence for continental drift?
- 44) During WWII, what military, technology was used to validate continental drift?
- 45) What is the name of the island that was upon the 3rd Atlantic ridge?
- 46) What type of volcano eruption takes place on the island?
- 47) What type of plate boundary is the mid-Atlantic ridge?

- 48) How many centimeters do the continent move per year?
- 49) At approximately 1.0 BYA, what was the name of the first supercontinent?
- 50) What was the climate of the first supercontinent?
- 51) What took place at 700 MYA on the earth?
- 52) What do scientists call this time period?
- 53) How deep was the sheet of ice on earth?
- 54) During which time did life first bloom?
- 55) What is the name of the rock formation that recorded this expansion of life?
- 56) What first created the ozone layer?

- 57) What did the ozone layer do?
- 58) When did the earth first become a world of tropical swamps?
- 59) What is the time period that produced these tropical swamps?
- 60) What 2 periods are part of this time?
- 61) What did this swamp land produce, that we use as energy?
- 62) What time period did this mantle plume explosion takes, that causes this internal mass extinction?
- 63) When did the next supercontinent Pangaea form?
- 64) Which species of reptile dominated Pangaea?
- 65) What year was the first Dinosaur fossil found by Marianne Mantell?
- 66) What dinosaur did this tooth belong to?
- 67) What does the word dinosaur mean?

- 68) What's the reason for the extreme size of the dinosaur?
- 69) Did dinosaurs exist after Pangaea broke apart?
- 70) According to the movie, what killed the dinosaurs?
- 71) What precise item was discovered in 1869 in South Africa?
- 72) Is this item a rock or mineral?
- 73) What geologic feature is recovered in the record of 65 mya?
- 74) What element was found in this layer?
- 75) Where is this element normally found?
- 76) What is your opinion on how the dinosaurs became extinct?
- 77) According to the movie, what took place to kill the dinosaurs?

- 78) When did the first mammal appear on the earth?
- 79) What important geologic process continued to take place and change the face of the planet?
- 80) What is uniformitarianism?
- 81) What famous mountain is part of both Africa and Europe?
- 82) List the three forms of erosion that are mentioned?
- 83) What famous gorge is the result of erosion?
- 84) How long did it take his gorge to form?
- 85) What first appeared about 2 million years ago?
- 86) Over the last 2 million years, how many times was North America covered with glaciers?
- 87) When did the last glacier retreat?

- 88) A fraction of a fraction of 1% is equivalent to what?
- 89) In our present state, many scientists believe we are between what?
- 90) 15 million years into the future what will take place?
- 91) 200 million years in the future, a new super continent will form, what will it be called?
- 92) What will happen to New York?
- 93) What will be the inevitable fate of the earth?
- 94) What other planet will the earth resemble?