1) What do we call the comprehensive theory of the real forces that shape the Earth?

2) In general, what are the formations revealed in the walls of the Grand Canyon evidence of?

3) How much of the history of the Earth is revealed by the Grand Canyon?

4) Prior to the advent of geology, how old did dogma dictate the Earth must be?

5) What did James Hutton say drove the changes in the Earth’s surface?

6) What age for the Earth is now suggested by radioactive decay?

7) What name was given to the theoretical single continent of Earth’s past?
8) What was the age of the oldest rocks brought up from the ocean floor?

9) Based on rock samples recovered from Big Pine, CA, how long ago did the magnetic field of the Earth flip south?

10) At what rate was it discovered that the sea floor spreads?

11) What is the outer shell of the globe called, and how thick is it?

12) Into how many different plates is the outer shell of the Earth divided?

13) What do we call the process by which one plate moves beneath another?

14) What two plates meet at the San Andreas fault?

15) Rather than sinking into the Pacific, what is happening to California at the San Andreas fault?
16) What has been determined to be the driving force behind the movements of the plates?

17) Why do the scientists studying the lava at Kilauea immediately cool the lava they collect?

18) How are the Hawaiian volcanoes formed so far from a plate edge?

19) What forces caused the New Madrid earthquakes, and subsequent quakes in the same region?

20) What is suggested by the fossils recovered from the Marin headland?

21) Why do we find evidence of glaciers in Africa?

22) How do we think the green sea turtle evolved the instinct to travel such long distances to lay eggs?