



Do not write on this.

Directions: Complete the following questions as you view the video.

GRAND CANYON (0:00 – 9:00)

1. How long is the Grand Canyon?
2. What is the top layer of the Grand Canyon made of?
3. What is the second layer made of? _____ and is loaded with
4. What was the Grand Canyon like 340 million years ago?
5. How long ago was the bottom rock of the Grand Canyon formed?

OLDEST ROCKS – EARTH’S FORMATION – (9:00 – 14:34)

6. The first rocks on our planet formed how long ago?
7. Erupting since _____ Mount Kilauea has spewed out _____ billion tons of lava.
8. All land started as what?
9. How does basalt turn into granite?

(remember, basalt is what oceanic crust is made of, granite is continental crust)

CONTINENTS – Mid-Continent Rift – (14:34-25:10)

10. How old are the rocks in the mine?
11. What was the name of the first version of the North American continent?
12. What waves are used to determine what is below Lake Superior?
13. How much Basalt is below Lake Superior?
14. What might have stopped the rift in our continent?

BUILDING COASTLINES – East Coast – (25:10-31:25)

15. What turned the original mud of Manhattan into hard rock (schist)?
16. Why is the center section of New York City lacking sky-scrapers?
17. What type of land terrain existed in New York 440 million years ago?
18. What happened to the mountains?

NORTH AMERICA'S SHAPE (31:25-43:00)

19. What type of terrain existed 200 million years ago in Utah?
20. What was the name for the mega-continent that existed over 300 million years ago?
21. What causes the circles in the sandstone of Utah?
22. What is the name for the mountain range that existed before today's Rocky mountains, 300 million years ago?
23. What caused the second version of the Rocky Mountains?

BUILDING COASTLINES – West Coast – (43:00-)

24. Why are there a palm front (leaf) and coral fossils in Alaska?
25. What is the name for the fault line that cuts through Tomales Bay between the Pacific Plate and the North American plate?
26. How fast is the Pacific plate moving north?
27. What can tension build-up along this fault cause?
28. Sooner or later _____ and _____ will be neighbors.