

Name: _____ Date: _____

How the Earth was Made - Iceland

Directions: As you watch the video *How the Earth was Made: Iceland*, answer the following questions. The questions do go in order so pay attention as you may miss some of the information

1. What is the name of the world's largest volcanic island?

2. How much of the world's lava is produced here?
3. Why is Thingvillir plain so important to studying Iceland and how the earth was made?
4. How fast is the valley spreading apart?
5. In what year was new evidence found that supported Alfred Wegener's idea of continental drift? _____ What was that evidence?
6. What geologic feature runs through the middle of Iceland?
7. With the help of ALVIN, what were scientists able to do in 1974?
8. What force pulls Iceland part? _____ Explain the widening process that is occurring.
9. The crack in Iceland's most active volcano, Hekla, is called what?

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10. What is the name used to describe the type of eruption that occurred at Hekla in 2000? _____ Describe what this type of eruption may look like.

11. What causes the vast quantity of lava to be forced out of the Icelandic volcanoes during eruptions?

12. Besides Iceland, name 2 other places that are known to be "hot spots"?

13. What is a hot spot?

14. How wide and deep is the hot spot underneath Iceland?

15. What are the 2 forces that have built Iceland?

16. What is decompression and how does it have an effect on the volcanism of Iceland?

17. Scientists have dated the "birth" of Iceland at _____ million years ago.

18. What is the geologic significance of Surtsey, the smaller newer island 20 miles off the coast of Iceland?

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19. What other force is responsible for shaping Iceland?

20. How much of the Iceland is covered by ice?

21. How fast is Iceland's glacier moving?

22. What is meant by the "Glacier is alive"?

23. What formed the great depression in the ice? Describe the significance of this feature.

24. Laki erupted in 1783 and was one of the most destructive in Icelandic history. Describe at least 2 of the devastating effects it had on Iceland.

25. What global climatic effects did the eruption of Laki have?

26. The moraines are evidence for what?

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27. The glacier is retreating how fast?

28. When glaciers melt extremely quickly what effect can it have on volcanic activity?

29. Why is this a concern for scientists and the Icelandic people?

30. After watching the video, make 3 inferences about the impact Iceland's volcanic activity has on the world (these should be different from your answers to question 25).