Haiti earthquakes



1. The Haiti earthquake occurred on the boundary between what two tectonic plates? The Haiti earthquake occurred on the boundary between the Caribbean plate and the North America plate (U. S. Department of the Interior | U. S. Geological Survey).

2. What is the rate of movement between these two plates?

The rate of movement between the Caribbean plate and the North America

plate is 20 mm/y (U. S. Department of the Interior | U. S. Geological Survey).

3. On what plate is a) Cuba? b) Puerto Rico? c) Honduras? d) Venezuela? e) Cocos Ridge?

(a) Cuba, (b) Puerto Rico and (c) Honduras are located on the Caribbean plate. (d)Venezuela is located on the South America plate. (e) The Cocos Ridge is located between the Cocos plate and the Nazca plate (U. S. Department of the Interior | U. S. Geological Survey).

4. Is the plate boundary in Haiti convergent (subduction), transform (strikeslip), or divergent?

The plate boundary in Haiti is transform (strike-slip) (U. S. Department of the Interior | U. S. Geological Survey).

5. Where in California, that is, on what fault, do we see a VERY similar tectonic plate boundary?

A very similar tectonic plate boundary is located on the San Andreas fault

system (U. S. Department of the Interior | U. S. Geological Survey).

6. What two countries comprise the island of Hispaniola?

The two countries which comprise the island of Hispaniola are Haiti and the

Dominican Republic (U. S. Department of the Interior | U. S. Geological Survey).

7. On what fault did the earthquake occur?

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The Haiti earthquake occurred on the Enriquillo-Plaintain Garden fault (U. S. Department of the Interior | U. S. Geological Survey).

8. What was the depth of the earthquake?

The depth of the earthquake was 13 Km or 8. 1 miles (U. S. Department of

the Interior | U. S. Geological Survey).

9. What was the magnitude of the earthquake?

The magnitude of the earthquake was 7.0 (U.S. Department of the Interior |

U. S. Geological Survey).

10. For comparison, what was the magnitude of the Great Sumatra-Andaman earthquake?

The magnitude of the Great Sumatra-Andaman earthquake was 7.5 (U.S.

Department of the Interior | U. S. Geological Survey).

11. On the modified Mercalli Intensity scale, what was the greatest shaking intensity recorded (near Port-au-Prince)?

The greatest shaking intensity recorded (near Port-au-Prince) on the

modified Mercalli Intensity scale was X (U. S. Department of the Interior | U.

S. Geological Survey).

12. How many earthquakes greater than 6. 5 magnitude occurred in the Haiti region since 1900?

Twenty-two earthquakes have occurred in the Haiti region since 1900 including the Haiti earthquake of January 12, 2010 (U. S. Department of the Interior | U. S. Geological Survey).

13. When was the last earthquake with greater than 6. 5 magnitude in the Haiti region?

The last earthquake with a magnitude greater than 6. 5 in the Haiti region occurred on January 12, 2010 (U. S. Department of the Interior | U. S.

Geological Survey).

14. What do the green lines represent? (Check your answer to 4 and 5 above).

The green lines represent transform faults (U. S. Department of the Interior |

U. S. Geological Survey).

15. What does the size of the circles represent?

The size of the circles represents the magnitude of the earthquake (U. S.

Department of the Interior | U. S. Geological Survey).

16. What does the color of the circles represent?

The color of the circles represents the depth of the earthquake in Kilometers

(U. S. Department of the Interior | U. S. Geological Survey).

17. The fault along which the earthquake occurred extends to what city in Jamaica?

The fault along which the earthquake occurred extends to the city of Kingston in Jamaica (U. S. Department of the Interior | U. S. Geological Survey).

18. Aside from the immediate devastation and loss of life from the earthquake, what are some of the longer term implications regarding health and safety in Haiti?

Some of the long-term implications regarding health and safety in Haiti include: the fact that the two major plate boundaries upon which Haiti lies will inevitably contribute to strong future earthquakes. As a result of faulty buildings, future earthquakes will pose further threats to the lives of individuals. In essence, building codes should be reviewed to ensure safer and stronger buildings in the event of future hazards (U. S. Department of the Interior | U. S. Geological Survey). Works Cited

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