

Assignment #:

Name:

Date:

Per:

The Japan Tsunami: How It Happened

1. What happened to the coast of Japan after the tsunami?
2. How far off the coast was the epicenter of this earthquake?
3. What kind of plate boundary does Japan lie on? (Hint: the plates are colliding)
4. How much energy was released during the 2011 earthquake?
5. How fast do P waves travel? How fast do S waves travel?
6. Why were the nuclear reactors at Fukushima still in danger even after the shut off?
7. How long did the earthquake last?
8. What is liquefaction?
9. What does the speed of a tsunami depend on?
10. What happened to the size of the tsunami as it reached shallow water?
11. Why did the height of the tsunami vary greatly from city to city?
12. Why did the tsunami travel so far inland in Sendai compared to other cities?
13. What tsunami defenses did Miyako have in place?
14. Why didn't Miyako's defenses work?
15. How did the tsunami make the situation at Fukushima worse?
16. How high was the tsunami by the time it hit Hawaii?
17. How did cars end up on top of buildings that were taller than the recorded height of the wave?
18. Why is Tokyo considered particularly vulnerable to tsunamis?
19. How many aftershocks occurred in the week following the main earthquake?
20. What was the magnitude of most of the aftershocks?
21. How damaging was the tsunami by the time it reached California?
22. Why are scientists still concerned about the plate boundaries around Japan?