



Name _____ Date _____

Quaking, Shaking Earth Web quest

Using the www.thesciencequeen.net website, go to the 7th grade section, projects and click on the Quaking, Shaking Earth Web quest.

Website #1 Earth - Our World in Motion

Click on What's the Big Idea about Earth.

- We live on the Earth's _____, a layer of rock about _____ thick.
- What motion in the inner core cause the Earth to act like a giant magnet? _____
- Intense heat flowing out of the _____ and mantle makes the _____ flow in circles.
- The motion of the _____ causes the _____ to move.
- The moving _____ create _____.
- The _____ release gases into the _____.
- The _____ acts like a giant blanket, keeping the planet warm.

Website # 2: Puzzles of the Earth

- These plates lie above the magma and are moved by the _____ of the mantle
- What Are Oceanic Plates? _____
- What Are Continental Plates? _____
- What are the three types of plate movement?

Plate Movement	Diagram of Plate Movement	Constructive/Destructive (Choose 1 & explain why)	What forms at this boundary?
Divergent	12.	13.	14.
Convergent	15.	16.	17.
Transform	18.	19.	20.

Website #3 – Great Rift Valley

21. The Great Rift Valley runs from Northern _____ to _____ in East _____.
22. The valley is created from the _____ plate & the _____ plate rifting apart.

Website #4 – Mid-Atlantic Ridge

23. The **Mid-Atlantic Ridge** is an _____ of the _____, which runs from _____ to _____.
24. This is the _____ mountain range on Earth.
25. According to plate tectonics, this ridge runs along a _____.

Website #4 Virtual Cave

26. Where are the largest lava tube caves found? _____
27. How are lava tube caves formed? _____
28. Most tubes form when fluid _____ flows down the sides of _____, the upper layer begins to _____, and the lava beneath continues to _____ in tubular conduits beneath the surface. Due to the insulating effects of the hardened lava above, molten lava is able to travel considerable _____ underground with very little cooling. In Hawaii, lava tubes have carried fluid lavas _____ or more miles from their source. Tubes may also form when lava follows _____ or _____ on the surface, which then _____ over as lava accumulates along the top edges.
29. Which type of lava would most likely form lava tube caves: a’a or pahoehoe? ____ Why?

30. What are lava balls? _____
How are they similar to snowballs? _____
31. What are lava roses? _____
32. How are helictites different from regular stalactites? _____

Website #5 Tsunami: Magnitude of Terror

33. What is a tsunami? _____

Click on effects and the interactive atlas.

34. In India, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

35. In Myanmar, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

36. In Thailand, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

37. In Malaysia, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

38. In India, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

39. In Indonesia, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

40. In Sri Lanka, how many fatalities were caused by the tsunami? _____ How many are missing? _____ How many were displaced (lost their home)? _____

Lick on Causes and then click on the tsunami formation.. Click on the picture/interactive introduction to answer the following questions

41. When did the tsunami happen? _____

42. What two plates collided to create the earthquake? _____

43. How much seawater was displaced? _____

44. How fast did the wave travel? _____ As it wave lost velocity it gained _____.

Website #6: Pompeii

Click on Vesuvius

1. Who is a plinian eruption named after and what he do that was so important?

2. What kind of volcano is Vesuvius? _____

Click on Pompeii

3. Where did people in Roman times go see the circus? _____

4. Whose eyewitness account gives us insight into the eruption at Pompeii? _____

Website #8 Worst Earthquakes in History

5. What was the worst earthquake in US History? _____
How many perished & by what ? _____

6. How many tsunamis have made the US worst earthquake list? _____

7. What was the world's worst earthquake disaster? _____

8. In Arizona in 1887, how much damage did an earthquake do to Tucson?

9. When was the largest earthquake in Arizona? _____

10. When was the last earthquake in Arizona? _____

Website #9 Life along the fault line

Click on page 2.

11. What did Alfred Wegener name his "supercontinent"? _____

12. How long did Wegener think it took for the supercontinent to break apart and form the
positions our continents are in today? _____

13. What two plates meet at the San Andreas fault? _____

Click on Page 3

14. What is the most common type of fault in California? _____

15. What is a seismic creep? _____

Click on Page 5

16. What does a seismometer measure? _____

17. What scale is used to measure the energy of an earthquake? _____

18. According to the graph, when and where did the most powerful earthquake take place?
