Earthquake WebQuest

Name: _____

1 2 3 4 5 6 7

Directions: Use the following internet links. You and information on each website to answer each question. Place your responses in the space provided and use a different COLOR text or HIGHLIGHT each answer.

Part 1 - Earthquakes USGS
http://earthquake.usgs.gov/learn/kids/eqscience.php

- What is an earthquake?
- What is a foreshock?
- What is a main shock?
- What is an aftershock?
- What causes earthquakes and where do they happen?
- Why does the earth shake when there is an earthquake?
- How do scientists measure the size of earthquakes?
- Describe P waves:
- Describe S waves:
- How can scientists tell where the earthquake happened?
- Can scientists predict earthquakes?

Part 2 - Reuters News Service
http://www.reuters.com/article/worldNews/idUSTRE4B10X520081202

- How deep was the earthquake which struck Taiwan on December 1, 2008?
- When was the most recent, worse earthquake to strike Taiwan? Describe it.

Part 3 - USGS Earthquake Hazards Program
http://earthquake.usgs.gov/ - Use the USGS Latest Earthquake Map to answer the following questions.

- When was the most recent earthquake (In the entire world) and what was its magnitude?
- Where was the most recent earthquake closest to Plainfield, IL? Give some details.

Part 4 - USGS Earthquake Hazards Program
http://earthquake.usgs.gov/ - Use the USGS Latest Earthquake Map to answer the following questions.

- When and where was the strongest, recent earthquake in the US?
- What was its magnitude?

Part 5 - National Geographic: Tsunami 2004 https://news.nationalgeographic.com/news/2004/12/deadliest-tsunami-in-history/

- How large was the earthquake that caused the 2004 Tsunami in the Indian Ocean?
- How tall were the largest waves that struck the coastlines around the earthquakes epicenter?
- What type of plate boundary and what kind of fault caused this tsunami?

Part 6 - Measuring Earthquakes: How are earthquakes measured and recorded?
http://earthquake.usgs.gov/learn/glossary/

Use the USGS Glossary to define the following terms:

- Seismograph:
- Seismogram:
- Epicenter:
- Hypocenter (focus):

Part 7 - Go the Measuring Earthquakes page
https://www.usgs.gov/faq/natural-hazards

- Briefly describe how earthquakes are recorded.
- What is the difference between intensity and magnitude?
- List the earthquake magnitude classes. How large must an earthquake be to be considered “great”?
- What was the first instrument to ever record an earthquake?
- How did it work?
- Look under the “How much energy is released by an earthquake?” link.
- What is the atomic bomb equivalent of energy released during a 7.0 quake? An 8.0 quake? A 9.0 quake?