**Earthquakes and Tsunamis Webquest**

**Go to Google and search for “How Shifting Plates Caused the Earthquake and Tsunami in Japan”**

**Click through the 7 stages of the Interactive animation and answer the questions below:**

Q1- Which type of boundary is Sendai closest to?

Q2- What seafloor feature is present at this plate boundary?

Q3- Describe what is happening to the two plates at this plate boundary.  What specifically caused the earthquake here?

Q4 - How did the earthquake generate a tsunami?

**Click on “Shaking Magnitude”**

Q5- Where was the epicenter of the quake? What is the meaning of the term epicenter?

Q6- What was the magnitude of the quake? What is the meaning of the term magnitude? Qualitatively describe what an earthquake of this magnitude means **(look it up!)**.

**Go to Related Multimedia - “A Closer Look at the Damage” and click through some of the images.**

Q7 – Describe the effects of the tsunami.

**Observe the “Predicted tsunami wave heights” graphic.**

Q8 – Approximately how long did it take for the tsunami waves to reach the west coast of the United States?

**At the bottom of the page, click on “Satellite Photos of Japan Before and After…” (as you scroll down, you can move the slider to the right or left to see the before and after pictures of these locations).**

Q9 – Make a few general observations about these photos. What stands out to you?

**Go to Google and search for BBC Fukushima: What Happened.**

Q10 – Summarize the GEOLOGIC events that led to the problem at the nuclear reactor.

**Go to Google and search for Accident at Fukushima Daiichi Nuclear Power Plant**

Q11 – Describe how the earthquake and tsunami ultimately led to the release of radiation into the surrounding environment.