

# PLEASE DO NOT WRITE ON THIS

## ANSWER THESE QUESTIONS IN YOUR AP NOTEBOOK

### Japan's Killer Quake – PBS/NOVA

Use the knowledge you gained from the video Japan's Killer Quake to answer these questions. Please use complete sentences and use detail from class in your responses.

#1. Describe the Earthquake in Japan, March 11<sup>th</sup>, 2011.

**Magnitude:** \_\_\_\_\_

**Duration:** \_\_\_\_\_

Explain what each type of wave did during the earthquake:

**p-waves:** \_\_\_\_\_

**s-waves:** \_\_\_\_\_

**surface waves:** \_\_\_\_\_

#2. For a tsunami to occur a trigger event must happen, like an earthquake, volcanic eruption, etc. Explain why this event must be high in magnitude or extremely explosive.

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#3 Why is Japan susceptible to earthquakes & tsunamis? Explain using plate tectonics.

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\_\_\_\_\_

#4 Japan's latest quake occurred only 80 miles offshore. Do you think the Tsunami warning system was still helpful? What other ways do the Japanese warn their people? Explain.

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\_\_\_\_\_

#5. The Pacific Tsunami Warning System, a coalition of 26 nations headquartered in Hawaii helps warn coastal nations of tsunamis. What types of measurements do they take and what data do they use to determine which tsunami advisory bulletin to issue?

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\_\_\_\_\_

#6. Japan faces lots of challenges in their recovery, disease, sanitation, structure damage, loss of family/friends & the nuclear radiation threat., to name a few. What do you think is their greatest challenge and why?

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#7 Explain the impacts that the earthquake/tsunami had on the nuclear power plant and the effects of the radiation on the area.

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**10 points Extra Credit:** Research the last 5 tsunamis and create a graph comparing their degree of destruction. Give their name, date of occurrence, level of destruction and trigger (earthquake, etc.)