DISCLAIMER: These topics are meant to help you focus your studying for your midterm exam. You are still responsible for all the reading that was assigned, everything discussed in lecture, and all in-class exercise topics.

IMPORTANT: Just because a question on a worksheet wasn't marked wrong doesn't mean your response was 100% correct. Refer to the online keys for more ideal/complete answers (i.e., more like a response I expect on an exam).

ASK QUESTIONS about any material you're unsure of…

Earth structure, geologic time, plate tectonics

Earth structure and details about the composition and strength of the different layers of the earth
Differences between oceanic and continental crust
Rock types - where they are found, how they are related (the rock cycle), mafic vs. felsic rocks
Geologic time (in general)
Relative vs. absolute age dating
Age of the earth and the oldest rocks
Age of the oceanic crust
Pangea and its subsequent break-up
Plate boundary types and specific characteristics (volcanism, earthquakes, and topography) of those boundary types [Tectonic plate boundary characteristics handout]

Earthquakes, seismology, etc.

Types of faults and the geologic environments in which they are found
Earthquakes (what is an earthquake?)
Virtual Earthquake topics and techniques
Seismology (different seismic waves, earthquake location, determining magnitude of a quake)
Some details about specific earthquakes we discussed in lecture:
- 1906 San Francisco and 1989 Loma Prieta quakes
- 1964 Alaska
- 1995 Kobe, Japan and similarities with the Loma Prieta quake
- Quakes in other places: Basin and Range, Hawaii, New Madrid seismic zone, east coast of the U.S.

The San Andreas fault and the North America-Pacific plate boundary
Earthquake: Where the Fault Lies video and questions from the worksheet
Earthquake hazards — what controls the amount of shaking you feel?

Tsunami

Tsunami — causes of tsunami, types of damage, how they travel through the ocean, etc.
Is a tsunami a tidal wave?
Tsunami warning systems — where are they? why are they there? what do they measure?
How big (Richter magnitude) does an earthquake need to be to cause a tsunami?