Name_____

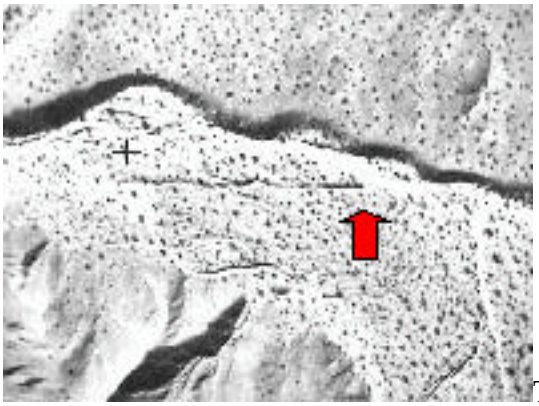
Earthquake!

Whole Lotta Shakin!

Shut your eyes. Imagine you are experiencing an earthquake. Describe what you see, hear, and feel: _____

_____

_____



This is a picture of a part of California from the air. Can you see where an earthquake has moved the land? Where is the force coming from?_____

Engineering Challenge

Who: Federal Emergency Management Agency (FEMA)
What: FEMA needs a simulation of an earthquake-resistant structure
Why: To demonstrate how earthquake waves & vibrations affect buildings, highways, etc.
Where: FEMA website
When: (insert deadline)

Problem
Design a building that can resist damage by an earthquake.

Specifications
Your model must have the following:

1. Information on the size and shape of the building or structure.
2. Information on the materials used to make it.
3. Information on how it will resist damage by earthquakes.

Your explanation must include the following:

1. How the Earth's crust moves in an earthquake.
2. How vibrations might damage a traditional structure.
3. How your structure might be better.

Each report must include:

1. A detailed drawing, labeled with dimensions.
2. A written description.