

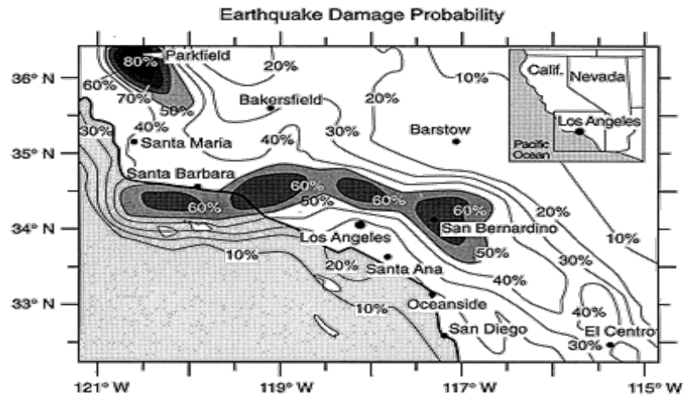
**Earthquake Epicenter Worksheet 1**  
**Ms. Webster – Earth Science Regents**

**Name** \_\_\_\_\_  
**17-JAN-08**

Base your answer to the questions 1 and 2 on the Earth Science Reference Tables, the map below, and your knowledge of Earth science.

1. The map shows a portion of California along the San Andreas Fault zone. The map shows the probability (percentage chance) that an earthquake strong enough to damage buildings and other structures will occur between now and the year 2024.

Which city has the greatest danger of damage from an earthquake?



1. Barstow
2. Parkfield
3. Oceanside
4. San Bernardino

2. The map above shows a portion of California along the San Andreas Fault zone. The map shows the probability (percentage chance) that an earthquake strong enough to damage buildings and other structures will occur between now and the year 2024.

If a large earthquake were to occur at San Diego, the earliest indication at another California location of the occurrence of that earthquake would be the arrival of the

- |                              |                              |
|------------------------------|------------------------------|
| 1. S-waves at Oceanside      | 3. P-waves at Oceanside      |
| 2. S-waves at San Bernardino | 4. P-waves at San Bernardino |

3. A seismograph records the arrival of a P-wave at 11:13 a.m. If the earthquake occurred 4,000 kilometers from the recording station, when did the earthquake occur?

- |               |               |
|---------------|---------------|
| 1. 11:06 a.m. | 3. 11:13 a.m. |
| 2. 11:11 a.m. | 4. 11:20 a.m. |

4. Through which materials can P-waves travel?

- |                          |  |
|--------------------------|--|
| 1. solid rock, only      | 3. magma, water, and natural gas, only       |
| 2. magma and water, only | 4. solid rock, magma, water, and natural gas |