

COMPARING RICHTER AND MERCALLI SCALES

Name _____ Block _____

Refer to pages 9 & 10 in the Earthquakes in Missouri booklet.

1. What does the Richter scale measure?
2. What does the Mercalli scale measure?
3. The Richter scale is divided into how many parts?
4. The Mercalli scale is divided into how many parts?
5. Each successive reading on the Richter scale is _____ times as large as the reading preceding it.
6. What can the Richter scale tell us when it is used to compare different earthquakes?
7. What Richter reading is the smallest that is usually felt by most people? _____
 - a. This corresponds to what reading on the Mercalli scale? _____
 - b. What effects would people observe? _____
8. There was a 63% chance of an earthquake in Missouri registering a 6.7 on the Richter scale by the year 2000; and there is a 97% chance of this occurring in the next 50 years.
 - a. This corresponds to what reading on the Mercalli scale? _____
 - b. What effects would people observe? _____
9. There was a 10% chance of an earthquake in Missouri registering a 7.6 on the Richter scale by the year 2000; and a 25% chance of this occurring in the next 50 years.
 - a. This corresponds to what reading on the Mercalli scale? _____
 - b. What effects would people observe? _____
10. The most powerful earthquake on record was one measuring 8.9 on the Richter scale.
 - a. This corresponds to what reading on the Mercalli scale? _____
 - b. What effects would people observe? _____
11. SUMMARY PARAGRAPH: Compare/contrast the Richter scale to the Mercalli scale. Include what they measure and the advantages of each.