

Main Idea

Determining Earthquake
Magnitude

magnitude distance ground motion

motion fault strength

total amount of energy

descriptions of effects

amount of damage

XII

I

shaking

Details

Compare and contrast the Richter magnitude scale, the moment magnitude scale, and the Modified Mercalli scale.

Richter Magnitude Scale

The scale uses the amount of _____
at a given _____ from an earthquake
to determine _____

All

Measure the size, or intensity, of
an earthquake

Moment Magnitude Scale

Measures the _____
_____ released by an earthquake;
energy released depends
on:

1. the size of the _____;
2. the _____ that
occurs;
3. the _____
of the rocks.

Modified Mercalli Scale

Measures the _____
_____ that
results from _____
Determined based on _____

Scale ranges from _____
to _____