

Name \_\_\_\_\_

## Measuring the Mighty Quakes: How Scientists Gauge Earthquake Power

### Multiple Choice Questions

1. What does the Richter scale measure?
  - a) The intensity of an earthquake's surface shaking
  - b) The earthquake's overall size and energy release
  - c) The speed of seismic waves during an earthquake
  - d) The depth of the earthquake's epicenter
  
2. How does the Richter scale work?
  - a) It measures seismic wave speed.
  - b) It assigns a numerical value to earthquake intensity.
  - c) It calculates the earthquake's magnitude based on fault length.
  - d) It quantifies the amplitude of seismic waves.
  
3. What instrument do scientists use to detect ground movements during an earthquake?
  - a) Seismometer
  - b) Thermometer
  - c) Barometer
  - d) Telescope
  
4. What is the primary difference between the Richter scale and the Moment Magnitude Scale?
  - a) The Richter scale considers fault length.
  - b) The Moment Magnitude Scale measures seismic wave amplitude.
  - c) The Moment Magnitude Scale accounts for fault slip and other factors.
  - d) The Richter scale is logarithmic, while the Moment Magnitude Scale is linear.
  
5. What does the Modified Mercalli Intensity (MMI) scale describe?
  - a) The earthquake's overall energy release
  - b) The earthquake's magnitude
  - c) The effects of an earthquake at specific locations
  - d) The speed of seismic waves

