

Magnitude is a measure of the size of an earthquake. There are a variety of methods used by scientists to calculate magnitude, the most familiar of which is the Richter magnitude. Typically, the calculation of magnitude involves measuring the largest ground motion record during the arrival of a specific type of seismic wave and then correcting for distance to the epicenter. Magnitude is expressed in decimal arabic whole numbers. Each earthquake is assigned one magnitude value, although the use of different methods of calculating magnitude may result in a slight variation of reported values. For historical earthquake data where there was no instrumental recording of the shock, magnitude is estimated from the size of the felt area (the geographic region over which a particular earthquake was felt by people). In such cases, the magnitudes are listed as a whole number followed by a  $\pm$  or a fraction (e.g.,  $\frac{1}{2}$ ) rather than a decimal (e.g., 0.5).