

# k10 Units of absolute geologic time

< Gk. *chilioi* thousand, *megas* large, *gigas* giant; L. *annus* year >

Fie, fie how frantically I square my talk! —Edwin Abbott Abbott (1838-1926), *Flatland: A romance of Many Dimensions With Illustrations by the Author, A SQUARE*.<sup>1</sup>

k = kilo = 10<sup>3</sup> M = mega = 10<sup>6</sup> G = giga = 10<sup>9</sup>

A gut feeling for vast lengths of time is not possible. However, we can keep the numbers simple.

Useful time units are:

Abbreviation	Meaning	Use
ky or kyr	thousand years duration thousand years old	- time durations within an epoch - how old something is
My or Myr	million years duration million years old	- time durations within a period or an era - how old something is
Gy or Gyr	billion years duration billion years old	- time durations within an eon - how old something is

To refer to a time in the past use:

Abbreviation	Meaning
ka	thousand years ago
Ma	million years ago
Ga	billion years ago



(Figure k9.3 cont.) Ideally, accurate radiometric dates at enough horizons will become sufficient to know the age of stratigraphic boundaries without recourse to interpolation.

The localities of specimens are indicated by letters.

- S: Solikamsk, U.S.S.R
- O: Oslo, Norway
- D: Dartmoor, England
- NSW: New South Wales, Australia
- G: Geevor, England
- V: Vosges Mountains, France
- H: Harzburg, Harz
- M: Magnitogorsk, U.S.S.R.
- SC: Snobs Creek, Australia
- C: Chattanooga farm, Tennessee
- J: Jackman, Maine
- EG: eastern Greenland
- SH: Shap, England
- EM: eastern Maine

