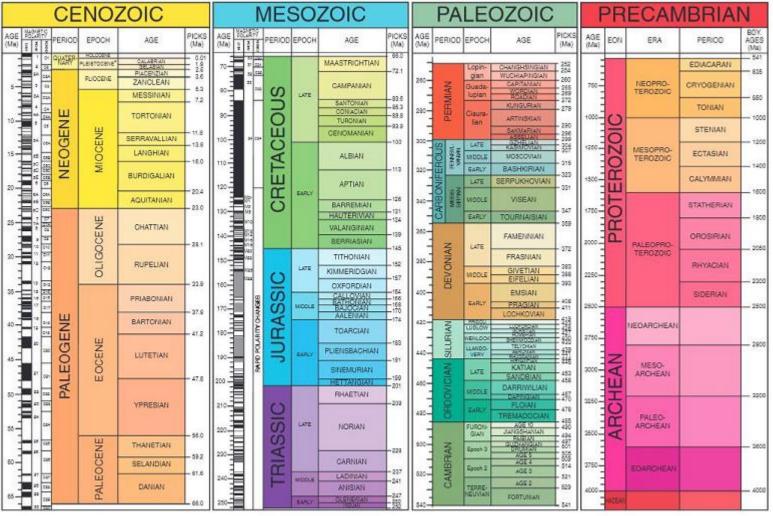


Millions of Years

Figure 1.4 Scaling concept employed by Arthur Holmes in the first half of the previous century to construct the geologic time scale. The cumulative sum of maximum thicknesses of strata in thousands of feet per stratigraphic unit is plotted along the vertical axis and selected radiometric dates from volcanic tuffs, glauconites, and magmatic intrusives along the horizontal linear axis. This version (Holmes, 1960) incorporated an uncertainty envelope from the errors on the radiometric age constraints.

© Arthur Holmes. All rights reserved. This content is excluded from our Creative Commons license. For more information, see http://ocw.mit.edu/help/faq-fair-use/. Source: Gradstein, Felix M., James G. Ogg, and Alan G. Smith, eds. *A Geologic Time Scale 2004*. Vol. 86. Cambridge University Press, 2004. © Felix Gradstein. All rights reserved. This content is excluded from our Creative Commons license. For more information, see http://ocw.mit.edu/help/faq-fair-use/.

GSA GEOLOGIC TIME SCALE



"The Pleistocene is divided into four ages, but only two are shown here. What is shown as Calabrian is actually three ages...-Calabrian in on 13 to 0.78 Ma, Middle from 0.78 to 0.13 Ma, and Late from 0.13 to 0.01 Ma. Walkar, J.D., Seiseman, J.W., Bowning, S.A., and Baboook, L.E., complete, 2012, Geologic Time State v. 40. Beological Society of America. The Genetocity, Meanobic, and Pleotocity and the Firse of the Phynescole Can Names of units and age boundaries (100 ka) for the Centerian et al. (2012) and Cohen et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of boundaries (100 ka) for the Centerian et al. (2012) completeness and pixes of pixes and pixes of the Centerian et al. (2012) completeness and pixes of boundaries et al. (2012) completeness and pixes of boundaries et al. (2012) completeness and pixes of pixes and pixes of pixes and pixes of pixes and pixes

Gradstein, F.M., Ogg, J.G., Schreitz, M.D., et al., 2012, The Geslogic Time Scale 2012; Boston, USA, Elsevier, DOI: 10.1016/8978-0-444-59425-9.00004-4.

Courtesy of The Geological Society of America. Used with permission.

THE GEOLOGICAL SOCIETY OF AMERICA® 12.001 Introduction to Geology Fall 2013

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.