

GEOLOGIC TIME SCALE

Compiled by Brian Grant, May 2003
from, "Geoscience Reporting Guidelines"

PHANEROZOIC															EON																																																
CENOZOIC				MESOZOIC				PALEOZOIC								ERA	PRECAMBRIAN																																														
PERIOD	EPOCH / STAGE		Age Ma	PERIOD	EPOCH / STAGE		Age Ma	PERIOD	EPOCH / STAGE		Age Ma	PROTEROZOIC	Hadrynian (late)	Neoproterozoic			PERIOD	Age Ma																																													
TERTIARY	QUATER-NARY	Holocene	0.01	CRETACEOUS	L	Maastrichtian	65.0 ± 2	PERMIAN	L	Changxingian	251 ± 0.4				ARCHEAN	Helikian (middle)	Mesoproterozoic	Ediacaran	543.9																																												
		Pleistocene	1.64				Longtanian			253 ± 2	Capitanian	256 ± 5	Wordian	264 ± 2					Varangian	565																																											
	NEOGENE	Pliocene	L			Piacenzian	3.40 ± 1.35		E	Campanian	74.0 ± 3	E	Artinskian	269 ± 7				Sakmarian	285 ± 10	Aphebian (early)	Paleoproterozoic	Statherian	1800																																								
			E			Zanclian	5.2 ± 1.5				Roadian			280 ± 4					Asselian				300 ± 4	Gzhelian	303 ± 3	Cryogenian	605																																				
			M			Messinian	6.7 ± 2.3							Kasimovian									306 ± 5		Tonian		850																																				
			L			Tortonian	10.4 ± 1.5				Moscovian			311 ± 3					Bashkirian				314 ± 5	Stenian		1000																																					
		Miocene	L			Serravallian	14.2 ± 1.8		E	Albian	112 ± 2	Serpukhovian	327 ± 6	Visean				342 ± 3		Helikian (middle)	Mesoproterozoic	Ectasian	1400																																								
							M				Langhian		16.3 ± 1					Tournaisian	355 ± 4				Famennian	376.5	Calymmian	1600																																					
							E				Burdigalian		21.5 ± 1.8						Givetian					383		Eifelian	387.5	Orosirian	2050																																		
							Aquitanian				23.3 ± 1		Pragian					394					Emsian	409.5	Rhyacian		2300																																				
	PALEOGENE	Oligocene	L		Chattian	29.3 ± 1.5	E	Aptian	124.5 ± 13	MISSISSIPPIAN	L	Frasnian		388		HADEAN	Neoarchaeon (late)																																														
						E			Rupelian				156.6 ± 2.3	M							Berriasian	144.8 ± 3.1	Devonian	L	Givetian	387.5																																					
													L									Kimmeridgian				151.5 ± 1.2	Silurian	L	Ludlovian	418																																	
																										Oxfordian				154.7 ± 1.0	E	Wenlockian	423																														
																														156.6 ± 2.3			Pragian	409.5	Llandoveryan	428																											
		Eocene	L		Priabonian	35.4 ± 1.4	M	Bathonian	159.7 ± 0.5	E	L	Ashgillian	443																																																		
						M			Bartonian				38.6 ± 1.5	Toarcian							174.0 ± 4.1	Ordovician	L	Caradocian	449																																						
													Lutetian								42.1 ± 1.8				Pliensbachian	183.6 ± 1.5	M	Llandeilian	458																																		
																					Ypresian					50 ± 1.5			Sinemurian	192.0 ± 4.5	E	Llanvirnian	464																														
																										49.6 ± 0.7				Hettangian			197.0 ± 2.7	Arenigian	470																												
Paleocene	L	Thanetian	56.5 ± 1.4	E	Rhaetian	199.6 ± 0.7	Cambrian	Late	Tremadocian	485																																																					
			E			Danian				60.5 ± 2.3	L	Norian	209.6 ± 4.1	Middle																																																	
										L			Carnian					220.7 ± 4.4	Early																																												
																		Ladinian						227.4 ± 4.5																																							
																								239.5 ± 6.5																																							

1) W.B.Harland et al., 1990 - Phanerozoic
2) Lumbers & Card (Geology, Vol. 20, 1991) - PreCamb.
3) R.D. Tucker & W.S. McKerrow, 1995 - Ord.-Sil.
4) R.D. Tucker et al. 1998 - Devonian
5) Palfy et al., 1998 - Jurassic
6) S.A. Bowring & D.H. Erwin, 1998 - Permo-Triassic

base not defined ~4400 Ma