

PHANEROZOIC GEOLOGICAL TIME-SCALE

CAINOZOIC						
AGE (Ma)	PERIOD	EPOCH	AGE	AGE Ma	DURATION m.y.	
0	QUAT.	HOLOCENE		0.01		
		PLEISTOCENE		1.81	1.81	
5	NEOGENE	PLIOCENE	L	Gelasian	1.81	
			M	Piacenzian	2.58	
			E	Zanclean	3.6	
					1.72	
		MIOCENE	L	Messinian	5.3	1.8
						7.1
			M	Tortonian		4.1
						11.2
				Serravallian		3.6
				Langhian		1.6
E	Burdigalian		4.1			
	Aquitanian		3.3			
	PALAEOGENE	OLIGOCENE	L	Chattian	23.8	4.7
					28.5	
E		Rupelian		5.2		
				33.7		
EOCENE		L	Priabonian		3.3	
					37.0	
		M	Bartonian		4.3	
					41.3	
			Lutetian		7.7	
					49.0	
E	Ypresian		6.0			
			55.0			
	PALAEOGENE	L	Thanetian		2.9	
			Selandian		3.0	
E		Danian		4.0		
65				65.0		

MESOZOIC					
AGE (Ma)	PERIOD	AGE	AGE 95% confidence level	DURATION	
65		(*) Boreal scale	65.0 ±0.1		
70	CRETACEOUS	Maastrichtian	71.3 ±0.5	6.3	
80		Campanian	83.5 ±0.5	12.2	
		Santonian	85.8 ±0.5	2.3	
		Coniacian	89.0 ±0.5	3.2	
90		Turonian	93.5 ±0.2	4.5	
		Cenomanian	98.9 ±0.6	5.4	
100		Albian	112.2 ±1.1	13.3	
110		Aptian	121.0 ±1.4	8.8	
120		Barremian	127.0 ±1.6	6.0	
130		Hauterivian	132.0 ±1.9	5.0	
140	JURASSIC	Valanginian*	136.5 ±2.2	4.5	
		Ryazanian*	137.0 ±2.2	5.4	
		Berriasian*	142.0 ±2.6	8.8	
		Portlandian*	144.2 ±2.6		
		Tithonian*	145.6		
		Volgian*	150.7 ±3.0	3.4	
150		Kimmeridgian	154.1 ±3.3	5.3	
		Oxfordian	159.4 ±3.6	5.0	
160		Callovian	164.4 ±3.8	4.8	
170		Bathonian	169.2 ±4.0	7.3	
180	TRIASSIC	Bajocian	176.5 ±4.0	3.6	
		Aalenian	180.1 ±4.0	9.5	
190		Toarcian	189.6 ±4.0	5.7	
		Pliensbachian	195.3 ±3.9	6.6	
200		Sinemurian	201.9 ±3.9	3.8	
		Hettangian	205.7 ±4.0	3.9	
210		Rhaetian	209.6 ±4.1	11.1	
		Sevastian	211.0		
220		Norian	216.0	6.7	
		Lacinian	220.7 ±4.4	6.9	
230	TRIASSIC	Tuvalian	225.0	7.4	
		Julian	227.4 ±4.5	231.4	
		Longobardian	231.4		
		Fassanian	234.3 ±4.6	236.1	
		Illyrian	237.5	237.5	
		Pelsonian	239.4	241.7 ±4.7	
		Bithynian	243.2	244.8 ±4.8	
		Aegean	246.3	248.2 ±4.8	
240		Spathian	241.7 ±4.7	3.1	
		Smithian	244.8 ±4.8	3.4	
245		Olenekian	246.3		
		Induan	248.2 ±4.8		
		Griesbachian			

PALAEOZOIC					
AGE (Ma)	PERIOD	EPOCH/AGE	AGE Ma	DURATION m.y.	
248.2	PERMIAN	Tartarian	252.1	3.9	
		Ufimian - Kazanian	256.0	3.9	
260		Kungurian	260.0	4.0	
		Artinskian	269.0	9.0	
280	PERMIAN	Sakmarian	282.0	13.0	
		Asselian	290.0	8.0	
300		Gzhelian	296.5	6.5	
		Kasimovian	303.0	6.5	
320	CARBONIFEROUS	Moscovian	311.0	8.0	
		Bashkirian	323.0	12.0	
		Serpukhovian	327.0	4.0	
340		Viséan	342.0	15.0	
	CARBONIFEROUS	Tournaisian	354.0	12.0	
360		Famennian	364.0	10.0	
		Frasnian	370.0	6.0	
380		Givetian	380.0	10.0	
	DEVONIAN	Eifelian	391.0	11.0	
400		Emsian	400.0	9.0	
		Praghatian	412.0	12.0	
420		Lochkovian	417.0	5.0	
	SILURIAN	Fridolf	419.0	2.0	
		Ludlow	423.0	4.0	
		Wenlock	428.0	5.0	
440		Llandovery	443.0	15.0	
	ORDOVICIAN	Ashgill	449.0	6.0	
460		Caradoc	458.0	9.0	
		Llandeilo	464.0	6.0	
480		Llanvirn	470.0	6.0	
	ORDOVICIAN	Arenig	485.0	15.0	
		Tremadoc	495.0	10.0	
500	CAMBRIAN	Trempealeauan	495.0	10.0	
		Franconian	505.0	13.0	
		Dresbachian	518.0	6.0	
520		Lenian	524.0	6.0	
	CAMBRIAN	Atdabanian	530.0	6.0	
		Tommotian	534.0	4.0	
		Nemakitian-Daldynian	545.0	11.0	

From: Gradstein, F.M. & Ogg, J.G. (1996) A Phanerozoic timescale, *Episodes*, **19**, 1–2; with amendments from J.G. Ogg (personal communication) 2002. Conventional British spelling used.