

# GEOLOGIC TIME SCALE 2020



## PHANEROZOIC

### CENOZOIC

Age	Period	Epoch	Age/Stage	Age		
0	Quat.	Holocene	5 stages	0.78		
		Pleistocene	Calabrian	1.81		
			Gelasian	2.58		
			Piacenzian	3.60		
			Zanclean	5.33		
5	Neogene	Pliocene	Messinian	7.25		
			Tortonian	11.63		
10	Neogene	Miocene	Serravallian	13.82		
			Langhian	15.99		
			Burdigalian	20.45		
			Aquitanian	23.04		
25			Paleogene	Oligocene	Chattian	27.3
					Rupelian	33.9
					Priabonian	37.7
40	Paleogene	Eocene	Bartonian	41.0		
			Lutetian	48.1		
			Ypresian	56.0		
			Thanetian	59.2		
60	Paleogene	Paleocene	Selandian	61.7		
			Danian	66.0		

### MESOZOIC

Age	Period	Epoch	Age/Stage	Age
70	Cretaceous	Late	Maastrichtian	72.2
			Campanian	83.7
			Santonian	85.7
			Coniacian	89.4
			Turonian	93.9
			Cenomanian	100.5
			Albian	113.2
			Aptian	121.4
			Barremian	126.5
			Hauterivian	132.6
130	Cretaceous	Early	Valanginian	137.7
			Berriasian	143.1
			Tithonian	149.2
			Kimmeridgian	154.8
			Oxfordian	161.5
			Callovian	165.3
			Bathonian	168.2
			Bajocian	170.9
			Aalenian	174.7
			Toarcian	184.2
180	Jurassic	Late	Pliensbachian	192.9
			Sinemurian	199.5
			Hettangian	201.4
			Rhaetian	205.7
			Norian	227.3
220	Triassic	Late	Carnian	237.0
			Ladinian	241.5
			Anisian	246.7
			Olenekian	249.9
			Induan	251.9

### PALEOZOIC

Age	Period	Epoch	Age/Stage	Age
254.2	Permian	Lopingian	Changhsingian	254.2
			Wuchiapingian	259.5
			Capitanian	264.3
			Wordian	269.2
274.4	Permian	Guadalupian	Roadian	274.4
			Kungurian	283.3
			Artinskian	290.5
			Sakmarian	293.5
298.9	Permian	Cisuralian	Asselian	298.9
			Gzhelian	303.7
			Kasimovian	307.0
			Moscovian	315.2
323.4	Carboniferous	Pennsylvanian	Bashkirian	323.4
			Serpukhovian	330.3
			Visean	346.7
			Tournaisian	359.3
371.1	Carboniferous	Mississippian	Famennian	371.1
			Frasnian	378.9
			Givetian	385.3
			Eifelian	394.3
410.5	Devonian	Middle	Emsian	410.5
			Pragian	412.4
			Lochkovian	419.0
			Pridoli	422.7
425.0	Devonian	Early	Ludfordian	425.0
			Gorstian	426.7
			Homerian	430.6
			Sheinwoodian	432.9
438.6	Silurian	Late	Telychian	438.6
			Aeronian	440.5
			Rhuddanian	443.1
			Hirnantian	445.2
452.8	Silurian	Middle	Katian	452.8
			Sandbian	458.2
			Darriwilian	469.4
			Dapingian	471.3
477.1	Silurian	Early	Floian	477.1
			Tremadocian	486.9
			Furongian	491.0
			Jiangshanian	494.2
497.0	Cambrian	Epoch 2	Paibian	497.0
			Guzhangian	500.5
			Drumian	504.5
			Wuliuan	509.0
514.5	Cambrian	Epoch 2	Age 4	514.5
			Age 3	521.0
			Age 2	529.0
			Fortunian	538.8

## PRECAMBRIAN

Age	Eon	Era	Period	Age		
635	Proterozoic	Neoproterozoic	Ediacaran	635		
			Cryogenian	720		
1000	Proterozoic	Neoproterozoic	Tonian	1000		
			Mesoproterozoic	Stenian	1200	
				Ectasian	1400	
				Calymmian	1600	
1800	Proterozoic	Mesoproterozoic	Statherian	1800		
			Paleoproterozoic	Orosirian	2050	
				Rhyacian	2300	
				Siderian	2500	
2800	Archean	Paleoproterozoic	Neo-archean	2800		
			Meso-archean	Paleo-archean	3200	
				Eoarchean	Hadean (informal)	4000
						4500

Gradstein, Ogg, Schmitz, Ogg et al., GTS2020, Elsevier.