



The GEOLOGIC TIME SCALE 2012

PHANEROZOIC

PRECAMBRIAN

CENOZOIC

MESOZOIC

PALEOZOIC

Age	Period	Epoch	Age/Stage	Age
0	Quat.	Holocene		
	Pleistocene	Calabrian	0.78	
		Gelasian	1.81	
	Pliocene	Piacenzian	2.59	
		Zanclean	3.60	
5	Neogene	Messinian	5.33	
		Tortonian	7.25	
		Serravallian	11.63	
		Langhian	13.82	
15	Miocene	Burdigalian	15.97	
		Aquitanian	20.4	
		Chatthian	23.0	
25	Oligocene	Rupelian	28.1	
		Priabonian	33.9	
35	Eocene	Bartonian	37.8	
		Lutetian	41.2	
45	Paleogene	Ypresian	47.8	
		Thanetian	56.0	
		Selandian	59.2	
60	Paleocene	Danian	61.6	
65				66.0

Age	Period	Epoch	Age/Stage	Age
70	Cretaceous	Late	Maastrichtian	72.1
			Campanian	
			Santonian	83.6
		Coniacian	86.3	
		Turonian	89.8	
		Cenomanian	93.9	
100	Early	Albian		100.5
				113.0
				126.3
		Aptian	130.8	
		Barremian	133.9	
		Hauterivian	139.4	
140	Late	Berriasian	145.0	
		Tithonian	152.1	
		Kimmeridgian	157.3	
160	Middle	Oxfordian	163.5	
		Callovian	166.1	
		Bathonian	168.3	
		Jurassic	170.3	
		Aalenian	174.1	
180	Early	Toarcian	182.7	
		Pliensbachian	190.8	
190	Sinemurian		199.3	
		Hettangian	201.3	
200	Late	Rhaetian	209.5	
		Norian	228.4	
		Camian	237.0	
		Ladinian	241.5	
230	Middle	Anisian	247.1	
		Olenekian	250.0	
240	Early	Induan	252.2	

Age	Period	Epoch	Age/Stage	Age	
	Permian	Lopingian	Changhsingian	254.2	
			Wuchiapingian	259.8	
		Guadalupian	Capitanian	265.1	
			Wordian	268.8	
		Cisuralian	Roadian	272.3	
			Kungurian	279.3	
			Artinskian	290.1	
			Sakmarian	295.5	
275	Carboniferous	Pennsylvanian	Asselian	298.9	
			Gzhelian	303.7	
		Mississippian	Kasimovian	307.0	
			L	Moscovian	315.2
			E	Bashkirian	323.2
300	Devonian	L	Serpukhovian	330.9	
			M	Visean	346.7
				E	Tournaisian
325		Silurian	Late	Famennian	372.2
				Frasnian	382.7
	Middle		Givetian	387.7	
			Eifelian	393.3	
350	Ordovician	Early	Emsian	407.6	
			Pragian	410.8	
			Lochkovian	419.2	
		Middle	Pridoli	423.0	
			Ludlow	427.4	
			Wenlock	430.5	
375	Silurian	Llandovery	Sheinwoodian	433.4	
			Telychian	438.5	
			Aeronian	440.8	
400	Ordovician	Late	Rhuddanian	443.8	
			Hirnantian	445.2	
		Middle	Katian	453.0	
			Sandbian	458.4	
425	Cambrian	Early	Darriwilian	467.3	
			Dapingian	470.0	
450	Cambrian	Epoch 3	Floian	477.7	
			Tremadocian	485.4	
		Epoch 2	Age 10	489.5	
			Jiangshanian	494.0	
475	Cambrian	Epoch 1	Palbian	497.0	
			Guzhangian	500.5	
500	Cambrian	Age 5	Drumian	504.5	
			Age 4	509.0	
		Age 2	Age 3	514.0	
			Age 2	521.0	
525	Cambrian	Terreneuvian	Fortunian	529.0	
				541.0	

Age	Eon	Era	Period	Age	
600	Proterozoic	Neoproterozoic	Ediacaran	635	
			Cryogenian		
			Tonian	850	
1000	Mesoproterozoic	Stenian		1000	
					1200
					1400
					1600
1500	Paleoproterozoic	Statherian		1600	
					1800
					2050
1900	Archean	Meso-archean	Orosirian	2300	
				Rhyacian	2500
				Siderian	2800
2500	Archean	Neo-archean		2500	
					2800
2900	Archean	Paleo-archean		2900	
					3200
3200	Archean	Eoarchean		3200	
					3600
4000	Hadean (informal)			4000	
					4100
					4200
					4300
					4500