

THE GEOLOGICAL CALENDAR

Era	Period	How Long Since It Began in Millions of Years	Major Physical Events in Canada	How Living Things Were Changing
Cenozoic	Quaternary Pleistocene	1	Scenery became what it is today after a period of heavy glaciation which covered much of Canada and the northern United States.	Life became essentially modern. Most of man's history is in this short period of time.
	Tertiary Pliocene Miocene Oligocene Eocene Palaeocene	70	Erosion with various uplifts of the land in the east. Western mountains were deeply eroded with filling in of basins between them, with several periods of uplift.	Modern plants spread widely. Mammals which were rare and primitive at beginning diversified and became numerous with rise of modern forms. Seas teemed with modern-looking invertebrate animals.
Mesozoic	Rocky Mountains folded and uplifted			Reptiles began modestly in Triassic, then had great climax in dinosaurs, flying reptiles, marine forms in abundance in Jurassic and Cretaceous, then sudden extinction. Forests started as mostly conifers and ferns but saw spread of flowering plants and grasses in late Mesozoic. Marine invertebrates included many which are now extinct.
	Cretaceous	125	Long and profound erosion in all of the east. Vast inland seas laid down rocks which now cover much of great plains area. Some making of mountains near the Pacific Coast.	
	Jurassic	165		
Triassic	200	In east, lava flows and erosion with infilling of local basins like the Bay of Fundy region. In west some mountain building and some flooding of the interior by seas.		
Palaeozoic	Mountains formed all along eastern seaboard of North America extending up into Maritimes and Newfoundland.			Permian saw end of many forms with long and successful histories in invertebrate world.
	Permian	230	Widespread deserts surrounding shallow inland seas.	Late Palaeozoic forests mostly of spore-bearing and fern-type trees. First reptiles and insects in Pennsylvanian.
	Pennsylvanian	260	Coal deposits laid down in great swamps in some parts of the Maritimes.	First forests in late Silurian or early Devonian.
	Mississippian	290	Red beds and gypsum in parts of Maritimes. Marine deposits in West.	Devonian seas dominated by primitive fishes; corals and crustaceans common.
	Severe folding and faulting of older rocks in eastern area			Early Palaeozoic saw fishes replace invertebrates as dominant marine forms. Lands were probably naked of vegetation in beginning but plants gradually spread over favorable areas.
	Devonian	330	Great inland seas like the modern Hudson Bay covered much of what is now North America and in them thick accumulations of sedimentary rocks took place.	
	Silurian	360		
Ordovician	420			
Cambrian	500			
Long erosion in most parts of North America			Many of the invertebrates were living in Precambrian times but the fossil record is very sparse because of the lack of preservable parts and destruction of most fossils by metamorphism.	
Pre-cambrian		4,000 ±		Ancient rocks which have since undergone great changes during mountain building and igneous intrusion were laid down, folded and deeply eroded many times. The bottoms of a few of the western mountains show these old rocks in little disturbed condition.