

ERA	PERIOD/EPOCH	SYMBOL	AGE	GEOLOGIC EVENTS IN COLORADO	STRATIGRAPHIC COLUMNS			DESCRIPTIONS
CENOZOIC AGE OF MAMMALS	QUATERNARY	Q <sub>u</sub>			UNCOMPAGRE VALLEY	SW COLORADO (SAN JUAN MTS) AND SEUTAH	GLENWOOD SPGS. - ASPEN-VAIL AREA	
	HOLOCENE		PRESENT TO 10,000	THE "RECENT"; COMING OF MAN IN NORTH AMERICA	ALLUVIAL VALLEY FILL	ALLUVIAL VALLEY FILL	ALLUVIAL VALLEY FILL	HISTORIC INCISION STREAM DEPOSITS
	PLEISTOCENE		10,000 TO 2 M.Y.	THE ICE AGE, FOUR MAJOR ICE ADVANCES	GLACIAL OUTWASH TERRACES, PEDIMENTS	GLACIAL DEPOSITS	GLACIAL DEPOSITS	GLACIERS IN THE MOUNTAINS, GLACIAL OUTWASH IN STREAMS
	TERTIARY	T		"REVERSE DEPOSITION" SEQUENCE OF DEPOSITION FOLLOWED BY INCISION AND DOWN CUTTING		BRIDGETIMBER GRAVEL	HIGH LEVEL ALLUVIUM	
	PLIOCENE		2 M.Y. TO 6 M.Y.	MIocene - PLIOCENE PERIOD OF UPLIFT, 5000 FEET TO PRESENT ELEVATIONS, SUBSEQUENT INCISION OF RIVER SYSTEMS	GRAND MESA BASALT	IGNEOUS INTRUSIVES AND EXTRUSIVES	IGNEOUS INTRUSIVES AND EXTRUSIVES	VOLCANIC ACTIVITY
	MIocene		6 M.Y. TO 22.5 M.Y.		↑	SAN JUAN FM.		
	OLIGOCENE		22.5 M.Y. TO 36 M.Y.	VOLCANIC ACTIVITY IN SAN JUANS,	SAN JUAN VOLCANICS GREEN RIVER FM. WASATCH FM.	TELLURIDE CONGLOMERATE	GREEN RIVER FM. WASATCH FM. LARAMIDE INTRUSIVES	LAKE DEPOSITS-OIL SHALE
Eocene		36 M.Y. TO 58 M.Y.	VAST LAKES IN WESTERN COLORADO AND IN UTAH, DEPOSITION OF OIL SHALE DEPOSITS		IGNEOUS INTRUSIVES AGE UNCERTAIN			
PALEOCENE		58 M.Y. TO 65 M.Y.	<i>LARAMIDE OROGENY</i> LONG EPISODE OF MOUNTAIN BUILDING CREATING PRESENT DAY STRUCTURE OF THE ROCKIES		KIRKLAND - LEWIS SHALES MESAVEERDE GROUP	MESAVEERDE GROUP	TIDEWATER AND SWAMP DEPOSITS-COAL	
MESOZOIC AGE OF DINOSAURS	CRETACEOUS	K	65 M.Y. TO 141 M.Y.	THE SEAS CAME IN, THE SEAS WENT OUT- DEPOSITION OF MARINE, NEAR SHORE, AND LAGOON (COAL) DEPOSITS	MESAVEERDE FORMATION	MESAVEERDE GROUP	MESAVEERDE GROUP	MARINE DEPOSITS "DOBES" - SHALE
	JURASSIC	J	141 M.Y. TO 195 M.Y.	TERRESTRIAL DEPOSITION- FLOODPLAIN, MARSH, DUNE	MANCOS SHALE	MANCOS SHALE	MANCOS SHALE	BEACH AND TIDE WATER DEPOSITS - SANDSTN.
	TRIASSIC	T <sub>r</sub>	195 M.Y. TO 230 M.Y.	CONT. EROSION OF MTS., DEPOSITION ON FLOODPLAINS, DELTA	DAKOTA - BURRO CANYON FM. MORRISON FORMATION SUMMERVILLE FM. ENTRADA SANDSTONE	DAKOTA - BURRO CANYON FM. MORRISON FORMATION SUMMERVILLE FM. ENTRADA SANDSTONE CARMEL FM. NAVAJO SS, KAYENTA, WINGATE FM.	DAKOTA - BURRO CANYON FM. MORRISON FORMATION CURTIS FORMATION ENTRADA SANDSTONE	STREAM AND LAKE DEPOSITS - DINOSAURS
PALEOZOIC TERRESTRIAL LIFE FISH LIFE EXPLODES IN THE SEAS	PERMIAN	P	230 M.Y. TO 280 M.Y.	CONT. EROSION OF MTS., DEPOSITION OF EOLIAN RED BEDS	CHINLE FORMATION	CHINLE FM.	CHINLE FORMATION	SAND DUNES
	PENNSYLVANIAN	P <sub>p</sub>	280 M.Y. TO 310 M.Y.	EROSION OF MTS., SALT BASINS BETWEEN RANGES <i>COLORADO OROGENY</i> UPLIFT OF ANCESTRAL ROCKIES INCLUDING THE UNCOMPAGRE HIGHLANDS (NOT TO BE CONFUSED WITH THE UNCOMPAGRE PLATEAU)		CUTLER FM.- INCLUDES CEDAR MESA SANDSTONE	MAROON AND STATE BRIDGE FM.	SAND DUNES (NAVAJO, WINGATE) AND STREAM DEPOSITS (KAYENTA)
	MISSISSIPPIAN	M	310 M.Y. TO 345 M.Y.	MARINE DEPOSITION		HERMOSA FORMATION	MINTURN FORMATION	TERRESTRIAL RED BEDS
	DEVONIAN	D	345 M.Y. TO 395 M.Y.			PARADOX FORMATION	EAGLE VALLEY EVAPORITE	MASSIVE TERRESTRIAL RED BEDS
	SILURIAN	S	395 M.Y. TO 435 M.Y.	MARINE DEPOSITION AND EROSION		LEADVILLE LIMESTONE	LEADVILLE LIMESTONE	MARINE DEPOSITS - LIMESTONE
	ORDOVICIAN	O	435 M.Y. TO 500 M.Y.			OURAY LIMESTONE ELBERT FORMATION	DEVONIAN AGE FMS.	SALT BEDS
	CAMBRIAN	C	500 M.Y. TO 600 M.Y.	MARINE DEPOSITION				MARINE DEPOSITS - LIMESTONE
PRECAMBRIAN	pC		METAMORPHOSED "BASEMENT" ROCK	METAMORPHIC ROCK	METAMORPHIC ROCK	METAMORPHIC AND INTRUSIVE ROCK	VERY OLD METAMORPHIC AND INTRUSIVE ROCK	

REFERENCE: TWETO ET AL (1978), CHRONIC (1980), WILLIAMS (1964), HAYNES ET AL (1972)

<u>ERA</u>	<u>PERIOD / EPOCH</u>	<u>AGE</u>	<u>GEOLOGIC EVENTS IN COLORADO</u>	<u>ROCK UNITS NEAR OLATHE</u>
<b>CENOZOIC</b>	QUATERNARY			
	HOLOCENE	0 TO 10,000	THE "RECENT", COMING OF MAN IN NORTH AMERICA	STREAM DEPOSITS
	PLEISTOCENE	10,000 TO 2 M Y	THE ICE AGE, FOUR MAJOR ICE ADVANCES	MESA TOP GRAVELS
	TERTIARY			
	PLIOCENE	2 TO 6 M Y	THE LANDSCAPE IS LIFTED 5000 FEET TO PRESENT ELEVATIONS AND RIVERS START CARVING CANYONS	
	MIOCENE	6 TO 22.5 M Y		
	OLIGOCENE	22.5 TO 36 M Y	ACTIVE VOLCANOS IN THE SAN JUNA MTNS VAST LAKES ARE PRESENT IN COLORADO AND UTAH, DEPOSITION OF OIL SHALE	
	EOCENE	36 TO 58 M Y		
	PALEOCENE	58 TO 65 M Y		
			<u>LARAMIDE OROGENY, A LONG PERIOD OF MOUNTAIN BUILDING CREATING THE PRESENT DAY STRUCTURE OF THE ROCKY MOUNTAINS</u>	
<b>MESOZOIC</b>	CRETACEOUS	65 TO 141 M Y	A VAST SHALLOW OCEAN COVERED COLORADO THEN RETREATED LOW LANDS OF RIVERS AND MARSHS EROSION OF MOUNTAINS	MANCOS SHALE (DOBIES) DAKOTA SANDSTONE MORRISON FM. ENTRADA SS CHINLE FORMATION
	JURASSIC	141 TO 195 M Y		
	TRIASSIC	195 TO 230 M Y		
<b>PALEOZOIC</b>	PERMIAN	230 TO 280 M Y	EROSION OF MOUNTAINS <u>COLORADO OROGENY, UPLIFT OF ANCESTRAL ROCKIES INCLUDING THE UNCOMPAHGRE HIGHLANDS, A VAST MOUNTAIN RANGE WHERE THE UNCOMPAHGRE VALLEY IS NOW.</u> OCEANS COVERED COLORADO OCEANS COVERED COLORADO OCEANS COVERED COLORADO OCEANS COVERED COLORADO OCEANS COVERED COLORADO	
	PENNSYLVANIAN	280 TO 310 M Y		
	MISSISSIPPIAN	310 TO 345 M Y		
	DEVONIAN	345 TO 395 M Y		
	SILURIAN	395 TO 435 M Y		
	ORDOVICIAN	435 TO 500 M Y		
	CAMBRIAN	500 TO 600 M Y		
<b>PRECAMBRIAN</b>		OLDER THAN 600 MILLION YEARS		THE ROCKS OF THE BLACK CANYON