- Paleocene Epoch ("ancient recent") -- Geologic conditions: sediments mainly terrestrial in North America. Plant life: similar to those in the Cretaceous. Animal life: no dinosaurs; dominance of the archaic mammals; appearance of creodonts (archaic carnivores) and the condylarths (primitive hoofed mammals).
- Eocene Epoch ("dawn of recent") -- Geologic conditions: mountains eroded; no continental seas; climate warmer. Plant life: many of the modern genera, such as the beeches, dogwoods, walnuts, maples, and elms. Animal life: many modern orders of reptiles and birds; placental mammals diversified and specialized; progenitors of the modern mammals, including the ancestors of the camels, pigs, horses, and primitive monkeys.
- Oligocene Epoch ("slightly recent") -- Geological conditions: lands lower, climate warmer; sedimentation well-developed in easterly Great Plains and Oregon; much fossilization in Bad Lands of South Dakota, in Eastern Wyoming, and in Black Hills of North Dakota; greatest development in Germany, with important sections in the Alps. Plant life: maximum spread of forests; rise of monocotyledons, flowering plants. Animal life: archaic mammals become extinct, the true carnivores replace the creodonts; rise of anthropoids; forerunners of most living genera of mammals appear; characteristic mammals are archaeotherium (giant pig), poebrotherium (ancestor of the camels), mesohippus (early horse), hyracodon (cursorial rhinoceros), and hoplophoneus (progenitor of the saber-toothed cats).
- Miocene Epoch ("less recent") -- Geological conditions: Sierra and Cascade mountains formed; volcanic activity in northwest United States, great accumulation of volcanic agglomerates in the Yellowstone Park region; period of mountain building in the Alps, Apennines, and Himalayas; climate cooler. Plant life: plants very similar to modern types, including the grasses, pines, and hard woods, such as sumac, beech, elm, and oak. Animal life: great development of modern mammals, especially in North and South America; primitive types of dogs, camels, horses, antelope, elephants, and rodents in North America; first manlike apes.
- Pliocene Epoch ("more recent") -- Geologic conditions: continued rise of mountains of western North America; considerable volcanic activity, especially in the Rocky Mountain region. Plant life: decline of forests, spread of grasslands; flowering plants, monocotyledons developed; fossil plants abundant in Europe. Animal life: numbers of mammals very similar to the Pleistocene and Recent, including all types of carnivores, horses, browsing camels, antelopes, and mastodons.