

Geology 101, Fall 2007

Name:

**Assignment 4: Dating methods and structural geology**  
**Define/distinguish** the following terms:

relative dating vs. numerical (absolute) dating

original horizontality vs. lateral continuity

faunal succession vs. evolution

uniformitarianism vs. catastrophism

index fossils vs. correlation

(geologic) formation vs. (geologic) period

dendrochronology vs. carbon-14 (radiocarbon) dating

Uranium-series dating vs. thermoluminescence

stress (compression, tension, shearing) vs. strain

plastic deformation vs. brittle failure

fold (anticline and syncline) vs. fault (reverse, normal and strike-slip)

orogeny (fold-and-thrust, fault-block) vs. peneplain

Place the geological **eras** of the Phanerozoic Eon in chronological order from oldest to youngest.

Place the geological **periods** of the Paleozoic Era in chronological order from oldest to youngest.

Place the geological **periods** of the Mesozoic Era in chronological order from oldest to youngest.

Place the geological **periods** of the Cenozoic Era in chronological order from oldest to youngest.

Place the geological **epochs** of the Tertiary Period in chronological order from oldest to youngest.