

Geology 101, Fall 2006

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. lichenometry

fission-track 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.