

Vocabulary: Unit 3: History of Earth

differentiation	The separation of Earth into layers based on density.
Giant Impact Hypothesis	The hypothesis that the moon was created out of the debris left over from a collision between the young Earth and a Mars-sized body.
cellular respiration	Metabolic reactions in the cell that convert energy from nutrients into usable energy.
outgassing	The transfer of gases from Earth's mantle to the atmosphere by volcanic eruptions.
body fossil	The remains of an ancient organism. Examples: Shells, bones, teeth, leaves.
trace fossil	Evidence of the activity of an ancient organism. Examples: Tracks, tubes, burrows, bite marks, feces.
index fossil	A fossil that indicates the relative age of the rock in which it is found; come from species that were widespread, but existed for only a short period of time.
lateral continuity	Sedimentary rock layers extend sideways as wide as the basin in which they form.
original horizontality	The idea that sedimentary layers are always deposited horizontally.
Principle of Cross-cutting Relationships	One of Steno's Laws that states that an intrusion or fault is younger than the rocks that it cuts through.
superposition	In a sequence of sedimentary rock layers, the oldest is at the bottom and the youngest is at the top.
unconformity	A gap in the sequence of rock layers
parent isotope	An unstable atom that will undergo radioactive decay.
daughter product	The product of the radioactive decay of a parent isotope.
half-life	The amount of time required for half the atoms of a radioactive substance to decay to the daughter product.
radioactivity	Emission of high-energy particles by unstable isotopes.
radiometric dating	The process of using the concentrations of radioactive substances and daughter products to estimate the age of a material.
geologic time scale	A division of Earth's history into blocks of time based on major events in geology, climate, and the evolution of life.