

Layered Earth Geology Correlations For Kentucky State Science Standards



Middle School: Grades 5-8		Lesson Plans
Grade 5	Water is a powerful solvent that dissolves earth materials, allowing them to impact the ocean system as water is cycled into it.	C4, D3
Grade 6	The total amount of material that makes the solid Earth is relatively constant (excluding impacts), even though rocks and minerals often change properties through a variety of processes that transform them (rock cycle).	C2
	The Earth's surface is not uniform due to a number of constructive and destructive forces that constantly reshape it. The past effects of these processes can be inferred, and the data these inferences are based upon can also be used to predict future changes.	D1-4
Grade 7	Models of the interior of the Earth have been constructed primarily from inferences based on limited data obtained during earthquakes and volcanic eruptions. These models are useful, but are open to revision or rejection as new information is obtained.	A1-2
	The Earth's layers vary widely in their properties, and interactions between them can manifest themselves in ways that impact both the Earth and its organisms.	A1-2
	While some changes to the Earth occur without warning, many changes to the surface or atmosphere can be predicted from available data/evidence.	G4
Grade 8	Heat flow and movement of molten rock within the interior of the Earth results in crustal changes such as earthquakes, volcanoes and continental drift.	B2, E1, F1
	Research and evaluate the geological dating techniques that were used to determine the accepted age of the Earth	G1
	Identify a variety of landforms on the Earth's surface that have undergone changes (both fast and slow) and investigate the forces responsible for those changes	D1-4
	Observe convection currents in liquids and model the movement of molten rock within the Earth in order to explain how internal heat is transferred	A2, B3

High School: Grades 9-12

Lesson Plans

The shape and location of the continents have been gradually changing for millions of years because density differences inside the mantle result in convection currents. These changes, as well as more rapid ones (e.g. earthquakes, volcanoes, tsunamis) can impact living organisms.

B2, D1-4, E5,
E3

Compare methods used to measure the ages of geologic features

G1

Research the historical rise in acceptance of the theory of Plate

B1-3

Tectonics and the geological/biological consequences of plate movement