Layered Earth Geology Correlations For Tennessee Science Standards

Middle School: Grades 5-8		**Lesson Plans**
0507.7.1	Compare geologic events responsible for the Earth's major geological features	B3, D1-4, E1, F1
0507.7.2	Prepare a chart to compare how volcanoes, earthquakes, faulting and plate movements affect the Earth's surface features	B3, E1, F1
0707.7.1	Organize and explain information about the properties of minerals and their uses	C1
0707.7.2	Label a diagram that depicts the major processes of the rock cycle	C2
0707.7.3	Distinguish among sedimentary, igneous, and metamorphic rocks and relate these to a simple diagram of the rock cycle	C2-3
0707.7.4	Recognize that the earth's layers have different thickness, states of matter, densities, and chemical makeup	A2
0707.7.5	Analyze the relationship between plate movements and areas of earthquake activity	E1
0707.7.6	Analyze the relationship between plate movements and mountain building	B3
0707.7.7	Analyze the relationship between plate movements, volcanoes, and sea floor spreading	B2, F1

High School: Grades 9-12		**Lesson Plans**
3204.3.1	Use models to explain the theory of plate tectonics	B3
3204.3.2	Apply mantle convection currents to distinguish between divergent and convergent plate boundaries	B3
3204.3.3	Explain and map the relationship between plate tectonics and mountain building, volcanoes, and	B3, E1, F1

	earthquakes	
3204.3.4	Distinguish between minerals and rocks	C1
3204.3.5	Identify minerals according to their physical properties	C1
3204.3.6	Distinguish among sedimentary, igneous, and metamorphic rocks	C3
3204.3.9	Distinguish between mechanical and chemical weathering	C4
3204.3.10	Describe the impact of water on the evolution of landforms	D3
3204.3.15	Construct a geological cycle for a physiographic region or geologic time period in Tennessee	G1-2
3204.4.3	Compare and contrast how relative and absolute dating techniques are used to interpret the advance of geologic history	G1
3204.4.4	Construct a geologic timetable for the evolution of earth and the history of life	G1-2
3204.4.5	Interpret evidence for plate tectonics such as the fossil record, mountain range formation, rock strata, paleomagnetism, paleoclimates, and configuration of the continents	B1
3204.4.9	Predict how an environmental change might influence the development of new species or cause the extinction of an existing species	G3