Virginia Standards of Learning Assessment
Earth Science Performance Level Descriptors

Fail/Does Not Meet	Pass/Proficient	Pass/Advanced
A student performing at this level should be able to: • Recognize tools and methods used in scientific inquiry. • Identify components, and processes of Earth and space systems. • Identify three major rock types, minerals, provinces, plate boundaries, and components of a soil profile in the physiographic provinces of Virginia. • Recognize features within cosmology, geology, and meteorology related to geologic time. • Identify basic interactions among humans, resource use, and the environment.	A student performing at this level should be able to: • Utilize scientific tools and inquiry to arrive at, support, and illustrate scientific conclusions. • Compare and contrast the components and interactions of Earth and space systems. • Classify and differentiate among the rocks, minerals, fossils, soil, and plate boundaries evidenced throughout the world, including the physiographic provinces of Virginia. • Distinguish and explain modes of fossil preservation, geologic dating methods, atmospheric evolution, and theories regarding astronomic formation. • Compare and contrast past and present environmental conditions to infer environmental impacts of resource consumption.	A student performing at this level should be able to: • Design and evaluate investigations and theories using scientific inquiry. • Design, construct, and evaluate models of Earth and space systems to make predictions about systems. • Integrate, illustrate, and analyze the processes of the rock cycle and plate tectonics throughout the world, including features found in Virginia provinces. • Differentiate and evaluate modes of fossil preservation, geologic dating methods, atmospheric evolution, and theories regarding cosmology. • Analyze past and present environmental conditions to formulate conclusions and predictions about human use of resources and the impact on the environments and systems interactions.