



Alignment Document
State of Idaho and Aventa Learning Earth Science

Earth Science
2005-2007 Benchmark Blueprint

Standards	Goals	Benchmarks	Unit Name	Course Topic Description	
8-9.ES.1 Nature of Science	8-9.ES.1.1 Understand Systems, Order, and Organization	8-9.ES.1.1.1 Explain the scientific meaning of system, order, and organization.			
		8-9.ES.1.1.2 Apply the concepts of order and organization to a given system.			
	8-9.ES.1.2 Understand Concepts and Processes of Evidence, Models, and Explanations	8-9.ES.1.2.1 Use observations and data as evidence on which to base scientific explanations.	Planet Earth	Scientific Method	
		8-9.ES.1.2.2 Develop models to explain concepts or systems.	Planet Earth	Scientific Method	
		8-9.ES.1.2.3 Develop scientific explanations based on knowledge, logic, and analysis.	Planet Earth	Scientific Method	
	8-9.ES.1.3 Understand Constancy, Change, and Measurement	8-9.ES.1.3.1 Measure changes that can occur in and among systems.			
		8-9.ES.1.3.2 Analyze changes that can occur in and among systems.	Minerals, Rocks,	Rock Cycle and Climate System	
		8-9.ES.1.3.3 Measure and calculate using the metric system.			
	8-9.ES.1.4 Understand the Theory that Evolution is a Process that Relates to the Gradual Changes in the Universe and of Equilibrium as a Physical State	No objectives in Earth Science.			
	8-9.ES.1.5 Understand Concepts of	No objectives in Earth Science.			

	Form and Function			
	8-9.ES.1.6 Understand Scientific Inquiry and Develop Critical Thinking Skills	8-9.ES.1.6.1 Identify questions and concepts that guide scientific investigations.	Planet Earth	Scientific Method
		8-9.ES.1.6.2 Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations.	Planet Earth	Scientific Method
		8-9.ES.1.6.3 Use appropriate technology and mathematics to make investigations.	Planet Earth	Scientific Method
		8-9.ES.1.6.4 Formulate scientific explanations and models using logic and evidence.	Planet Earth	Scientific Method
		8-9.ES.1.6.5 Analyze alternative explanations and models.	Planet Earth	Scientific Method
		8-9.ES.1.6.6 Communicate and defend a scientific argument.	Planet Earth	Scientific Method
		8-9.ES.1.6.7 Explain the differences among observations, hypotheses, and theories.	Planet Earth	Scientific Method
	8-9.ES.1.7 Understand That Interpersonal Relationships Are Important in Scientific Endeavors	No objectives in Earth Science.		
	8-9.ES.1.8 Understand Technical Communication	8-9.ES.1.8.1 Analyze technical writing, graphs, charts, and diagrams.	Covered throughout the course	
8-9.ES.2 Physical Science	8-9.ES. No goals or objectives in Earth Science.			
8-9.ES.3 Biology	8-9.ES. No goals or objectives in Earth Science.			
8-9.ES.4 Earth and Space Systems	8-9.ES.4.1 Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems	8-9.ES.4.1.1 Explain the current scientific theory that suggests that the solar system formed from a nebular cloud of dust and gas.	Geologic Time	Age of the Earth
		8-9.ES.4.1.2 Identify methods used to estimate geologic time.	Geologic Time	Geologic Time Scale

		8-9.ES.4.1.3 Show how interactions among the solid earth, oceans, atmosphere, and organisms have changed the earth system over time.	Geologic Time	Age of the Earth
	8-9.ES.4.2 Understand Geo-chemical Cycles and Energy in the Earth System	8-9.ES.4.2.1 Explain the internal and external energy sources of the earth	Plate Tectonics	Plate Tectonics
8-9.ES.5 Personal and Social Perspectives; Technology	8-9.ES.5.1 Understand Common Environmental Quality Issues, Both Natural and Human Induced	8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources.	Minerals, Rocks,	Rock Cycle and Climate System
	8-9.ES.5.2 Understand the Relationship between Science and Technology	8-9.ES.5.2.1 Explain how science advances technology.		
		8-9.ES.5.2.2 Explain how technology advances science.		
		8-9.ES.5.2.3 Explain how science and technology are pursued for different purposes.		
8-9.ES.5.3 Understand the Importance of Natural Resources and the Need to Manage and Conserve Them	8-9.ES.5.3.1 Describe the difference between renewable and nonrenewable resources.	Minerals, Rocks,	Rock Cycle and Climate System	