Pennsylvania English Language Development

Grades 9-12: Science

Listening	1	Level 1 Entering: Match pictures of water to its various states using visual cues. 16.4.9-12.1L
	2	Level 2 Emerging: Categorize water according to its states and properties with a partner. 16.4.9-12.2L
	3	Level 3 Developing: Predict how the state of water will change given various real-world scenarios in videos. 16.4.9-12.3L
	4	Level 4 Expanding: Compare and contrast the unique properties of water to other liquids with a graphic organizer and teacher direction. 16.4.9-12.4L
	5	Level 5 Bridging: Reflect on how human influence impacts the state of water with a small group. 16.4.9-12.5L
Reading	1	Select traits related to patterns of inheritance (e.g., blond vs. black hair, short tails vs. long tails) with visual support. 16.4.9-12.1R
	2	Identify the different parts of a DNA molecule on a diagram with a partner. 16.4.9-12.2R
	3	Describe the role of protein synthesis in cell reproduction using poster support. 16.4.9-12.3R
	4	Analyze genetic mutations and the how the DNA sequence may or may not affect phenotype using illustrations/photographs. 16.4.9-12.4R
	5	Draw conclusions about the impact of breeding using guided notes (e.g., dog, fruit, flower breeding). 16.4.9-12.5R
Speaking	1	Name examples of extinct and non-extinct species using flash cards (e.g., t-rex, wooly mammoth, raccoons). 16.4.9-12.1S
	2	Identify and describe artifacts that support the theory of evolution (e.g., Identify pictures of fossil skeletons). 16.4.9-12.2S
	3	Describe the possible causes of species extinction using online video resources. 16.4.9-12.3S

Skip to main content

	4 **Discuss how natural selection can impact a population in a small group.** 16.4.9-12.4S
	5 **Debate various theories of evolution, creation, and extinction of life with teacher modeling and class notes.** 16.4.9-12.5S
Writing	1 **Label a simple diagram of the food chain using graphic support.** 16.4.9-12.1W
	2 **Take notes on a graphic organizer to show predator/prey relationships using phrase wall support.** 16.4.9-12.2W
	3 **Write an outline describing a food web which includes producers, consumers, and decomposers with template support (e.g., descriptors of the roles of each organism).** 16.4.9-12.3W
	4 **Summarize the flow of energy within an ecosystem with the support of a model (i.e., as it relates to the food web).** 16.4.9-12.4W
	5 **Produce a research report explaining how the flow of energy within an ecosystem changes when one element is removed with partner support (i.e., as it relates to the food web).** 16.4.9-12.5W