

RISE PLD Science Grade 5

	Below Proficient	Approaching Proficient	Proficient	Highly Proficient
	The Level 1 student is below proficient in applying all three dimensions as specified in the Utah SEEd standards. The student generally performs significantly below the standard for the grade-level, is able to partially access grade level content, and engages with the science and engineering practices and crosscutting concepts with extensive support.	The Level 2 student is approaching proficient in applying all three dimensions as specified in the Utah SEEd standards. The student performs slightly below the standard for the grade level, is able to access grade-level content, and engages with most of the science and engineering practices and crosscutting concepts with some independence and support.	The Level 3 student is proficient in applying all three dimensions as specified in the Utah SEEd standards. The student generally performs at the standard for the grade level, is able to access grade-level content, and engages with the science and engineering practices and crosscutting concepts independently.	The Level 4 student is highly proficient in applying all three dimensions as specified in the Utah SEEd standards. The student generally performs significantly above the standard for the grade level, is able to access above grade-level content, and engages with the science and engineering practices and crosscutting concepts independently.
Earth Science				
5.1	Make observations from data and/or collect information to identify parts of a model and identify patterns that would show how the interactions among Earth's four major systems might cause patterned features of the Earth, distribution of water, and physical and biological constructive and deconstructive forces. Use information and observations from sources to identify natural hazards on humans.	Identify questions, use data sets, create graphs, and/or carry out investigations using models or information that show how the interactions among Earth's four major systems might cause patterned features of the Earth, distribution of water, and physical and biological constructive and deconstructive forces. Compare multiple solutions to help explain the cause and effect relationship of natural hazards on humans.	Ask questions, develop and/or use simple models, carry out investigations, or evaluate evidence using mathematical thinking, reasoning, and information regarding how the interactions among Earth's four major systems might cause patterned features of the Earth, distribution of water, and physical and biological constructive and deconstructive forces. Generate and evaluate the merits or accuracy of a solution that could explain and reduce the cause and effect relationship of natural hazards on humans.	Revise a model, analyze the data sets from an investigation using mathematical thinking, and research how to communicate or predict how the interactions among Earth's four major systems might cause patterned features of the Earth, distribution of water, and physical and biological constructive and deconstructive forces. Evaluate, compare, and revise a solution to a problem to predict changes that can occur in the cause and effect relationships of natural hazards on humans.
Physical Science				
5.2	Make observations about patterns of properties and identify evidence of changes when two or more substances are combined. Measure and graph quantities to show matter is conserved regardless of the change that occurs and make observations from a model that matter is made of particles too small to be seen.	Use models to test controlled variables and determine whether a change occurs when two or more substances are combined. Measure and graph quantities to show matter is conserved regardless of the change that occurs and use a model to show matter is made of particles too small to be seen.	Conduct an investigation, using controlled variables, to combine two or more substances and identify new substances based on the patterns of their properties. Measure and graph quantities to show matter is conserved regardless of the change that occurs and develop a model to show matter is made of particles too small to be seen.	Evaluate and revise an investigation or model that combines two or more substances and identify new substances based on the patterns of their properties. Measure and graph quantities to show matter is conserved regardless of the change that occurs and evaluate limitations of a model that shows matter is made of particles too small to be seen.
Life Science				
5.3	Identify the parts of a model that show the cycling of matter through plants, animals, decomposers, and the environment. Make observations that plants use air, water, and energy from the Sun for growth. Make observations that organisms obtain energy and matter from their food for survival, support, and structures. Use information to identify design solutions that aim to conserve the Earth's environments and resources.	Use a model to show the cycling of matter through plants, animals, decomposers, and the environment. Recognize a change in an ecosystem. Identify data as evidence that plants use air, water, and energy from the Sun for growth. Identify data as evidence that organisms obtain energy and matter from their food for survival, support, and structures. Compare multiple design solutions that aim to conserve the Earth's environments and resources.	Develop and/or use a model to show the cycling of matter through plants, animals, decomposers, and the environment. Create a simple food chain to show an interaction in an ecosystem. Use evidence to construct an explanation that organisms need food for the energy and matter to grow and repair their internal and external structures. Evaluate design solutions that aim to conserve the Earth's environments and resources.	Evaluate and revise a model to show the cycling of matter through plants, animals, decomposers, and the environment. Evaluate the effects when a simple food chain changes. Compare and refine arguments that organisms need food for the energy and materials to grow and repair their internal and external structures. Evaluate, compare and revise a design solution that aims to conserve the Earth's environments and resources.