



5th Grade Science Pacing Guide 18-19

4.0 Target	3.0 Target	2.0 Target	Does Not Extend	T1	T2	T3
Unit 1: Living Things and Ecosystems						
-Identify the effects of a disruption to the flow of energy if one element of the food chain model were changed or removed. AND -Uses a model to describe that energy in animal's food was once energy from the sun. AND -Model is correctly labeled AND -Arrows in model correctly show flow of energy AND -describes verbally or in writing the movement of energy	Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.	-Attempts to use a model to describe that energy in animal's food was once energy from the sun. AND -Model is incorrectly labeled OR -Arrows in model incorrectly show flow of energy OR -Attempts to describe verbally or in writing the movement of energy			x	
Written or verbal explanation includes a well supported inference of what might happen to the movement of matter (air, water, decomposed materials in soil) when the ecosystem changes. (human cause, natural disasters, climate change). AND -Develop a model -Use labeled arrows to show the correct movement of matter among plants, animals, decomposers, and the environment. -Plants, animals and decomposers are correctly labeled -Oxygen, carbon dioxide and carbon are correctly labeled.	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	-Develop a model -Use labeled arrows to show the correct movement of matter among plants, animals, decomposers, and the environment. -Plants, animals and decomposers are correctly labeled -Oxygen, carbon dioxide and carbon are correctly labeled. 4 errors in their model.			x	
Unit 2: Earth Systems						
Create and investigate a plan that explains how one can protect the resources and environment. AND Student is able to use resources to learn and explain how individual communities are protecting the Earth's resources and environment. AND In the explanation, students use domain specific vocabulary such as Earth systems, conserve, reduce, reuse, recycle, and protect.	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Student struggles to use resources to provide examples of how individual communities are protecting the Earth's resources and environment. . Explanations are limited or not fully explained. AND Students uses limited domain specific vocabulary and/or vocabulary doesn't properly support their explanation.				x
Unit 3: Changes in Matter						
Knowing that the law of conservation of matter is true, students explain why the weight of initial materials in an experiment weighs more than the final substance/product. AND Students can measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. AND Students explain why the total weight of matter is conserved using content specific vocabulary such as conserve, heating, cooling, matter, mixing, dissolving, and reaction.	Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.	Students make errors in measuring and graphing quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. AND Students accurately explains why the total weight of matter is conserved or is unable to use content specific vocabulary such as conserve, heating, cooling, matter, mixing, dissolving, and reaction.				
Does Not Extend	Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	Students conduct an investigation and inaccurately determines whether the mixing of two or more substances results in new substances. AND Student inaccurately uses specific vocabulary (state change, gas formation, solid formation, heating, cooling, temperature change, light, etc.) to explain how they know if a new substance was created.	X			x
Unit 4: Earth, the Moon and the Stars						
Does Not Extend	Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	Students may make multiple errors in representing data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. AND Students explanations of why we see different stars throughout the year using evidence is weak and lacking specific vocabulary.	X		x	