Learning Goals	Unit 1 - Human Body & the Brain	Unit 2 - Animal & Plant Adaptations	Unit 3 - Earth's Features & Processes	Unit 4 - Forces & Motion	Unit 5 -Energy & Energy Transfer	Unit 6 - Electricity, Light, & Heat	Unit 7 - Sounds, Waves, & Communications
Physical Science							
Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.				X			
Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.				X			
Plan and conduct a fair test to compare and contrast the forces (measured by a spring scale in Newtons) required to overcome friction when an object moves over different surfaces (i.e., rough/smooth).				X			
Predict how changes in either the amount of force applied to an object or the mass of the object affects the motion (speed and direction) of the object.					X		
Use evidence to construct an explanation relating the speed of an object to the energy of that object.					X		
Provide evidence to construct an explanation of an energy transformation (e.g., temperature change, light, sound, motion, and magnetic effects).						X	
Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.						X	
Use models to explain that simple machines change the amount of effort force and/or direction of force.					X		

Develop a model of waves to describe patterns in terms of amplitude or wavelength and that waves can cause objects to move.							X
Life Science							
Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and plant reproduction.	X	X					
Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	X	X					
Earth and Space Science							
Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.			X				
Plan and conduct scientific investigations or simulations to provide evidence how natural processes (e.g. weathering and erosion) shape Earth's surfaces.			X				
Analyze and interpret data from maps to describe patterns of Earth's features.			X				
Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.			X				
Engineering							

Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.							
Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.			X	X		X	
Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.							X