

Lesson	Standards Taught
Trail Walk	5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water. MS-LS4-4 Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
Water Quality	MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions. MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. 5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
Physics Track	MS-PS2-1 Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. MS-PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object. MS-PS2-5 Conduct an investigation and evaluate the experimental design to provide

	evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.
Physics- Egg Drop	3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. 3-5-ETS1-2 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. 3-5-ETS1-3 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. MS-PS2-1 Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. MS-PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the MS-PS3-1 Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object. object. MS-PS3-2 Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system. MS-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. object. MS-ETS1-1 Define the criteria and constraints

	of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions. MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
Science with Slime	S1.A Substances are made of atoms and molecules. Their properties are determined by the arrangement of atoms. ETS1.A Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints on materials, time, or cost. PS2.A Motion is described by a change in an object's position relative to a reference point. The position, velocity, and acceleration of an object can be determined by the object's motion and forces acting on it. PS1.B Chemical reactions involve the rearrangement of atoms to form new substances, and these changes can be identified by changes in energy, appearance, or other observable features.