



	Grade 5		Grade 6		Grade 7		Grade 8
	Number and Operations in Base Ten	Measurement and Data	Ratios and Proportional Relationships	The Number System	Expressions and Equations	Statistics and Probability	Statistics and Probability
	Fluently multiply multi-digit whole numbers using the standard algorithm.	Convert among different-sized standard measurement units within a given measurement system.	Use ratio and rate reasoning to solve real-world and mathematical problems.	Fluently divide multi-digit number using the standard algorithm.	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering outliers, positive or negative association, linear association, and nonlinear association.
This Bitter Be Good						X	
Take it in Stride	X	X	X	X		X	X
Science Cooks!	X	X	X	X	X		
Heart to Heart	X		X	X	X		X

NEXT GENERATION SCIENCE STANDARDS



SciGirls Live Healthy Activity Guide



	Grade 5				Grades 6-8				
	Physical Science	Engineering Design			Life Science			Engineering Design	
	Make observations and measurements to identify materials based on their properties.	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.	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.	Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.	Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.	Use argument supported by evidence for how the body is a system of interacting sub-systems composed of groups of cells.	Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.	Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.
This Bitter be Good	x				x	x			
Breathing Room							x	x	
Take it in Stride									
Science Cooks!		x	x	x				x	
Heart to Heart							x	x	

