

SCIENCE STANDARDS

STANDARD #	CATEGORY	CORE	STANDARD	1ST QTR	2ND QTR	3RD QTR	4TH QTR
5.PS1	Physical Science	Matter and Its Interactions	1) Analyze and interpret data from observations and measurements of the physical properties of matter to explain phase changes between a solid, liquid, or gas.			1	
5.PS1	Physical Science	Matter and Its Interactions	2) Analyze and interpret data to show that the amount of matter is conserved even when it changes form, including transitions where matter seems to vanish.			2	
5.PS1	Physical Science	Matter and Its Interactions	3) Design a process to measure how different variables (temperature, particle size, stirring) affect the rate of dissolving solids into liquids.			3	
5.PS1	Physical Science	Matter and Its Interactions	4) Evaluate the results of an experiment to determine whether the mixing of two or more substances result in a change of properties.			4	
5.PS2	Physical Science	Motion and Stability: Forces and Interactions	1) Test the effects of balanced and unbalanced forces on the speed and direction of motion of objects.			5	
5.PS2	Physical Science	Motion and Stability: Forces and Interactions	2) Make observations and measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.			6	
5.PS2	Physical Science	Motion and Stability: Forces and Interactions	3) Use evidence to support that the gravitational force exerted by Earth on objects is directed toward the Earth's center.			7	
5.PS2	Physical Science	Motion and Stability: Forces and Interactions	4) Explain the cause and effect relationship of two factors (mass and distance) that affect gravity.			8	
5.PS2	Physical Science	Motion and Stability: Forces and Interactions	5) Explain how forces can create patterns within a system (moving in one direction, shifting back and forth, or moving in cycles), and describe conditions that affect how fast or slowly these patterns occur.			9	
5.LS1	Life Science	From Molecules to Organisms: Structures and Processes	1) Compare and contrast animal responses that are instinctual versus those that are gathered through the senses, processed, and stored as memories to guide their actions.				1
5.LS3	Life Science	Heredity: Inheritance and Variation of Traits	1) Distinguish between inherited characteristics and those characteristics that result from a direct interaction with the environment. Apply this concept by giving examples of characteristics of living organisms that are influenced by both inheritance and the environment.				2
5.LS3	Life Science	Heredity: Inheritance and Variation of Traits	2) Provide evidence and analyze data that plants and animals have traits inherited from parents and that variations of these traits exist in a group of similar organisms.				3

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5.LS4	Life Science	Biological Change: Unity and Diversity	1) Analyze and interpret data from fossils to describe types of organisms and their environments that existed long ago. Compare similarities and differences of those to living organisms and their environments. Recognize that most kinds of animals (and plants) that once lived on Earth are now extinct.				4
5.LS4	Life Science	Biological Change: Unity and Diversity	2) Use evidence to construct an explanation for how variations in characteristics among individuals within the same species may provide advantages to these individuals in their survival and reproduction.				5
5.ESS1	Earth & Space Science	Earth's Place in the Universe	1) Explain that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from the Earth.			1	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	2) Research and explain the position of the Earth and the solar system within the Milky Way galaxy, and compare the size and shape of the Milky Way to other galaxies in the universe.			2	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	3) Use data to categorize different bodies in our solar system including moons, asteroids, comets, and meteoroids according to their physical properties and motion.			3	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	4) Explain the cause and effect relationship between the positions of the sun, earth, and moon and resulting eclipses, position of constellations, and appearance of the moon.			4	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	5) Relate the tilt of the Earth's axis, as it revolves around the sun, to the varying intensities of sunlight at different latitudes. Evaluate how this causes changes in day-lengths and seasons.			5	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	6) Use tools to describe how stars and constellations appear to move from the Earth's perspective throughout the seasons.			6	
5.ESS1	Earth & Space Science	Earth's Place in the Universe	7) Use evidence from the presence and location of fossils to determine the order in which rock strata were formed.			7	
5.ETS1	Engineering, Technology, & Applications of Science	Engineering Design	1) Research, test, re-test, and communicate a design to solve a problem.	1			
5.ETS1	Engineering, Technology, & Applications of Science	Engineering Design	2) Plan and carry out tests on one or more elements of a prototype in which variables are controlled and failure points are considered to identify which elements need to be improved. Apply the results of tests to redesign the prototype.	2			

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5.ETS1	Engineering, Technology, & Applications of Science	Engineering Design	3) Describe how failure provides valuable information toward finding a solution.	3			
5.ETS2	Engineering, Technology, & Applications of Science	Links Among Engineering, Technology, Science, and Society	1) Use appropriate measuring tools, simple hand tools, and fasteners to construct a prototype of a new or improved technology.	4			
5.ETS3	Engineering, Technology, & Applications of Science	Links Among Engineering, Technology, Science, and Society	2) Describe how human beings have made tools and machines (X-ray cameras, microscopes, satellites, computers) to observe and do things that they could not otherwise sense or do at all, or as quickly or efficiently.	5			
5.ETS4	Engineering, Technology, & Applications of Science	Links Among Engineering, Technology, Science, and Society	3) Identify how scientific discoveries lead to new and improved technologies.	6			