



1st 9 weeks Parent Syllabus – Grade 5 Science

Listed below are skills we expect your child to be able to perform and the vocabulary that will be used in the classroom both orally and written

Physical Science	I can Statements	Vocabulary
	<u>P.5.5A: I can demonstrate understanding of the physical and chemical properties of matter.</u> P.5.5A.1: I can obtain and evaluate scientific information to describe physical properties of matter. P.5.5A.2: I can collect, analyze, and interpret data from measurements of the physical properties of solids, liquids, and gases. P.5.5A.3: I can analyze matter through observations and measurements to classify materials. P.5.5A.4: I can make and test predictions about how the density of an object affects whether the object sinks or floats when placed in a liquid. P.5.5A.5: I can design a vessel that can safely transport a dense substance. <u>P.5.5B: I can demonstrate an understanding of mixtures and solutions.</u> P.5.5B.1: I can obtain and evaluate scientific information to describe what happens to the properties of substances in mixtures and solutions. P.5.5B.2: I can analyze and interpret data to communicate that the concentration of a solution is determined by the amount of solute versus solvent in mixtures. P.5.5B.3: I can investigate how different variables affect the rate at which a solute will dissolve. P.5.5B.4: I can design an effective system for separating various mixtures. <u>P.5.5C: I can demonstrate an understanding of physical and chemical changes.</u> P.5.5B.1: I can analyze and communicate results of chemical changes. P.5.5B.2: I can analyze and communicate results of physical changes. P.5.5C.3: I can interpret data to support claims that when mixed, weight of a mixture is conserved.	substance, mass, matter, atom, physical property of matter, chemical property of matter, solubility, solute, solvent, solid, liquid, gas, boiling point, melting point, freezing point, reflectivity, chemical change, physical change, mixture, element, compound, electrical conductivity, thermal conductivity, density, filtration, concentration, flexibility, malleability, ductility, sifting, sieve, magnetism, floatation, evaporation, law of conservation of mass, volume, design, conduct, evaluate, observe, define, interpret, infer/inference, increase, decrease, technique, image, apply, impact, increment, gap, data, insulators, conductors, homogeneous, heterogeneous, relative amount

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Physical/Life Science	I can Statements	Vocabulary
	<u>P.5.6 : I can understand the factors that affect motion using Newton's Laws.</u> P.5.6.1 : I can obtain, communicate, and describe the effect of gravity on an object. P.5.6.2 : I can predict the motion of objects based on past observation and measurement based on position, direction and speed. P.5.6.3 : I can develop and design models to explain the amount and type of force, contact and noncontact and the effects of motion. P.5.6.4 : I can plan and conduct scientific investigations to test the effects of balanced and unbalanced forces of speed and direction of objects in motion. P.5.6.5 : I can predict how change of force, mass, and/or friction affects the motion of an object to convert potential into kinetic energy. P.5.6.6 : I can design a system to increase the effects of friction on the motion of an object.	physical change, chemical change, motion, force, inertia, speed, velocity, acceleration, newton, balanced force, unbalanced force, gravity, friction, energy, potential energy, kinetic energy, chemical potential energy, elastic potential energy, gravitational potential energy, conductor, insulator, hypothesis, controlled experiment, variable, observation, inferences, predictions, purpose, conclusion
	<u>L.5.3A: I can demonstrate an understanding of photosynthesis and energy transfer from the sun.</u> L.5.3A.1: I can understand and demonstrate an understanding of photosynthesis. L.5.3A.2: I can understand the transfer of chemical energy necessary for plant growth and survival. <u>L.5.3B: I can demonstrate an understanding of a ecosystem and all the parts of it.</u> L.5.3B.1: I can obtain and evaluate information regarding different ecosystems and organisms that live in it. L.5.3B.2: I can use a food chain to classify organisms.	organism, food chain, food web, producer, primary consumer, secondary consumer, herbivore, omnivore, carnivore, decomposer, habitat, niche, ecosystem, phylum, xylem, cellular respiration, carbon dioxide, chloroplasts,
	L.5.3B.3: I can use a food web to justify effects species have on the web. L.5.3B.4: I can communicate information that explains human's position in a food web and the potential impacts on these systems.	chlorophyll, vascular plants, nonvascular plants, gymnosperm, angiosperm, spore

3rd 9 weeks Parent Syllabus – Grade 5 Science

Listed below are skills we expect your child to be able to perform and the vocabulary that will be used in the classroom both orally and written

Earth Science	I can Statements	Vocabulary
	<u>E.5.8A I can demonstrate and understand locations of objects in the universe.</u> E.5.8A.1 I can develop and use models of Earth's solar system to demonstrate size, composition, location and order of the planets as they orbit the sun. E.5.8A.2 I can use evidence demonstrate why the sun appears brighter than other stars. E.5.8A.3 I can describe the appearance of constellations and how they move from Earth's perspective throughout the seasons. E.5.8A.4 I can construct arguments to support the importance of astronomy in navigation and exploration. I can describe the importance of telescopes, compasses, and star charts in navigation and exploration. E.5.8B.1 I can understand the appearance of the moon during different phases throughout a month over a course of the year. E.5.8B.2 I can develop and use models explain rotation, revolution and angle of sunlight. E.5.8B.4 I can obtain information and analyze how our understanding of the solar system has evolved over time <u>E.5.10 I can demonstrate the understanding of how humans affect natural resources and how to protect them.</u> E.5.10.1 I can collect and organize scientific ideas that humans can use to conserve Earth's natural resources and systems. E.5.10.2 I can design a process for better preparing communities to withstand manmade or natural disasters.	hypothesis, controlled experiment, variable, observation, inferences, prediction, purpose, conclusion, telescope, compass, satellite, star, gravity, asteroid, constellation, moon phases, lunar eclipse, solar eclipse, summer solstice, vernal equinox, autumnal equinox, winter solstice, new moon, waxing crescent, first quarter, waxing gibbous, full moon, waning gibbous, last quarter, waning crescent, planets, rotation, revolution, conservation, pollution, natural resource, renewable resource, nonrenewable resource, reuse, recycle, biodegradable waste, non-biodegradable waste