

Tennessee Standard	K	1	2	3	4	5	6	7	8	Biology 1	Physical Science
Embedded Inquiry (ALL CONTENT AREAS)	<p>GLE 0207.Inq.1 Observe the world of familiar objects using the senses and tools.</p> <p>GLE 0207.Inq.2 Ask questions, make logical predictions, plan investigations, and represent data.</p> <p>GLE 0007.Inq.3 Explain the data from an investigation.</p>			<p>GLE 0507.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data.</p> <p>GLE 0507.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation.</p> <p>GLE 0507.Inq.3 Organize data into appropriate tables, graphs, drawing, or diagrams.</p> <p>GLE 0507.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations.</p> <p>GLE 0307.Inq.5 Recognize that people may interpret the same results in different ways.</p> <p>GLE 0507.Inq.6 Compare the results of an investigation with what scientists already accept about this question.</p>			<p>GLE 0807.Inq.8.1 Design and conduct open-ended scientific investigations.</p> <p>GLE 0807.Inq.8.2 Use appropriate tools and techniques to gather, organize, analyze, and interpret data.</p> <p>GLE 0807.Inq.8.3 Synthesize information to determine cause and affect relationships between evidence and explanations.</p> <p>GLE 0807.Inq.8.4 Recognize possible sources of bias and error, alternative explanations, and questions for further exploration.</p> <p>GLE 0807.Inq.8.5 Communicate scientific understanding using descriptions, explanations, and models.</p>			<p>CLE 3202.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts, and compare opposing theories.</p> <p>CLE 3202.Inq.3 Use appropriate tools and technology to collect precise and accurate data.</p> <p>CLE 3202.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias.</p> <p>CLE 3202.Inq.5 Compare experimental evidence and conclusions with those drawn by others about the same testable question.</p> <p>CLE 3202.Inq.1 Recognize that science is a progressive endeavor that reevaluates and extends what is already accepted.</p> <p>CLE 3202.Inq.6 Communicate and defend scientific findings.</p>	

<p>Embedded Technology and Engineering</p>	<p>GLE 0007.T/E.1 Recognize that both natural materials and human-made tools have specific characteristics that determine their use.</p> <p>GLE 0007.T/E.2 Apply engineering design and creative thinking to solve practical problems.</p>			<p>GLE 0507.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems.</p> <p>GLE 0507.T/E.2 Recognize that new tools, technology, and inventions are always being developed.</p> <p>GLE 0507.T/E.3 Identify appropriate materials, tools, and machines that can extend or enhance the ability to solve a specified problem.</p> <p>GLE 0507.T/E.4 Recognize the connection between scientific advances, new knowledge, and the availability of new tools and technologies.</p> <p>GLE 0507.T/E.5 Apply a creative design strategy to solve a particular problem generated by societal needs and wants.</p>			<p>GLE 0807.T/E.8.4 Differentiate between adaptive and assistive bioengineered products.</p> <p>GLE 0807.T/E.8.2 Know that the engineering design cycle involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting.</p> <p>GLE 0807.T/E.8.3 Compare the intended benefits with the unintended consequences of a new technology.</p> <p>GLE 0807.T/E.8.1 Explore how technology responds to social, political, and economic needs.</p>			<p>CLE 3202.T/E.3 Explain the relationship between the properties of a material and the use of the material in the application of a technology.</p> <p>CLE 3202.T/E.4 Describe the dynamic interplay among science, technology, and engineering within living, earth-space, and physical systems.</p> <p>CLE 3202.T/E.2 Differentiate among elements of the engineering design cycle: design constraints, model building, testing, evaluating, modifying, and retesting.</p> <p>CLE 3202.T/E.1 Explore the impact of technology on social, political, and economic systems.</p>		
<p>1: Cells</p>	<p>GLE 0007.1.1 Recognize that many things are made of parts.</p>	<p>GLE 0107.1.1 Recognize that living things have parts that work together.</p>	<p>GLE 0207.1.1 Recognize that plants and animals are made up of smaller parts and use food, water, and air to survive.</p>		<p>GLE 0407.1.1 Recognize that cells are the building blocks of all living things.</p>	<p>GLE 0507.1.1 Distinguish between the basic structures and functions of plant and animal cells.</p>		<p>GLE 0707.1.1 Make observations and describe the structure and function of organelles found in plant and animal cells.</p> <p>GLE 0707.1.2 Summarize how the different levels of organization are integrated within living systems.</p> <p>GLE 0707.1.3</p>		<p>CLE 3210.1.1 Compare the structure and function of cellular organelles in both prokaryotic and eukaryotic cells.</p>		

		<p>GLE 0107.1.2 Use tools to examine major body parts and plant structures.</p>		<p>GLE 0307.1.1 Use magnifiers to make observations of specific plant and body parts and describe their functions.</p>				<p>Describe the function of different organ systems and how collectively they enable complex multicellular organisms to survive.</p>				
								<p>GLE 0707.1.4 Illustrate how cell division occurs in sequential stages to maintain the chromosome number of a species.</p>			<p>CLE 3210.1.4 Describe the processes of cell growth and reproduction.</p>	
								<p>GLE 0707.1.5 Observe and explain how materials move through simple diffusion.</p>			<p>CLE 3210.1.5 Compare different models to explain the movement of materials into and out of cells.</p>	
											<p>CLE 3210.1.2 Distinguish among the structure and</p>	

										function of the four major organic macromolecules found in living things. CLE 3210.1.3 Describe how enzymes regulate chemical reactions in the body.
2: Interdependence	GLE 0007.2.1 Recognize that some things are living and some are not. GLE 0007.2.2 Know that people interact with their environment through their senses.	GLE 0107.2.1 Distinguish between living and non-living things in an environment.	GLE 0207.2.1 Investigate the habitats of different kinds of local plants and animals. GLE 0207.2.2 Investigate living things found in different places. GLE 0207.2.3 Identify basic ways that plants and animals depend on each other.	GLE 0307.2.1 Categorize things as living or non-living. GLE 0307.2.2 Explain how organisms with similar needs compete with one another for resources.	GLE 0407.2.1 Analyze the effects of changes in the environment on the stability of an ecosystem.	GLE 0507.2.1 Investigate different nutritional relationships among organisms in an ecosystem. GLE 0507.2.2 Explain how organisms	GLE 0607.2.1 Examine the roles of consumers, producers, and decomposers in a biological community. GLE 0607.2.2 Describe how matter and			CLE 3210.2.1 Investigate how the dynamic equilibrium of an ecological community is associated with interactions

						<p>interact through symbiotic, commensal, and parasitic relationships.</p> <p>GLE 0507.2.3 Establish the connections between human activities and natural disasters and their impact on the environment.</p>	<p>energy move through an ecosystem.</p> <p>GLE 0607.2.3 Draw conclusions from data about interactions between the biotic and abiotic elements of a particular environment.</p> <p>GLE 0607.2.4 Analyze the environments and the interdependence among organisms found in the world's major biomes.</p>			<p>among its organisms.</p> <p>CLE 3210.2.4 Describe the sequence of events associated with biological succession.</p> <p>CLE 3210.2.2 Analyze and interpret population data, graphs, or diagrams.</p> <p>CLE 3210.2.3 Predict how global climate change, human activity, geologic events, and the introduction of non-native species impact an ecosystem.</p>	
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<p>3: Matter & Energy</p>	<p>GLE 0007.3.1 Recognize that living things require water, food, and air.</p>	<p>GLE 0107.3.1 Recognize that plants and animals are living things that grow and change over time.</p>	<p>GLE 0207.3.1 Recognize that animals eat plants or other animals for food.</p>	<p>GLE 0307.3.1 Describe how animals use food to obtain energy and materials for growth and repair.</p>	<p>GLE 0407.3.2 Investigate different ways that organisms meet their energy needs.</p> <p>GLE 0407.3.1 Demonstrate that plants require light energy to grow and survive.</p>	<p>GLE 0507.3.1 Demonstrate how all living things rely on the process of photosynthesis to obtain energy.</p>		<p>GLE 0707.3.1 Distinguish between the basic features of photosynthesis and respiration.</p> <p>GLE 0707.3.2 Investigate the exchange of oxygen and carbon dioxide between living things and the environment.</p>		<p>CLE 3210.3.2 Distinguish between aerobic and anaerobic respiration.</p> <p>CLE 3210.3.3 Investigate the relationship between the processes of photosynthesis and cellular respiration.</p> <p>CLE 3210.3.1 Analyze energy flow through an ecosystem.</p> <p>CLE 3210.3.4 Describe the events which occur during the major biogeochemical cycles.</p>	
<p>4: Heredity</p>	<p>GLE 0007.4.1 Observe how plants and animals change as they grow.</p>	<p>GLE 0107.4.1 Observe and illustrate the life cycle of animals.</p>	<p>GLE 0207.4.1 Compare the life cycles of various organisms.</p>	<p>GLE 0307.4.1 Identify the different life stages through which plants and animals pass.</p>	<p>GLE 0407.4.2 Differentiate between complete and incomplete metamorphosis.</p>			<p>GLE 0707.4.4 Predict the probable appearance of offspring based on the genetic characteristics of</p>		<p>CLE 3210.4.3 Predict the outcome of monohybrid and dihybrid crosses.</p>	

					<p>GLE 0407.4.1 Recognize the relationship between reproduction and the continuation of a species.</p>			<p>the parents.</p>		<p>CLE 3210.4.4 Compare different models of inheritance: sex linkage, co-dominance, incomplete dominance, multiple alleles, and polygenic traits.</p> <p>CLE 3210.4.1 Investigate how genetic information is encoded in nucleic acids.</p> <p>CLE 3210.4.2 Describe the relationships among genes, chromosomes, proteins, and hereditary traits.</p> <p>CLE 3210.4.6 Describe the connection between mutations and human genetic disorders.</p> <p>CLE 3210.4.5 Recognize how meiosis</p>
	<p>GLE 0007.4.2 Observe that offspring resemble their parents.</p>	<p>GLE 0107.4.2 Describe ways in which animals closely resemble their parents</p>	<p>GLE 0207.4.2 Realize that parents pass along physical characteristics to their offspring.</p>	<p>GLE 0307.4.2 Recognize common human characteristics that are transmitted from parents to offspring.</p>		<p>GLE 0507.4.1 Describe how genetic information is passed from parents to offspring during reproduction.</p> <p>GLE 0507.4.2 Recognize that some characteristics are inherited while others result from interactions with the environment.</p>		<p>GLE 0707.4.3 Explain the relationship among genes, chromosomes, and inherited traits.</p>		
								<p>GLE 0707.4.1 Compare and contrast the fundamental features of sexual and asexual reproduction.</p> <p>GLE 0707.4.2</p>		

								Demonstrate an understanding of sexual reproduction in flowering plants.		and sexual reproduction contribute to genetic variation in a population.	
										CLE 3210.4.7 Assess the scientific and ethical ramifications of emerging genetic technologies.	
5: Biodiversity & Change	GLE 0007.5.1 Compare the basic features of plants and animals.	GLE 0107.5.1 Investigate how plants and animals can be grouped according to their habitats. GLE 0107.5.2 Recognize that some organisms which formerly lived are no longer found on earth.	GLE 0207.5.1 Investigate the relationship between an animal's characteristics and the features of the environment where it lives. GLE 0207.5.2 Draw conclusions from fossils about organisms that lived in the past.	GLE 0307.5.1 Explore the relationship between an organism's characteristics and its ability to survive in a particular environment.	GLE 0407.5.1 Analyze physical and behavioral adaptations that enable organisms to survive in their environment.	GLE 0507.5.1 Investigate physical characteristics associated with different groups of animals. GLE 0507.5.2 Analyze fossils to demonstrate the connection between organisms and environments that existed in the past and those that currently exist.			GLE 0807.5.1 Identify various criteria used to classify organisms into groups. GLE 0807.5.2 Use a simple classification key to identify a specific organism. GLE 0807.5.7 Investigate fossils in sedimentary rock layers to gather evidence of changing life forms.	CLE 3210.5.6 Explore the evolutionary basis of modern classification systems.	

				<p>GLE 0307.5.2 Classify organisms as thriving, threatened, endangered, or extinct.</p>	<p>GLE 0407.5.2 Describe how environmental changes caused the extinction of various plant and animal species.</p>				<p>GLE 0807.5.3 Analyze how structural, behavioral, and physiological adaptations within a population enable it to survive in a given environment.</p> <p>GLE 0807.5.4 Explain why variation within a population can enhance the chances for group survival.</p> <p>GLE 0807.5.5 Describe the importance of</p>	<p>CLE 3210.5.1 Associate structural, functional, and behavioral adaptations with the ability of organisms to survive under various environmental conditions.</p> <p>CLE 3210.5.2 Analyze the relationship between form and function in living things.</p> <p>CLE 3210.5.3 Explain how genetic variation in a population and changing environmental conditions are associated with adaptation and the emergence of new species.</p>	
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									maintaining the earth's biodiversity.	<p>CLE 3210.5.4 Summarize the supporting evidence for the theory of evolution.</p> <p>CLE 3210.5.5 Explain how evolution contributes to the amount of biodiversity.</p>	
6: The Universe	<p>GLE 0007.6.1 Know the different objects that are visible in the day and night sky.</p>	<p>GLE 0107.6.1 Compare and describe features of the day and night sky.</p> <p>GLE 0107.6.2 Realize that the sun can only be seen during the day, while the moon can be seen at night and sometimes during the day.</p>	<p>GLE 0207.6.1 Realize that the sun is our nearest star and that its position in the sky appears to change.</p>		<p>GLE 0407.6.1 Analyze patterns, relative movements, and relationships among the sun, moon, and earth.</p>	<p>GLE 0507.6.2 Recognize that charts can be used to locate and identify star patterns.</p>	<p>GLE 0607.6.2 Describe the relative distance of objects in the solar system from earth.</p> <p>GLE 0607.6.3 Explain how the positional relationships among the earth, moon, and sun control the length of the day, lunar cycle, and year.</p> <p>GLE 0607.6.6 Illustrate the relationship between the seasons and the earth-sun system.</p>				

			<p>GLE 0207.6.2 Make observations of changes in the moon's appearance over time.</p>	<p>GLE 0307.6.1 Identify and compare the major components of the solar system.</p>		<p>GLE 0507.6.1 Compare planets based on their known characteristics.</p>	<p>GLE 0607.6.1 Analyze information about the major components of the universe.</p> <p>GLE 0607.6.4 Describe the different stages in the lunar cycle.</p> <p>GLE 0607.6.5 Produce a model to demonstrate how the moon produces tides.</p> <p>GLE 0607.6.7 Describe the causes of lunar and solar eclipses.</p>				
7: The Earth	<p>GLE 0007.7.1 Identify non-living materials found on the surface of the Earth.</p> <p>GLE 0007.7.2 Recognize that some objects are man-made and that some occur naturally.</p>	<p>GLE 0107.7.1 Realize that water, rocks, soil, living organisms, and man-made objects make up the earth's surface.</p> <p>GLE 0107.7.2 Classify earth materials according to their physical properties.</p>	<p>GLE 0207.7.1 Compare and record the components of a variety of soil types.</p> <p>GLE 0207.7.2 Describe rocks according to their origin, size, shape, texture, and color.</p> <p>GLE 0207.7.3 Differentiate between renewable and non-renewable resources.</p>	<p>GLE 0307.7.2 Recognize that rocks can be composed of one or more minerals.</p> <p>GLE 0307.7.3 Distinguish between natural and manmade objects.</p> <p>GLE 0307.7.4 Design a simple investigation to demonstrate how earth materials can be conserved or recycled.</p>				<p>GLE 0707.7.1 Describe the physical properties of minerals.</p> <p>GLE 0707.7.5 Differentiate between renewable and nonrenewable resources in terms of their use by man.</p>			

				<p>GLE 0307.7.1 Use information and illustrations to identify the earth's major landforms and water bodies.</p>	<p>GLE 0407.7.1 Investigate how the earth's geological features change as a result of erosion (weathering and transportation) and deposition.</p>	<p>GLE 0507.7.1 Compare geologic events responsible for the earth's major geological features.</p>		<p>GLE 0707.7.6 Evaluate how human activities affect the earth's land, oceans, and atmosphere.</p> <p>GLE 0707.7.2 Summarize the basic events that occur during the rock cycle.</p> <p>GLE 0707.7.3 Analyze the characteristics of the earth's layers and the location of the major plates.</p> <p>GLE 0707.7.4 Explain how earthquakes, mountain building, volcanoes, and sea floor spreading are associated with movements of the earth's major plates.</p>				
<p>8: The Atmosphere</p>	<p>GLE 0007.8.2 Collect daily weather data at different times of the year.</p>	<p>GLE 0107.8.1 Gather and interpret daily weather data.</p>		<p>GLE 0307.8.1 Recognize that that there are a variety of atmospheric conditions that can be measured.</p> <p>GLE 0307.8.2 Use tools such as the barometer, thermometer,</p>			<p>GLE 0607.8.4 Analyze meteorological data to predict weather conditions.</p>					

			<p>GLE 0207.8.1 Associate temperature patterns with seasonal changes.</p>	<p>anemometer, and rain gauge to measure atmospheric conditions.</p> <p>GLE 0307.8.3 Identify cloud types associated with particular atmospheric conditions.</p> <p>GLE 0307.8.4 Predict the weather based on cloud observations.</p>	<p>GLE 0407.8.2 Differentiate between weather and climate.</p> <p>GLE 0407.8.1 Recognize the major components of the water cycle.</p>	<p>GLE 0507.8.1 Analyze and predict how major landforms and bodies of water affect atmospheric conditions.</p>	<p>GLE 0607.8.2 Describe how the sun's energy produces the wind.</p> <p>GLE 0607.8.1 Design and conduct an investigation to determine how the sun drives atmospheric convection.</p> <p>GLE 0607.8.2 Investigate the relationship between currents and oceanic temperature differences.</p>				
9: Matter	<p>GLE 0007.9.1 Describe an object by its observable properties.</p> <p>GLE 0007.9.2 Identify objects and materials as solids or liquids.</p>	<p>GLE 0107.9.1 Classify objects according to their physical properties.</p> <p>GLE 0107.9.2 Distinguish between the properties of solids and liquids.</p>	<p>GLE 0207.9.1 Use tools to observe the physical properties of objects.</p> <p>GLE 0207.9.3 Recognize that air takes up space.</p>		<p>GLE 0407.9.1 Collect data to illustrate that the physical properties of matter can be described with tools that measure weight, mass, length, and volume.</p>	<p>GLE 0507.9.1 Observe and measure the simple chemical properties of common substances.</p>			<p>GLE 0807.9.9 Explain the basic difference between acids and bases.</p>		<p>CLE 3202.1.1 Explore matter in terms of its physical and chemical properties.</p>

		<p>GLE 0107.9.3 Predict the changes that may occur when different materials are mixed.</p>	<p>GLE 0207.9.2 Investigate how temperature changes affect the state of matter.</p>	<p>GLE 0307.9.1 Design a simple experiment to determine how the physical properties of matter can change over time and under different conditions.</p> <p>GLE 0307.9.2 Investigate different types of mixtures.</p> <p>GLE 0307.9.3 Describe different methods to separate mixtures.</p>	<p>GLE 0407.9.2 Explore different types of physical changes in matter.</p>	<p>GLE 0507.9.2 Design and conduct an experiment to demonstrate how various types of matter freeze, melt, or evaporate.</p> <p>GLE 0507.9.3 Investigate factors that affect the rate at which various materials freeze, melt, or evaporate.</p>			<p>GLE 0807.9.3 Interpret data from an investigation to differentiate between physical and chemical changes.</p> <p>GLE 0807.9.4 Distinguish among elements, compounds, and mixtures.</p> <p>GLE 0807.9.5 Apply the chemical properties of the atmosphere to illustrate a mixture of gases.</p> <p>GLE 0807.9.6 Use the periodic table to determine the characteristics of an element.</p> <p>GLE 0807.9.1 Understand that all matter is made up of atoms.</p> <p>GLE 0807.9.2</p>	<p>CLE 3202.1.4 Investigate chemical and physical changes.</p> <p>CLE 3202.1.8 Investigate relationships among the pressure, temperature, and volume of gases and liquids.</p> <p>CLE 3202.1.5 Evaluate pure substances and mixtures.</p> <p>CLE 3202.1.6 Distinguish between common ionic and covalent compounds.</p> <p>CLE 3202.1.7 Construct chemical formulas for common compounds.</p> <p>CLE 3202.1.2 Describe the structure and arrangement of atomic particles.</p> <p>CLE 3202.1.3</p>
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									<p>Explain that matter has properties that are determined by the structure and arrangement of its atoms.</p> <p>GLE 0807.9.7 Explain the Law of Conservation of Mass.</p> <p>GLE 0807.9.8 Interpret the events represented by a chemical equation.</p>		<p>Characterize and classify elements based on atomic structure.</p> <p>CLE 3202.1.9 Apply the Laws of Conservation of Mass/Energy to balance chemical equations.</p>
10: Energy	<p>GLE 0007.10.1 Identify the sun as the source of heat and light.</p> <p>GLE 0007.10.2 Investigate the effect of the sun on a variety of materials.</p>	<p>GLE 0107.10.1 Investigate the effect of the sun on land, water, and air.</p>	<p>GLE 0207.10.1 Explain why the sun is the primary source of the earth's energy.</p>	<p>GLE 0307.10.1 Investigate phenomena that produce heat.</p> <p>GLE 0307.10.2 Design and conduct an experiment to investigate the ability of different materials to conduct heat.</p>	<p>GLE 0407.10.1 Distinguish among heat, radiant, and chemical forms of energy.</p>	<p>GLE 0507.10.2 Conduct experiments on the transfer of heat energy through conduction, convection, and radiation.</p>					<p>CLE 3202.2.3 Examine the applications and effects of heat energy.</p>

					<p>GLE 0407.10.2 Investigate how light travels and is influenced by different types of materials and surfaces.</p>	<p>GLE 0507.10.1 Design an experiment to illustrate the difference between potential and kinetic energy.</p>	<p>GLE 0607.10.1 Compare and contrast the three forms of potential energy.</p> <p>GLE 0607.10.2 Analyze various types of energy transformations.</p> <p>GLE 0607.10.3 Explain the principles underlying the Law of Conservation of Energy.</p>				<p>CLE 3202.2.2 Explore and explain the nature of sound and light energy.</p> <p>CLE 3202.2.1 Investigate the properties and behaviors of mechanical and electromagnetic waves.</p> <p>CLE 3202.2.6 Investigate the Law of Conservation of Energy.</p> <p>CLE 3202.2.4 Probe the fundamental principles and applications of electricity.</p> <p>CLE 3202.2.5 Distinguish between nuclear fission and nuclear fusion.</p>
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<p>11: Motion</p>	<p>GLE 0007.11.1 Explore different ways that objects move.</p>	<p>GLE 0107.11.1 Investigate how forces (push, pull) can move and object or change its direction.</p>	<p>GLE 0207.11.1 Investigate how vibrating objects produce sound.</p> <p>GLE 0207.11.2 Classify sounds according to their loudness and pitch.</p>	<p>GLE 0307.11.1 Explore how the direction of a moving object is affected by unbalanced forces.</p> <p>GLE 0307.11.2 Recognize the relationship between the mass of an object and the force needed to move it.</p> <p>GLE 0307.11.3 Investigate how the pitch and volume of a sound can be changed.</p>	<p>GLE 0407.11.1 Recognize that the position of an object can be described relative to other objects or a background.</p> <p>GLE 0407.11.2 Design a simple investigation to demonstrate how friction affects the movement of an object.</p> <p>GLE 0407.11.3 Investigate the relationship between the speed of an object and the distance traveled during a certain time period.</p>	<p>GLE 0507.11.1 Design an investigation, collect data and draw conclusions about the relationship among mass, force, and distance traveled.</p>		<p>GLE 0707.11.3 Distinguish between speed and velocity.</p> <p>GLE 0707.11.4 Investigate how Newton's laws of motion explain an object's movement.</p> <p>GLE 0707.11.5 Compare and contrast the basic parts of a wave.</p> <p>GLE 0707.11.6 Investigate the types and fundamental properties of waves.</p> <p>GLE 0707.11.1 Identify six types of simple machines.</p> <p>GLE 0707.11.2 Experiment with simple machines to determine the amount of force needed to do</p>			<p>CLE 3202.3.1 Investigate the relationship among speed, position, time, velocity, and acceleration.</p> <p>CLE 3202.3.2 Investigate and apply Newton's three laws of motion.</p> <p>CLE 3202.3.3 Examine the Law of Conservation of Momentum in real world situations.</p>
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<p>12: Magnetic & Gravitational Forces</p>		<p>GLE 0107.12.1 Investigate materials that are attracted to magnets.</p>	<p>GLE 0207.12.1 Experiment with magnets to determine that objects can move without being touched.</p> <p>GLE 0207.12.2 Realize that things fall toward the ground unless something holds them up.</p>	<p>GLE 0307.12.1 Explore how magnets attract objects made of certain metals.</p>	<p>GLE 0407.12.1 Explore the interactions between magnets</p> <p>GLE 0407.12.2 Observe that electrically charged objects exert a pull on other materials.</p>	<p>GLE 0507.12.1 Recognize that the earth attracts objects without directly touching them.</p> <p>GLE 0507.12.2 Investigate how the shape of an object influences the way that it falls toward the earth.</p> <p>GLE 0507.12.3 Provide examples of how forces can act at a distance.</p>			<p>GLE 0807.12.1 Investigate the relationship between magnetism and electricity.</p> <p>GLE 0807.12.2 Design an investigation to change the strength of an electromagnet.</p> <p>GLE 0807.12.3 Compare and contrast the earth's magnetic field to that of a magnet and an electromagnet.</p> <p>GLE 0807.12.4 Identify factors that influence the amount of gravitational force between objects.</p> <p>GLE 0807.12.5 Recognize that gravity is the force that controls the motion of objects in the solar system.</p>		<p>CLE 3202.4.1 Explore the difference between mass and weight.</p> <p>CLE 3202.4.2 Relate gravitational force to mass.</p>
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