

GRADE 1

COMPONENT	OBJECTIVES	COMPETENCY
I The Nature of Science as Inquiry	 Identify, classify, and carefully describe observations of an object, a substance, or an event. (SC.A.1.1.1) Extend, predict, and create new patterns using physical characteristics. (SC.A.1.1.3) Construct a list of qualitative (descriptions using words) observations about an object, substance, or event perceived through at least four senses. (SC.A.1.1.1) Construct a list of quantitative (descriptions using numbers) observations through nonstandard and standard measures (English and metric) for example, hand-spans and rulers. (SC.A.1.2.1) Describe a set of distinctly different objects or events in sufficient detail so a peer can identify the object or event based upon the description. (SC.H.1.1.0) Follow directions and work cooperatively to complete observational investigations. (SC.H.1.1.3) Predict outcomes verbally of observational investigations. (SC.H.1.1.4) Read, draw, and label a vertical and horizontal bar graph. (SC.H.1.1.4) Communicate safe and organized housekeeping procedures during and after an experiment. 	A. After using the science process skills in hands-on group investigations, the student will use the five senses to: a) classify and sort physical objects and events according to attributes such as sound, color, texture, shape, size, weight, length, temperature, and volume and b) describe the purpose of group investigations and comparing results. (SC.A.I.I.0)



GRADE 1

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	 Differentiate between a discovery and an invention. Categorize a discovery or invention that has impacted a specific science discipline (life science, physical science, or space and earth sciences). (SC.H.3.2.0) 	B. After listening to non-fiction literature, the student will identify discoveries, inventions, or ideas created by scientists from many cultures and ethnic groups. (SC.H.1.1.3)
II Life Science	 Measure simple differences between humans. (SC.F.1.2.3) Identify and list the basic needs of plants and animals. (SC.F.1.1.1) Follow directions for measuring and recording plant growth, varying one condition (soil, sunlight, water, or habitat). (SC.H.1.3.5) Recognize that some plants may be helpful or harmful to humans. Predict seasonal changes that occur in animal behavior and plant growth. (SC.G.1.2.7) 	A. After using the science process skills in hands-on group activities, the student will identify the needs and unique characteristics of living things. (SC.F.2.1.0)
	 Identify the living and non-living parts of environments. (SC.G.1.1.1) Describe how plants and animals are dependent upon each other for survival. (SC.G.1.1.2) Describe several examples of how there are many different plants and animals living in many different kinds of environments (e.g., hot, cold, wet, dry, sunny, and dark). (SC.G.1.1.3) 	B. After using the science process skills in hands-on group activities, the student will describe how all animals depend on plants, how some animals eat plants for food, and how other animals eat animals that eat the plants. (SC.F.2.1.0)



GRADE 1

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III Earth and Space Science	After observing a model energy system, such as an aquarium or a terrarium, describe how the Sun supplies heat and light energy to the energy system. (SC.B.1.1.3)	A. After using the science process skills, the student will observe and communicate that the sun provides the light and heat necessary to maintain the temperature of the earth. (SC.H.1.1.5)
	2. Investigate that air expands when it is heated and contracts when it is cooled. (SC.A.1.1.3)	
	3. Identify materials through which heat and light can pass. (SC.B.1.1.2)	
	4. Demonstrate the temperature of dark and light colored objects, when exposed to the sun. (SC.A.1.1.3)	
	5. Demonstrate how heat can speed up evaporation. (SC.D.1.1.3)	
	6. Recognize that the moon has different shapes or phases caused by light from the sun. (SC.E.1.1.1)	
	Construct a chart with simple weather symbols and record daily conditions. (SC.D.1.1.3)	B. After using the science process skills, the student will observe and communicate that weather changes from day to day and over the seasons. (SC.D.1.1.3)
	2. Chart and graph daily temperature changes using a thermometer. (SC.D.1.1.3)	
	3. Identify warning signs of severe weather patterns (thunderstorms, hurricanes, and tornadoes). (SC.D.1.1.3)	
	4. Investigate wind speed and direction (e.g., construct a pinwheel). (SC.D.1.1.3)	

Volume I - Page 606 SCIENCE - GRADE 1 3 of 6



GRADE 1

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	 5. Describe and illustrate different cloud formations. (SC.D.1.1.3) 6. Identify meteorologists as scientists who study the weather. (SC.H.1.1.4) 	
IV Physical Science	 Communicate that everything is made of matter and that there are different types, and may be made of parts too small to be seen without magnification. (SC.A.2.2.1) Classify by recognizing that many things are made of smaller pieces, different amounts, and various shapes. (SC.A.2.1.1) Investigate different types of liquids and observe common properties. (SC.A.1.1.1) 	A. After using the science process skills in hands-on group investigations, the student will use observable properties to describe and measure the similarities and differences of solids, liquids, and gases. (SC.A.1.1.1)
	 Investigate and demonstrate that air is a gas that takes up space and has weight (e.g., weigh an inflated and deflated balloon). (SC.A.1.1.0) Investigate and communicate findings in which temperature changes matter. (SC.B.2.1.1) Predict and investigate the physical properties of a material before and after a physical change. (e.g., observe the change from ice to water). (SC.A.1.1.3) 	B. After using the science process skills, the student will classify different types objects by the properties that describe the materials from which they are made, including solids, liquids or gases. (SC.A.1.1.3)



GRADE 1

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V Interaction of Society and the Environment	 Identify and label living and non-living things that make up an environment. (SC.F.2.1.0) Observe and describe the interactions between plants, animals, and other living things in different habitats. (SC.F.2.1.2) Draw a simple food chain and describe how plants and animals are dependent upon each other for survival. (SC.G.1.1.2) Use a food chain to describe how humans get energy to live. (SC.B.1.1.5) 	A. After using the science process skills, the student will describe the members of a food chain and explain their interdependence. (SC.G.1.2.1)
	 Discuss ways in which habitats are destroyed (fire, construction, pollution). (SC.G.2.1.2) Cite an example of how human activity may produce changes in the earth's surface, air, and water. (SC.G.2.2.3) 	B. After using the science process skills in hands-on group investigations, the student will list substances and environmental conditions that are harmful to living things. (SC.F.2.1.1)
VI Science and Technology Design	 Describe a problem that has been solved by technology. (SC.H.3.3.5) Describe a product that has been used to solve a problem. (SC.H.3.3.5) 	A. Collaboratively describe a technology or a product of technology that is a solution to an identified problem and communicate the results. (SC.H.3.3.5)

Volume I - Page 608 SCIENCE - GRADE 1 5 of 6



GRADE 1

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VII Comprehensive Health	1. Demonstrate an understanding of safety and security as basic needs of humans. Safety involves freedom from danger, risk, or injury. Security involves feelings of confidence and lack of anxiety and fear. Student understandings include following safety rules for home and school, preventing abuse and neglect, avoiding injury, knowing whom to ask for help, and when and how to say no. (Refer to Health Curriculum and the Human Growth and Development Curriculum for specific objectives)	A. After utilizing the components of the Human Growth and Development, Health, Prevention of HIV/AIDS, and Substance Abuse Curriculums, the student will develop and promote a healthy lifestyle.
	2. Demonstrate an understanding of the concept that individuals have some responsibility for their own health. Students should engage in personal care, dental hygiene, cleanliness, and exercise, that will maintain and improve health. Understandings include how communicable diseases, such as colds, are transmitted and some of the body's defense mechanisms that prevent or overcome illness. (Refer to AIDS Curriculum and the Health Education Curriculum for specific objectives)	
	3. Demonstrate an understanding of how different substances can damage the body and how it functions. Such substances include tobacco, alcohol, over-the-counter medicines, and illicit drugs. Demonstrate an understanding that some substances, such as prescription drugs, can be beneficial, but that any substance can be harmful if used inappropriately. (Refer to the Substance Abuse Prevention Curriculum for specific objectives)	

SCIENCE - GRADE 1 6 of 6