

<p><u>Science</u></p>	
<p>Properties and Principles of Matter and Energy</p>	
	<ul style="list-style-type: none"> ▪ Compare the observable physical properties of solids, liquids, or gases (air) (i.e., visible vs. invisible, changes in shape, changes in the amount or space occupied). ▪ Identify everyday objects /substances as solid, liquid, or gas. ▪ Recognize water evaporates (liquid water changes into a gas as it moves into the air). ▪ Measure and compare the temperature of water when it exists as a solid to its temperature of water when it exists as a solid to its temperature changes. ▪ Investigate and recognize water can change from a liquid to a solid (freeze), and back again to a liquid (melt), as the result of temperature changes. ▪ Describe the changes in the physical properties of water (i.e., shape, volume) when frozen or melted. ▪ Predict and investigate the effect of heat energy (i.e., change in temperature, melting, evaporation) on objects and materials. ▪ Identify sources of thermal energy (e.g., Sun, stove, fire, body) that can cause solids to change to liquids, and liquids change to gas. ▪ Identify sources of light energy (e.g., Sun, bulbs, flames). ▪ Recognize light can be transferred from the source to the receiver (eye) through space. ▪ Identify the three things (light source, object, and surface) necessary to produce a shadow. ▪ Recognize the Sun is the primary source of light and food energy on Earth.
<p>Characteristics and Interactions of Living Organisms</p>	
	<p>Plants The students will be able to...</p>

	<ul style="list-style-type: none"> ▪ Describe the basic needs of most plants (i.e., air, water, light, nutrients, temperature) ▪ Recognize plants progress through life cycles of seed germination, growth and development, reproduction, and death ▪ Sequence and describe the stages in the life cycle of a flowering plant ▪ Identify the major organs (roots, stems, flowers, leaves) and their functions in vascular plants (absorption, transport, reproduction) ▪ Illustrate and trace the path of water and nutrients as they move through the transport of a plant ▪ Identify and relate the similarities and differences between plants and their offspring (seedlings)
<p>Changes in Ecosystems and Interactions of Organisms with Their Environments</p>	
	<p>The students will be able to...</p> <ul style="list-style-type: none"> ▪ Identify sunlight as the primary source of energy plants use to produce their own food. ▪ Classify populations of organisms as producers or consumers by the role they serve in the ecosystem. ▪ Sequence the flow energy though a food chain beginning with the Sun. ▪ Predict the possible effects of removing an organism from a food chain.
<p>Processes and Interactions of the Earth's Systems (Geosphere, Atmosphere and Hydrosphere)</p>	
	<p>Earth's Water</p> <p>The students will be able to...</p> <ul style="list-style-type: none"> ▪ Recognize liquid water can change into a gas (vapor) in the air.

	<ul style="list-style-type: none"> ▪ Recognize clouds and fog are made of tiny droplets of water. ▪ Recognize air is a substance that surrounds us, takes up space, and moves around us as wind. ▪ Describe clouds and precipitation as forms of water in the water cycle.
<p>Composition and Structure of the Universe and the Motion of the Objects Within It</p>	
	<p>Earth, Sun, and Moon The students will be able to...</p> <ul style="list-style-type: none"> ▪ Describe our Sun as a star because it provides light energy to the solar system. ▪ Recognize the moon is a reflector of light. ▪ Illustrate and describe how the sun and/or moon appear to move slowly across the sky from east to west during the day and/or night. ▪ Observe the change in the moon's appearance relative to time of day and month over several months and note the pattern in this change. ▪ Recognize there is a day/night cycle every 24 hours. ▪ Describe the changes in length and position (direction) of shadows from morning to midday to afternoon. ▪ Describe how the Sun's position in the sky changes the length and position of shadows. ▪ Describe the rotation and revolution of Earth and moon. ▪ Describe the Earth's seasonal changes. ▪ Describe eclipses.
<p>Scientific Inquiry</p>	
	<p>The students will be able to...</p> <ul style="list-style-type: none"> ▪ Pose questions about objects, materials, organisms, and events in the environment. ▪ Plan and conduct a fair test to answer a question. ▪ Make qualitative observations, using the five senses.

Third Grade

	<ul style="list-style-type: none">▪ Make observations, using simple tools and equipment.▪ Measure length to the nearest centimeter, mass using grams, temperature using degrees Celsius, volume using liters.▪ Compare amounts and measurements.▪ Judge whether measurements and computation of quantities are reasonable.▪ Use quantitative and qualitative data as a support for reasonable explanations.▪ Use data as support for observed patterns and relationships, and make predictions to be tested.▪ Communicate simple procedures and results of investigations and explanations through oral presentations, drawings and maps, data tables, graphs, and writings.▪ Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member.
Impact of Science, Technology and Human Activity	
	<p>The students will be able to...</p> <ul style="list-style-type: none">▪ Research biographical information about various scientists and inventors from different gender and ethnic backgrounds, and describe how their work contributed to science and technology.