

Jemez Valley Public Schools
THIRD GRADE SCIENCE • CONTENT MAP

Quadrant I	Quadrant II	Quadrant III	Quadrant IV
Strand I: Scientific Thinking and Practice			
Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.			
<ul style="list-style-type: none"> ● Recognize the difference between data and opinion. (year long) ● Collect data in an investigation and analyze those data (year long) ● Use a variety of methods to display data and present findings ● Pose a question of interest and present observation and measurements with accuracy. (year long) ● Make new observations when discrepancies exist between two descriptions of the same object or phenomenon to improve accuracy (year long) ● Use numerical data in describing and comparing objects, events, and measurements (year long) 	<ul style="list-style-type: none"> ● Understand that predictions are based on observations, measurements, and cause-and-effect relationships (year long) ● Know that the same scientific laws govern investigations in different times and places (e.g., gravity, growing plants). (year long) 	<ul style="list-style-type: none"> ● Use a variety of methods to display data and present findings (year long) ● Use various methods to display data and present findings and communicate results in accurate mathematical language. ● Describe the difference between observation and interpretation ● Examine how scientific investigations may differ from one another (e.g., observations of nature, measurements of things over time) 	<ul style="list-style-type: none"> ● Explore multiple techniques for collecting data in an investigation ● Identify simple mathematical relationship in a scientific investigation (e.g., the relationships of the density of materials that will or will not float to the density of water)
Quadrant I	Quadrant II	Quadrant III	Quadrant IV
Strand II: Content of Science			
Standard I: (Physical Science) Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.			
	<ul style="list-style-type: none"> ● Separate mixtures based on properties (e.g., by size or by substance; rocks and sand, iron filings and sand, salt and sand). ● Measure energy and energy changes (e.g., temperature changes). ● Recognize that magnets can produce motion by attracting some materials (e.g., steel) and have no effect on others (e.g., plastics). 	<ul style="list-style-type: none"> ● Identify and compare properties of pure substances and mixtures (e.g., sugar, fruit juice). ● Understand that light is a form of energy and can travel through a vacuum. ● Know that light travels in a straight line until it strikes an object and then it is reflected, refracted, or absorbed. ● Describe how magnets have poles (N and S) and that like poles repel each other while unlike poles attract. ● Observe that some forces produce motion without objects touching (e.g., magnetic force on nails). ● Identify and compare properties of pure substances and mixtures (e.g., sugar, fruit juice). ● Construct charts or diagrams that relate variables associated with energy changes (e.g., melting of ice over time). ● Describe motion on different time scales (e.g., the slow motion of a plant toward light, the fast motion of a tuning fork). ● Describe how changes of matter may be chemical or physical 	<ul style="list-style-type: none"> ● Explore how the mass of the same amount of material remains constant whether it is together, in parts, or in a different state ● Observe how gravity exerts more force on objects with greater mass (e.g., it takes more force to hold up a heavy object than a lighter one)

		Discuss how energy can be stored	
Quadrant I	Quadrant II	Quadrant III	Quadrant IV
Strand II: Content of Science			
Standard I: (Life Science) Understand the properties, structures, and processes of living things and the interdependence of living things and their environments..			
<ul style="list-style-type: none"> • Observe that differences exist among individual living organisms (e.g., plants, animals) of the same kind. • Use the senses (e.g., sight, hearing, smell, taste, touch) to observe surroundings, and describe the observations. • Identify the parts of the human body (e.g., legs, arms, head, hands, and the functions of these parts. 	<ul style="list-style-type: none"> • Identify major structures of common living organisms (e.g., stems, leaves, and roots of plants; arms, wings, and legs of animals). • Observe and describe similarities and differences in the appearance and behavior of living organisms (e.g., plants and animals). • Observe that living organisms (e.g., plants, animals) closely resemble their parents. 		
Jemez Valley Public Schools KINDERGARTEN SCIENCE • CONTENT MAP			
Quadrant I	Quadrant II	Quadrant III	Quadrant IV
Strand II: Content of Science			
Standard III: (Earth and Space Science) Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.			
		<ul style="list-style-type: none"> • Observe that there are many objects in the night sky and that some are brighter than others. • Observe that changes in weather occur from day to day and season to season. • Observe that the sun warms the land and water and they warm the air. 	<ul style="list-style-type: none"> • Describe the location and movements of objects in the sky (e.g., stars, sun, moon).
Quadrant I	Quadrant II	Quadrant III	Quadrant IV
Strand II: Science and Society			
Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.			

<ul style="list-style-type: none">● Recognize that germs exist and may cause disease.● Describe how science helps provide products we use every day (e.g., gasoline for cars; electricity for lights, refrigerators, TVs; gas or electricity for heating, cooking).			
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