

St Sebastian School
Grades K4-1 Student Standards Science
Grades K4-1 Exit Expectations Checklist

Science as Inquiry	GRADE LEVEL
• Know that learning can come from careful observations and simple experiments	K4 – 1st
• Know that in science it is helpful to work with a team and share findings with others	K4 – 1st
• Recognize that science is a part of everyday life	K4 – 1st
• Recognize that students are scientific thinkers	K4 – 1st
• Make observation and report properties of objects	K4 – 1st
• Notice discrepant events	K4 – 1st
• Use past experiences and observations to make predictions	K4 – 1st
• Utilize problem solving skills in science exploration	K4 – 1st
• Recognize that math is an important tool of science	K4 – 1st
• Collect, record, and communicate data accurately	K4 – 1st
• Explore features and functions of living and non-living things	K4 – 1st
• Group by comparing common and measurable properties	K4 – 1st
• Investigate objects and materials that have similarities and differences	K4 – 1st
• State the properties of objects using the five senses	K4 – 1st
• Note the patterns and the exceptions to the patterns	K4 – 1st
• Use standard and non-standard units of measurement to compare and graph	K4 – 1st
• Observe, describe, and record changes	K4 – 1st
• Know that tools can be used to gather information and extend the senses	K4 – 1st
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Physical Science	GRADE LEVEL
• Discover that objects and materials have similarities and differences	K4 – 1st
• Know that different objects are made up of many different types of materials and have many different observable properties	K4 – 1st
• Discover that changes can be made to materials to alter some of their properties but not all materials respond the same way to what is done to them	K4 – 1st
• Identify how properties of materials determine how they can be used	1st
• Know that things move in different ways	K4 – 1st
• Know that the position and motion of an object can be changed by pushing or pulling	K4 – 1st
• Know that things near the Earth fall to the ground unless something holds them up	K4 – 1st
• Know that magnets can be used to make some things move without being touched	1st
• Know that the Sun supplies heat and light to Earth	K4 – 1st
• Observe that non-living things do not move by themselves	K4 – 1st
• Understand that energy is needed for things to grow or move	1st

Physical Science	GRADE LEVEL
• Identify the primary colors of pigment as red, yellow, and blue	K5
• Identify the secondary colors of pigment as green, orange and purple. They are made by mixing primary colors.	K5
• Discover that white light can be split up into the colors of the rainbow	1st
• Demonstrate that the rainbow, or spectrum is a pattern	1st
• Demonstrate that colors can be created in a variety of ways	K4 – K5
• Relate how sounds in our environment can be used to identify objects, to communicate, and to obtain information	K4 – 1st
• Know that sound may be harmful to our ears	K4 – 1st
• Investigate how water does not appear or disappear; it is constant but can change states	1st
• Show that water takes the shape of its container	1st
• Show that water can change	1st
• Discover that water has weight	1st
• Observe that different objects sink and float in water	K4 – 1st
• Investigate how our senses help us to gain information about our environment and identify properties of materials	K4 – 1st
• Investigate how our ears allow us to hear sound differences, quality, and direction	K4 – 1st
• Investigate how our noses allow us to distinguish different smells	K4 – 1st
• Investigate how our skin enables us to use our sense of touch	K4 – 1st
• Investigate how our eyes provide us with our sense of sight	K4 – 1st
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Life Science	GRADE LEVEL
• Investigate living things that have recognizable characteristics	K5-1st
• Know and investigate that plants and animals need certain resources for energy and growth	K5-1st
• Know that plants and animals closely resemble their parents	1st
• Know that plants and animals have features that help them live in different environments	1st
• Know that some kinds of organisms that once lived on the Earth have completely disappeared	K5
• Illustrate that water is a habitat	1st
• Recognize that all life is a gift from God (*1)	K4 – 1st
• Observe that most plants have stems, roots, flowers, leaves, and buds	K4 – 1st
• Describe how different plants live in different habitats	1st
• Discover that many kinds of seeds are found in the environment	K4
• Investigate how seeds sprout and infer how they grow into plants	K4 – 1st
• Discover that seeds travel in different ways	K5-1st
• Communicate that people and animals use plants in many ways	K4 – 1st
• Infer that people can use what they know about plant needs to care for plants	K5-1st
• Discover that there is a great diversity of animals	K4 – 1st
• Show that animals have observable behaviors	1st
• Illustrate that animals have life cycles	1st
• Observe that animals move, grow, change, and reproduce	K4 – 1st
• Discover that animals need certain conditions to grow and survive	1st
• Understand that different animals have different types of homes	1st
• Investigate how animal tracks provide clues about animals	1st

• Observe that human bodies have similarities and differences	1 st
• Observe that human body parts have functions that are adapted for special tasks	K5-1 st
• Relate how seasons and weather affect animals and plants	K4 – 1st
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Earth and Space Science	GRADE LEVEL
• Understand that we live on the planet Earth	K4 – 1 st
• Discover that different materials have different properties	1 st
• Know that Earth materials consist of solid rocks, soils, liquid water, and the gases of the atmosphere	1 st
• Know that rocks come in many different shapes, textures, and sizes	1 st
• Observe that rocks have similarities and differences	1 st
• Observe that rocks have different properties	1 st
• Discover that rocks of different sizes have different masses	1 st
• Discover that erosion can change rocks and landscapes	1 st
• Investigate how the observable properties of sand change when sand is mixed with water	1 st
• Show that rocks and sand have weight	1 st
• Show that sand takes the shape of the container it is in	1 st
• Identify the Earth's surface as mostly water	K4 – 1 st
• Infer that the water cycle plays a role in weather	1 st
• Relate how water is used in many ways	1 st
• Communicate that water is found in different places	1 st
• Know that short-term weather conditions can change daily and weather patterns change over the seasons	1 st
• Demonstrate that air exists and takes up space	1 st
• Relate that air has many uses	1 st
• Discover that air temperature varies with time and place	K5-1 st
• Discover that wind is moving air and has strength and direction	1 st
• Identify how rainy, sunny, snowy, and cloudy days have similarities and differences	1 st
• Relate that rain and snow come from clouds	1 st
• Know the basic patterns of the movement of the sun and the moon	K5-1 st
• Identify that the Earth is one of many planets in the solar system	K4 – 1 st
• Discover that gravity is a force that pulls objects toward Earth	K5-1 st
• Relate that the Earth is a planet that supports life	K5-1 st
• Relate the Earth is surrounded by air called the atmosphere	K5
• Illustrate that an astronaut needs to adapt to living and working in space	K5-1st
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Science and Technology	GRADE LEVEL
• Recognize that science is assisted by technology	1 st
• Investigate how models represent the real thing	K5-1 st
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Science in Personal and Social Perspective	GRADE LEVEL
• Identify God as the maker of everything in the environment (*7)	K4 – 1st
• Understand the basic rights of people (*3)	K5-1st
• Share self and material things for the good of others (*2,4)	K5-1st
• Recognize examples of social responsibility (*2)	K5-1st
• Can name bad elements that hurt the environment (*7)	K5-1st
• Demonstrate that people can make the environment better by their actions (*7)	K5-1st
• Participate in simple service projects that benefit others and the environment (*6,7)	K5-1st
• Recognize that a diversity of careers exist in science	K5-1st
• Relate that environmental conservation is important to our quality of life	1st
• Illustrate how people have a role in caring for the environment	K5-1st
• Explain how people use science at home, in school, and in the community	K5-1st
• Relate that people can affect their neighborhood environments	K5-1st
• Infer that people can prepare for different kinds of weather	K5-1st
• Show that people can conserve water	K5-1st
• Evaluate how people can conserve water	K5-1st
• Communicate that water should not be polluted or wasted	K5-1st
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History and Nature of Science	GRADE LEVEL
• Recognize that the field of science is open to anyone	K4-1st
• Know that scientific investigations generally work the same way in different places and normally produce results that can be duplicated	1st
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