

**Third Grade Science** students at St. Patrick’s will develop into individuals with the ability to use the process skills of inquiry to discover answers to questions. Using various instructional tools, students will deepen their understandings of Life Science, Earth/Space Science, Physical Science and Health/Social Science topics. Students will gain experience in observing, gathering and recording data, and evaluating results/observations. Students’ progress will be assessed using a variety of tools: including lab experiments, drawing or completing diagrams, reports, essays, or other written evidence of mastery, chapter and unit assessments, and participation in activities.

	<b><u>Standards/Goals</u></b>	<b><u>Instructional Tools</u></b>	<b><u>Assessment Tools</u></b>
<b>3.1 Life Science (Plants)</b>	<ul style="list-style-type: none"> <li>a. Students will recognize the parts of a plant.</li> <li>b. Students will describe the life cycle of a plant.</li> <li>c. Students will explain the various functions of plants used for growth, survival, and reproduction: germination/pollination; adaptation.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams of different plants</li> <li>Diagrams of the plant life cycle</li> <li>Greenhouse</li> <li>Books/Text</li> <li>Science Lab</li> </ul>	<ul style="list-style-type: none"> <li>Constructing diagrams</li> <li>Tests</li> <li>Lab experiments</li> <li>Teacher observation</li> <li>Projects</li> <li>Student participation</li> </ul>
<b>3.2 Life Science (Animals)</b>	<ul style="list-style-type: none"> <li>a. Students will distinguish between vertebrates and invertebrates.</li> <li>b. Students will explain the life cycle of an organism.</li> <li>c. Students will identify and diagram a food chain: producers, prey, predator.</li> <li>d. Students will explore different populations and the habitats in which they live.</li> <li>e. Students will describe how organisms affect their environment.</li> <li>f. Students will explain the various adaptations of animals that allow for their survival in their environment.</li> <li>g. Students will identify ways that pollution and recycling affect the environment.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams of life cycles</li> <li>Books/Text</li> <li>Internet</li> <li>Experiments</li> <li>Examples of food chains</li> <li>Venn diagrams</li> </ul>	<ul style="list-style-type: none"> <li>Constructing diagrams</li> <li>Charts</li> <li>Tests</li> <li>Lab experiments</li> <li>Research</li> <li>Teacher observation</li> <li>Venn diagrams</li> <li>Student participation</li> </ul>
<b>3.3 Earth/Space Science (Solar System)</b>	<ul style="list-style-type: none"> <li>a. Students will develop an understanding of the objects in the sky: sun, moon, stars.</li> </ul>	<ul style="list-style-type: none"> <li>Books/Text</li> <li>Diagrams</li> <li>Models</li> <li>Internet</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Models</li> <li>Projects</li> <li>Research</li> <li>Tests</li> <li>Teacher observation</li> <li>Student participation</li> </ul>

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<b>3.4 Earth Science (Earth)</b>	<ul style="list-style-type: none"> <li>a. Students will describe landforms on the earth's surface.</li> <li>b. Students will identify how erosion, flooding, earthquakes, and volcanoes can change the earth's surface.</li> <li>c. Students will explore the effects of gravity.</li> </ul>	<ul style="list-style-type: none"> <li>Books/Text</li> <li>Diagrams</li> <li>Models</li> <li>Labs/Experiments</li> <li>Projects</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Constructing models</li> <li>Teacher Observation</li> <li>Student Participation</li> <li>Quizzes</li> </ul>
<b>3.5 Earth/Space Science (Weather)</b>	<ul style="list-style-type: none"> <li>a. Students will describe changes in the weather: clouds, lightning, tornadoes, hurricanes, and thunderstorms.</li> <li>b. Students will recognize different cloud formations.</li> <li>c. Students will measure temperature with a thermometer.</li> <li>d. Students will use a rain gauge to measure precipitation.</li> <li>e. Students will identify how erosion, flooding, earthquakes, and volcanoes can change the earth's surface.</li> </ul>	<ul style="list-style-type: none"> <li>Books/text</li> <li>Thermometer</li> <li>Rain gauge</li> <li>Internet</li> <li>Bar graphs</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Models</li> <li>Projects</li> <li>Tests</li> <li>Teacher observations</li> <li>Student participation</li> </ul>
<b>3.6 Physical Science</b>	<ul style="list-style-type: none"> <li>a. Students will classify, compare, and contrast observable characteristics of matter.</li> <li>b. Students will demonstrate that matter can change states. (solid to liquid to gas by heating; gas to liquid to solid by cooling).</li> <li>c. Students will develop an understanding of light, heat, electricity, and magnetism (conduction, electrical current, insulators/conductors, magnetic poles, attract/repel).</li> </ul>	<ul style="list-style-type: none"> <li>Books/text</li> <li>Balance</li> <li>Thermometer</li> <li>Measuring cups</li> <li>Magnets</li> <li>Diagrams</li> <li>Internet</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Models</li> <li>Projects/reports</li> <li>Tests</li> <li>Teacher observation</li> <li>Student participation</li> </ul>

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<b>3.7 Personal/Social Science</b>	<ul style="list-style-type: none"> <li>a. .Students will identify the body systems: skeletal, nervous, digestive, circulatory, muscular, and respiratory systems.</li> <li>b. Students will describe how different substances can damage the body and alter how it functions: drugs, alcohol, tobacco.</li> <li>c. Students will distinguish between God given resources, basic resources (air, water, soil), and resources produced from basic materials (food, fuel, building materials).</li> <li>d. Students will distinguish between natural environmental changes and human influenced changes (positive or negative).</li> <li>e. Students will describe how technology affects their quality of life.</li> </ul>	<ul style="list-style-type: none"> <li>Books/text</li> <li>Diagrams/models</li> <li>Internet</li> <li>Food Guide Pyramid</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Models</li> <li>Constructing diagrams</li> <li>Projects/reports</li> <li>Tests</li> <li>Teacher observation</li> <li>Student participation</li> </ul>
<b>3.8 Science Inquiry</b>	<ul style="list-style-type: none"> <li>a. Students will use the Scientific Process as their inquiry model: ask a question, form a hypothesis, conduct an experiment, record data, draw conclusions, and communicate results.</li> <li>b. Students will use equipment and tools to gather data.</li> <li>c. Students will follow lab safety rules.</li> <li>d. Students will explain and answer questions about a model and how it represents an object, living thing, or event.</li> <li>e. Students will explain procedures and ideas in more than one way.</li> <li>f. Students will be able to describe observable change by using the appropriate tools and units of measurement.</li> </ul>	<ul style="list-style-type: none"> <li>Lab equipment</li> <li>Lab manual pages</li> <li>Science lab</li> <li>Safety equipment</li> <li>Posters/charts</li> <li>Books/text</li> </ul>	<ul style="list-style-type: none"> <li>Lab experiments</li> <li>Lab reports</li> <li>Quizzes</li> <li>Discussions</li> <li>Teacher observation</li> <li>Student participation</li> </ul>