

**Sanborn Regional School District**  
**Middle School Course Syllabus and Competencies**

<b>Course Title:</b> <i>Life Science</i>	<b>Grade:</b> 7		
<p>Course Description: In seventh grade science we learn about living things: what they are made of, where they live, how they work, and how they affect one another. By the end of the year the student will know all about plants, animals, bacteria, the environment and the human body.</p>			
<p>Text/Major Resources: Prentice Hall <i>Science Explorer</i> series in life science, and the FOSS <i>Diversity of Life</i> module.</p>			
<p>Competencies:</p> <ol style="list-style-type: none"> <li>1. Use appropriate tools to accurately collect and record both qualitative and quantitative data gathered through observation</li> <li>2. Evaluate methods of classification for a specific purpose</li> <li>3. Ask questions about observations</li> <li>4. Design a controlled experiment, identifying and controlling the major variables</li> <li>5. Determine whether the results of an experiment support or refute the scientific idea tested</li> <li>6. Understand that any system is usually connected to other systems, both internally and externally; thus a system may be thought of as containing subsystems and as being a subsystem of a larger system</li> <li>7. Understand the importance of patterns in science and the significance of symmetry</li> <li>8. Describe or compare how different organisms have mechanisms that work in a coordinated way to obtain energy, grow, move, respond, provide defense, enable reproduction, or maintain internal balance</li> <li>9. Explain relationships between or among the structure and function of the cells, tissues, organs, and organ systems in an organism.</li> <li>10. Given a scenario, trace the flow of energy through an ecosystem, beginning with the sun, through organisms in the food web, and into the environment (includes photosynthesis and respiration).</li> <li>11. Given an ecosystem, trace how matter cycles among and between organisms and the physical environment (includes water, oxygen, food web, decomposition, recycling but not carbon cycle or nitrogen cycle).</li> </ol>			
<p>7<sup>th</sup> Grade Science Essential Questions:</p> <ul style="list-style-type: none"> <li>✓ How is the scientific method used to solve problems?</li> <li>✓ How are the essential processes of life carried out in plants, animals, fungi, protists and bacteria?</li> <li>✓ How do living things interact with one another and their environment?</li> </ul>			
<p><u>Instructional Practices</u></p> <ul style="list-style-type: none"> <li>✓ Writing Across the Curriculum/Differentiated Instruction</li> <li>✓ Cooperative Learning/Writing Workshop/Essential Questions</li> <li>✓ Big 6 Research/6+ Writing Traits /Key 3 Reading</li> </ul>	<p><u>Assessment Strategies</u></p> <ul style="list-style-type: none"> <li>✓ Student Writing Portfolio</li> <li>✓ NECAP, NWEA, Common assessments</li> <li>✓ Lab Reports, Foss Science</li> </ul>		
<p><b>Sanborn Regional Middle School Mission and Expectations</b></p> <p>The faculty and staff of the Sanborn Regional Middle School have a commitment to recognize and nurture each student’s abilities within the context of the educational setting. Through reflection, reinforcement and challenge we anchor within the student a sense of his/her ability, success, and dignity.</p> <p>We believe this goal is best served when a holistic approach is used.</p>			
<p><u>Students</u></p> <p><b>Recognize student ability</b>  <b>Nurture student ability</b>  <b>Help students recognize their strengths and needs</b>          Help students recognize their success          Help students behave with dignity</p>	<p><u>Classroom Lessons and Activities</u></p> <p><b>Ask students to reflect on their learning</b>          Create experiences that reinforce skills          Offer opportunities for students to be challenged</p>	<p><u>Classroom Climate</u></p> <p>Create a safe classroom climate  <b>Develop clear and coherent expectations</b>          Provide a consistent system for expectations, behavior, and assessment</p>	<p><u>Communications</u></p> <p>Develop partnerships with community          Develop partnerships with parents</p>
<p>GRADEQUICK: Parents and students may access grades and course information on EDLINE:  <a href="https://www.edline.net/index.page">https://www.edline.net/index.page</a>          All student grades are updated every two weeks.</p>			