

Sanborn Regional School District
Middle School Course Syllabus and Competencies

Course Title: <i>Science</i>	Grade: 6		
<p>Course Description: Sixth grade science is a general science course designed to provide the necessary background for further study in the areas of physical and earth sciences. Students will use the scientific method while practicing creative problem solving skills. The course focuses on hands-on instructional methods and inquiry. Students will be expected to use prior knowledge as a foundation for further exploration and to be active participants in their own learning. The goal this year for students is to investigate into the world around them and to develop the mechanisms necessary to become independent thinkers.</p>			
<p>Text/Major Resources: Prentice Hall Science: <u>Sound and Light, Matter, Electricity and Magnetism</u>, (1993), <u>Motion, Forces, and Energy</u>(1997), <u>Dynamic Earth</u> (1994) <u>Solar Energy, Mixtures and Solutions, and Landforms</u> Foss Kits by Foss Science, Delta Education.</p>			
<p>Competencies:</p> <ol style="list-style-type: none"> 1. Make observations and record measurements using a variety of tools and instruments 2. Design and record a simple step by step procedure to follow in order to carry out a fair test of a scientific question 3. Explain how a hypothesis is a direct extension of a scientific idea and therefore makes the "idea" testable 4. Recognize that thinking about things as a systems means looking for how every part relates to others 5. Understand the importance of patterns in science 6. Recognize that all matter is composed of minute particles called atoms, and explain that all substances are composed of atoms, each arranged into different groupings. 7. Differentiate between a physical change, such as melting, and a chemical change, such as rusting. 8. Explain that the pitch of a sound is dependent on the frequency of the vibration producing it. 9. Describe the relationship between the strength of a force on an object and the resulting effect, such as the greater the force, the greater the change in motion. 			
<p>6th Grade Science Essential Questions:</p>			
<ul style="list-style-type: none"> ✓ What is energy and how is it used in our everyday lives? What are the different types of energy? How can we conserve our energy resources? What is matter and how does it help to define our existence? ✓ How is the sun crucial to life on Earth, yet disastrous at the same time? What can humans do to protect our planet from Greenhouse gasses and pollution? ✓ What are the variables that shape our landscape? Why is paying attention to detail so important in the scientific process and in life? 			
<p><u>Instructional Practices</u></p>	<p><u>Assessment Strategies</u></p>		
<ul style="list-style-type: none"> ✓ Writing Across the Curriculum/Differentiated Instruction ✓ Cooperative Learning/Writing Workshop/Essential Questions ✓ Big 6 Research/6+ Writing Traits /Key 3 Reading 	<ul style="list-style-type: none"> ✓ Student Writing Portfolio ✓ NECAP, NWEA, Common assessments ✓ Lab Reports, Foss Science 		
<p>Sanborn Regional Middle School Mission and Expectations</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>Recognize student ability Nurture student ability Help students recognize their strengths and needs Help students recognize their success Help students behave with dignity</p>	<p><u>Classroom Lessons and Activities</u></p> <p>Ask students to reflect on their learning 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 Develop clear and coherent expectations 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: https://www.edline.net/index.page All student grades are updated every two weeks.</p>			