

# 8th Grade Curriculum Overview

EST. 1999

**PRAIRIE CROSSING**  
**CHARTER SCHOOL**



CREATING NATURAL LEADERS

## Science & Social Studies

Our goal is to teach using designed units of study that adhere to our environmental and constructivist beliefs while adhering to the Illinois Learning Standards. In Science, the Pearson Science Explorer Series is used in conjunction with supplementary materials including but not limited to Interactive Science, and Great Explorations in Math & Science (GEMS). In Social Studies, materials to accomplish these goals and other varied text and multimedia resources are used in conjunction with supplementary material.

Science	Social Studies																								
<p><u>Year A:</u>            Water Quality            Scientific Process            Relationships Within The Environment            Energy Flow            Nitrogen Cycle            Weather, Season Change, Climate            Phenology</p> <p><u>Year B:</u>            Toxins            Force and Motion            Light and Sound            Electricity &amp; Magnetism            Phenology</p>	<p>8<sup>th</sup> grade social studies curriculum is in a two (2) phase in. During the 2013-2014 school year the 8<sup>th</sup> grade teacher in collaboration with the Director of Student Services and surrounding high schools will be integrating the previous 8<sup>th</sup> grade curriculum with newer units of study. Parents will be kept abreast of the curriculum taught during the 2013-2014 school year.</p> <table border="0"> <thead> <tr> <th><u>Units of Study previous to 2013-14</u></th> <th><u>Units of Study for 2014-2015</u></th> </tr> </thead> <tbody> <tr> <td>13 Colonies</td> <td>American Colonies</td> </tr> <tr> <td>Constitution</td> <td>American Revolution</td> </tr> <tr> <td>American Revolution</td> <td>U.S. Constitution</td> </tr> <tr> <td>Civil War</td> <td>Early 1800s</td> </tr> <tr> <td>Western Expansion</td> <td>The Alamo</td> </tr> <tr> <td>Robber Baron Trials</td> <td>Lewis &amp; Clark</td> </tr> <tr> <td>World War I</td> <td>Civil War</td> </tr> <tr> <td>Great Depression</td> <td>Westward Expansion</td> </tr> <tr> <td>Illinois Constitution</td> <td>Cowboy Era</td> </tr> <tr> <td>Holocaust</td> <td>Robber Barons</td> </tr> <tr> <td>World War II</td> <td></td> </tr> </tbody> </table>	<u>Units of Study previous to 2013-14</u>	<u>Units of Study for 2014-2015</u>	13 Colonies	American Colonies	Constitution	American Revolution	American Revolution	U.S. Constitution	Civil War	Early 1800s	Western Expansion	The Alamo	Robber Baron Trials	Lewis & Clark	World War I	Civil War	Great Depression	Westward Expansion	Illinois Constitution	Cowboy Era	Holocaust	Robber Barons	World War II	
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## Math

Our math curriculum supports all students in developing mathematical ideas and then expanding them. Rather than teaching and students learning, the teachers collaborate with their students to develop a strong conceptual math foundation and skills based on that foundation. Teachers do this by guiding their students through the discovery of math concepts via the Socratic Method of directed questioning to enable students to construct their own knowledge about the concept at hand. This style of learning causes our students to have deeper understanding and longer retention of math concepts. For instance, a teacher has their students draw a line on the board and writes 0 at one end and 1 at the other. The students are then asked to point to the middle and the teacher asks, "What's in there?" The teacher proceeds to guide these kids through specific questions or comments leading them to the discovery of fractions, ordering fractions, and adding fractions. The teacher does not directly tell them about fractions, introduce terminology of fractions, or give them algorithms to solve problems presented in a text until they have gone through this discovery period. This process can be time consuming, however meaningful to the understanding of the mathematical concept.

Eighth Grade Units of Study and Core Standards

- The Pythagorean Theorem
- Making sense of expressions and symbols
- Linear systems and inequalities
- Quadratic Relationships
- Exponential Relationships
- Exponents and Radicals, Polynomials
- Quadratics
- Symmetry and transformations in geometry

## Language Arts

Reading, writing, listening, and speaking are fundamental to all learning and are integrated throughout the curriculum. The ELA Common Core Standards are integrated into planned units of study that adhere to our environmental and constructivist beliefs. Students experience a writing program which teaches necessary skills while fostering the creative aspects of writing. The 8<sup>th</sup> grade language arts curriculum uses various novels in conjunction with supplementary materials to accomplish these goals.

Fiction	Non-Fiction	Writing
<p>Students will learn to:</p> <ul style="list-style-type: none"> <li>● Cite the textual evidence that most strongly supports an analysis of what the text says explicitly.</li> <li>● Cite the textual evidence that most strongly supports inferences drawn from the text.</li> <li>● Analyze the theme or central idea that develops over the course of the text, including its relationship to the setting</li> <li>● Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.</li> <li>● Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings.</li> <li>● Analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.</li> <li>● Analyze the extent to which a filmed production stays faithful to or departs from the text or script.</li> <li>● By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</li> </ul>	<p>Students will learn to:</p> <ul style="list-style-type: none"> <li>● Cite the textual evidence that most strongly supports an analysis of what the text says explicitly.</li> <li>● Cite the textual evidence that most strongly supports inferences drawn from the text.</li> <li>● Analyze text development over the course of the text, including its relationship to supporting ideas.</li> <li>● Provide an objective summary of the text.</li> <li>● Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.</li> <li>● Analyze how the author acknowledges and responds to conflicting evidence or viewpoints.</li> <li>● Analyze a case in which two or more texts provide conflicting information on the same topic.</li> <li>● Identify where the texts disagree on matters of fact or interpretation.</li> <li>● By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.</li> </ul>	<p>Students will learn to:</p> <ul style="list-style-type: none"> <li>● Write arguments to support claims with clear reasons and relevant evidence.</li> <li>● Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>● Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>● Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.</li> <li>● Establish and maintain a formal style.</li> <li>● Provide a concluding statement or section that follows from and supports the argument presented.</li> <li>● Write informative/ explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</li> <li>● Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused</li> </ul>

		<p>questions that allow for multiple avenues of exploration.</p> <ul style="list-style-type: none"> <li>● Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.</li> <li>● Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</li> </ul>
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## Specials

### Art

No info at this time

### Music

In 8th Grade, student will continue their sight-reading and singing advancement. We will take musical journeys to other parts of the world to see how different cultures use music in their lives. We will conclude by making connections between the musical traditions of different cultures and see how music from across the globe influences music here at home. Live performances are essential to a complete musical education, and students will perform a concert during the school year.

- Sing advanced and 2 part harmonies through sight-reading
- Explore music of the world and how cultures use music
- Find connections in the musical traditions of different world cultures

### Physical Education

Our goal is to teach functional fitness and health using our school resources as well as the natural environment to promote lifelong healthy, fit individuals. Seventh/eighth grade PE will continue to build upon the moderate (Junior Varsity) level of strength and conditioning skills learned in fifth/sixth grade. Students will learn new skills and concepts of strength and conditioning through activities, journaling and workouts throughout the year. Journals will be used to record workouts and skills learned as well as track progress throughout the year. Students will also engage in moderate to high intensity activity through various workouts and fun activities/games involving multiple movement patterns and many different manipulatives. Fitness tests will be performed at the beginning of the year and at the end of the year so that students can evaluate progress made in each test. By the end of the year students will be able to track their progress through their journals and have an advanced (Varsity) level of strength and conditioning.

Physical

- Combinations and sequences of loco motor, non-loco motor, and manipulative motor patterns in activities, games and sport
- Efficient vs. inefficient movement patterns

- Rules and safety in activities
- Apply basic offensive, defensive and cooperative strategies in activities, games and sport

#### Individual and Team-building

- Follow directions and decisions of responsible individuals
- Participate in establishing procedures for group activities
- Remain on task free of distraction
- Work cooperatively with others to accomplish a set goal in multiple situations

#### Functional Fitness

- Push-ups, sit-ups, modified pull-ups, box jumps, broad jumps, squats and dead lifts
- Principles of training: FITT
- Participate in health-related fitness activities
- Monitor intensity of exercise using a variety of methods with and without technology
- Evaluate strengths and weaknesses of a personal fitness profile
- Set short term and long term health-related fitness goals
- Identify physical activity opportunities within the community
- Use principles of training toward health-related fitness goals

#### Nutrition

- Food groups and multiple examples of each
- 6 essential nutrients
- diet theories/fades
- USDA Dietary Guidelines

#### Body

- Functions of major muscle groups and bones, ligaments, tendons and joints.
- Interactions of body systems
- Effects of health related actions on body
- Relationships between physical, mental and social factors

#### Health

- Identify and describe ways to reduce common age appropriate health risks
- Influences of positive health practices and health care on health risks
- Routine safety precautions
- Identify careers for health promotion
- Individual influence on community health
- Identify environmental conditions that affect the health of local community
- Develop solutions to address environmental problems to the local community
- Causes and consequences of conflict and violence
- Addressing differences without harm
- Influence of positive communication at school, home and workplace
- Apply decision-making process to individual health
- Practice and application of refusal and negotiation skills in bad situations

### Spanish

Communication
<ul style="list-style-type: none"> <li>• Responds appropriately to simple commands.</li> <li>• Demonstrate understanding of basic conversational questions/answers.</li> </ul>

<ul style="list-style-type: none"> <li>● Asks simple questions with prompts.</li> </ul>
<ul style="list-style-type: none"> <li>● Responds to basic conversational questions.</li> </ul>
<ul style="list-style-type: none"> <li>● Imitates pronunciation, intonation and inflection.</li> </ul>
<ul style="list-style-type: none"> <li>● Recognizes the written form of spoken words.</li> </ul>
<ul style="list-style-type: none"> <li>● Copy and writes words.</li> </ul>
<ul style="list-style-type: none"> <li>● Demonstrates knowledge of vocabulary introduced during thematic units.</li> </ul>
<ul style="list-style-type: none"> <li>● Presents simple written or oral report on a familiar subject.</li> </ul>
<ul style="list-style-type: none"> <li>● Writes compositions and reports.</li> </ul>
<ul style="list-style-type: none"> <li>● Presents a short original piece on a given theme.</li> </ul>
<ul style="list-style-type: none"> <li>● Presents an original piece on a theme of their choice.</li> </ul>
<b>Culture</b>
<ul style="list-style-type: none"> <li>● Uses common forms of courtesy.</li> </ul>
<ul style="list-style-type: none"> <li>● Demonstrates knowledge of language appropriate to the time of day and relationship</li> </ul>
<ul style="list-style-type: none"> <li>● (adult, peer)</li> </ul>
<ul style="list-style-type: none"> <li>● Identify one or more art forms from Spanish-speaking countries.</li> </ul>
<ul style="list-style-type: none"> <li>● Identify sample art works and their creators associated with areas where target language is spoken.</li> </ul>
<ul style="list-style-type: none"> <li>● Identify and use simple geography vocabulary.</li> </ul>
<ul style="list-style-type: none"> <li>● Uses maps, charts, and original images to describe countries.</li> </ul>
<b>Language Connected to Academic Discipline</b>
<ul style="list-style-type: none"> <li>● Recognize the currency of Spanish-speaking countries.</li> </ul>
<ul style="list-style-type: none"> <li>● Use Spanish vocabulary to identify simple science terms relating to weather and</li> </ul>
<ul style="list-style-type: none"> <li>● nature.</li> </ul>
<ul style="list-style-type: none"> <li>● Identify different geometric shapes.</li> </ul>
<ul style="list-style-type: none"> <li>● Uses Spanish to describe basic earth science content.</li> </ul>
<ul style="list-style-type: none"> <li>● Identifies professions in which Spanish is spoken.</li> </ul>
<ul style="list-style-type: none"> <li>● Use Spanish to do measurements/time/money.</li> </ul>