

Grade

6

Language Arts

The English language arts are the vehicles of communication by which we live, work, share, and build ideas and understandings of the present, reflect on the past, and imagine the future.

Michigan Curriculum Framework
A portion of the Vision Statement

Genre, Craft, and Conventions of Language

- Narrative focus: adventure, fantasy, folktales, myth, legend
- Non-fiction focus: research project, personal narrative
- Write narrative using good word choice, imagery, voice to develop plot, characters, theme
- Write expository using introductions, summaries conclusions, emotional appeal, strong opinion, credible support
- Analyze and apply rules for spelling
- Identify and use main/subordinate clauses, indefinite pronouns, abstract nouns, reflective pronouns
- Public speaking creates interest and emphasizes key ideas

Literature and Understanding

- Universal themes of survival, responsibility, relationships in classic and contemporary literature examined from cultural, personal, and author's perspective

Creating Communication Products for Various Purposes and Audiences

- Written and spoken narratives and expository pieces related to universal themes using focus genres
- Vocabulary that defines critical attributes of key concepts of survival, responsibility, relationships and vocabulary relative to English Language Arts

Skills, Strategies, and Processes

Comprehension

- Use essential comprehension strategies before, during, and after reading to support proficient, independent reading. These strategies include: making connections, monitoring and correcting, determining order of importance, visualizing, asking questions, making inferences, synthesizing

Writing

- Writing includes six essential traits of writing
- Use writing process

Research

- Brainstorm, generate and evaluate questions to initiate research related to universal themes
- Select and use information from a variety of sources that represent several perspectives
- Organize and analyze information
- Present/publish research

Metacognition

- Plan and evaluate skills, strategies and processes to construct and convey meaning when reading, listening, speaking and viewing.

Critical Standards

- Analyze purposes and contexts in which shared, individual and expert standards are used in order to assess own work and that of others

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Connected Mathematics Instructional Program

The goal of *Connected Mathematics* is to help students develop mathematical knowledge, understanding and skill, as well as an awareness and appreciation of the rich connections among mathematical strands and between mathematics and other disciplines. Every unit develops a big idea, that is, an important cluster of related concepts, skills, procedures and ways of thinking. Below is an overview of the **6th grade program**.

Title of Unit <i>Big Idea</i>	Concept & Skills
Bits & Pieces II <i>Using Rational Numbers: Fractions</i>	Estimating, adding, subtracting, multiplying and dividing fractions.
Data About Us	Collecting, organizing, displaying and analyzing data
Bits & Pieces III <i>Using Rational Numbers: Decimals and Percent</i>	Adding, subtracting, multiplying and dividing decimals, finding percent.
Variables & Patterns <i>Introducing Algebra</i>	Variables; representations of relationships, including tables, graphs, words and symbols.
Filling & Wrapping <i>Introducing Algebra</i>	Volume and surface area of various solids; volume and surface area relationships

Number and Operations

- Convert from a fraction to a decimal to a percent
- Estimate the sums and differences of fractions
- Solve real life problems involving fractions and decimals
- Efficiently and accurately apply operations with integers in solving problems
- Develop and apply the appropriate method of computation from mental mathematics, estimation, paper/pencil or by using a calculator with integers

Algebra

- Describe and illustrate the properties of operations with positive and negative numbers
- Simplify expressions and translate between verbal and algebraic expressions
- Model and write algebraic equations
- Solve one- and two-step linear equations
- Discuss whether a solution is reasonable in the context of a problem

Geometry

- Construct and classify polygons
- Identify shapes
- Identify a shape when properties are given
- Identify corresponding segments and angles of polygons
- Recognize and describe flips and turns
- Calculate perimeter and area
- Graph a set of ordered pairs in the first quadrant
- Select and use appropriate tools to measure an object
- Estimate measurements in standard and metric units

Data and Probability

- Explore, predict, graph experimental probability
- Collect and analyze experimental data.
- Define probability
- Compare experimental and theoretical probabilities

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Science

Goals for school science are to educate students who are able to:

- Experience the richness and excitement of knowing about the natural world
- Use appropriate scientific processes and principles in making personal decisions
- Engage intelligently in public discourse and debate about matters of scientific and technological concern
- Increase their productivity through the use of the knowledge, understanding, and skills of the scientifically literate person in their careers

The middle school science curriculum engages students in inquiries designed to increase their interest and understanding, using the “5 E model”: engage, explore, explain, extend, evaluate. The following units are based on the National Science Education Standards and address the Michigan Curriculum Framework objectives.

<p>Biography of the Earth Unifying Concept: Forces within the earth can cause continual changes to its surface. Waves, wind, water and ice sculpt the earth’s surface to produce distinctive landforms.</p> <p>Key Concepts:</p> <ul style="list-style-type: none">• It is part of scientific inquiry to evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.• Landforms are the result of combinations of constructive and destructive forces.• Destructive forces include weathering and erosion.• Some changes in the solid earth can be described as the “rock cycle.”	<p>Populations and Ecosystems Unifying Concept: All organisms and their environment are dependent on each other.</p> <p>Key Concepts:</p> <ul style="list-style-type: none">• Every species is linked, directly or indirectly, to a great many things in an ecosystem.• Almost all life on earth is ultimately maintained by transformations of energy from the sun.• The amount of life any environment can sustain is limited by its most basic resources.
<p>Properties of Matter Unifying Concept: Although substances have different properties, everything is really made up of a relatively few kinds of basic material combined in various ways.</p> <p>Key Concepts:</p> <ul style="list-style-type: none">• Density is a characteristic property of matter that is independent of the amount of sample.• Boiling point is a characteristic property of matter that is independent of the amount of sample. Every substance can exist in a variety of different states, depending on temperature and pressure. All but a few substances can also take solid, liquid and gaseous form.• Solubility and pH levels are characteristic properties of matter that are independent of the amount of sample. A mixture of substances often can be separated into the original substances using one or more of the characteristic properties.	<p>Transfer of Energy Unifying Concept: Energy is a property of many substances and is associated with heat, light, electricity, mechanical motion, sound, nuclei and the nature of a chemical.</p> <p>Key Concepts:</p> <ul style="list-style-type: none">• Whenever the amount of energy in one place or form diminishes, the amount in another place or form increases by an equivalent amount.• Transformations of energy usually result in producing some energy in the form of heat, which leaks away by radiation or conduction.• Sound energy is chiefly the regular back and forth motion of molecules that will vary depending on the medium.• The sun’s energy arrives as light with a range of wavelengths, consisting of visible light, infrared, and ultraviolet radiation. Light interacts with matter by transmission (including refraction), absorption or scattering (including reflection).• Electrical circuits provide a means of transferring electrical energy when heat, light, sound and chemical changes are produced.

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Social Studies

Social Studies is the integrated study of the social sciences to prepare young people to become responsible citizens. Responsible citizens display social understanding and civic efficacy. Social understanding includes knowledge of the human condition, how it has changed over time, the variations that occur in different physical environments and cultural settings, and the emerging trends that appear likely to shape the future in an interdependent world. Civic efficacy is the readiness and willingness to assume responsibilities of citizenship, knowing how, when, and where to make informed and reasoned decisions for the public good in a democratic society.

GRADES K-8 SOCIAL STUDIES CONTENT EXPECTATIONS,
MICHIGAN DEPARTMENT OF EDUCATION



Foundations of Social Studies Western Hemisphere Studies Geography, People, Places, and Issues

The sixth grade social studies curriculum introduces students to cultures of the Western World. Emphasis is placed on the contemporary geography of North America, South America, and Europe and Russia, with a look at Australia and Oceania at the end of the year. Students study the geography of each of these world regions; explore cultural and natural features that characterize each region; trace the movement of people, ideas, and products within the regions; and discover ways that each can be divided into sub-regions.

Historical background is provided to enable students to understand how these regions developed from the past to the present. Differences in governments and economies are examined. The economy of each region and its role in the global economy is explored. Special attention is paid to economic ties with the United States.

Using a variety of media, students compile, analyze, and present geographic and economic data pertaining to the regions. Throughout the course, students study public issues of global significance in the Western World. Through analysis, discussion, and writing, students consider what actions, if any, they and their country should pursue to promote the well being of people who live in these regions.