



Hawthorn School District 73

Curriculum Guide for Parents: Eighth Grade

What you can expect your child to learn and be able to do.

This guide shares important information about Hawthorn Learning Standards, which are aligned with the Illinois Learning Standards. These standards outline state requirements for your child's learning program and what students across the state should be able to do in certain subjects.

A good educational system provides many tools that help children learn. Curriculum standards are useful for making sure:

- ★ teachers know what is to be taught;
- ★ children know what is to be learned; and
- ★ parents and the public can determine how well the concepts are being learned.

The following pages provide information about learning standards for English language arts, mathematics, science, social studies, technology, physical development and health, and fine arts for Eighth Grade. For a more comprehensive list, which includes all of the performance indicators, you may view our Curriculum Guide online at www.hawthorn73.org.

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Eighth Grade culminates with promotion exercises held each year in June, when students mark the passage from middle school to their next level of education.

English Language Arts

Through the study of the language arts, students will learn to read fluently and understand a broad range of written materials. They must be able to communicate well and listen carefully and effectively. They should develop a command of the language and demonstrate their knowledge through speaking and writing for a variety of audiences and purposes. In addition, students must be able to study, retain, and use information from many sources.

Big Idea/Topic: Utilizing the Power of Quality Communication.

By the end of eighth grade, students will be able to...

Literacy

Reading

- ★ Preview reading materials using re-reading strategies.
- ★ Respond to questions that reflect higher thinking.
- ★ Analyze the meaning of words and phrases in their context.
- ★ Determine the meaning of an unknown word or content-area vocabulary using knowledge of prefixes, suffixes, and word roots.

- ★ Understand how story elements, point of view, and theme contribute to reader understanding of the text.
- ★ Understand how specific elements and techniques enhance characterization.
- ★ Engage in literary discussions.
- ★ Relate literature selections and informational text to self, world and other texts.
- ★ Identify details which reveal the genre of specific texts (e.g. historical fiction, mysteries, biography/autobiography, science fiction, story, dramatic reading, nonfiction, and essay).
- ★ Evaluate how text reflects a culture, society, or historical period.

Listening

- ★ Utilize appropriate listening skills in order to follow instructions and participate in discussions.

Speaking

- ★ Deliver presentations that use language clearly, audibly, and appropriately.
- ★ Manage notecards, outlines, and other visual aids while presenting.

Writing

- ★ Select and apply appropriate prewriting strategies.
- ★ Write using organizational structure that demonstrates coherence.
- ★ Employ an engaging introduction, organization, and an effective conclusion.
- ★ Include specific supporting information to develop an assigned topic fully.
- ★ Use effective transition words and phrases within and between paragraphs.
- ★ Edit and revise to maintain a consistent voice, tone, and focus throughout a piece of writing.
- ★ Use available technology to research and compose.
- ★ Identify accurate current and credible sources.
- ★ Develop a works cited page.
- ★ Design and present a research project.



Mathematics

Mathematics is a language we use to identify, describe, and investigate the patterns and challenges of everyday living. It deals with numbers, quantities, shapes, and data, as well as numerical relationships and operations. Mathematics is a way of approaching new challenges through investigating, reasoning, visualizing, and problem solving with the goal of communicating the relationship observed and problems solved to others.

Big Idea/Topic: Understanding the Power of Mathematics.

Number Sense

- ★ Solve problems involving order of operations, including exponents, and parentheses.
- ★ Compute with rational numbers (positive and negative integers, fractions, and decimals).
- ★ Identify and apply algebraic properties.
- ★ Apply proportional reasoning to solve word and pictorial problems.
- ★ Solve real-life problems involving percents including those less than 1% and greater than 100%.

Estimation and Measurement

- ★ Use equations to solve for perimeter, area, circumference, volume, and surface area of geometric shapes.
- ★ Demonstrate use of appropriate units and measurement tools.

Algebra and Analytical Methods

- ★ Expand sequences to the n th term.
- ★ Simplify, and evaluate algebraic expressions with rational numbers.
- ★ Translate sentences into algebraic equations.
- ★ Solve algebraic equations containing rational numbers.

Geometry

- ★ Apply the Pythagorean Theorem to solve problems.
- ★ Identify and solve angle relationships involving transversals, complementary, supplementary, and vertical angles.
- ★ Recognize and plot transformations.

Data Analysis and Probability

- ★ Interpret and solve problems using data from various graphs.
- ★ Solve problems involving measures of central tendency.
- ★ Represent possible outcomes for compound events with tables and diagrams.
- ★ Determine the arrangements using permutations and combinations.



Mania proved to be a popular event as nearly 300 students participated in the fun at Middle School North.

Science

The goal of science education is to develop in learners an understanding of the inquiry process as it is related to key concepts and principles of the life, physical, and earth/space sciences. The curriculum addresses the integration of the sciences with the technology and society as students learn to connect the importance of scientific knowledge to its application in everyday life.

Scientific Inquiry and Technological Design

- ★ Demonstrate the use of science skills in forming hypotheses and understanding the experimental process of controlling one variable at a time.
- ★ Identify the dependent and independent variables in a scientific experiment.
- ★ Design an experiment including the ability to write a detailed procedure.
- ★ Demonstrate the ability to accurately collect, record, and interpret data including being able to explain unexpected results.
- ★ Report the process and results of a scientific investigation through verbal, written or graphical representation.

Life Science: Interactions of Life and Other Sciences

- ★ Identify the elements and compounds necessary for life.
- ★ Investigate how living systems are impacted by an imbalance of elements.
- ★ Analyze how the ecological health of the environment can be impacted by human activity.
- ★ Explain what would happen if normal limiting factors of an ecosystem are disrupted.
- ★ Investigate the environmental effect of introducing a substance that causes biological harm to the ecosystem.
- ★ Investigate the structure and function of sensory systems.

Physical Science: Interactions of Physical and Other Sciences

- ★ Apply physical and chemical properties to separation and identification of matter.
- ★ Identify an unknown mixture based on its physical and chemical properties.
- ★ Explain the role of subatomic particles and behavior of matter.
- ★ Compare and contrast the relationship of energy changes to matter on molecular/atomic level.
- ★ Demonstrate and discuss how forces affect motion.
- ★ Predict and discuss factors that influence the relative motion of an object.
- ★ Apply and analyze Newton's second law of motion in various situations.
- ★ Apply principles of forces and motion to design technology.

Earth /Space Science: Interactions of Earth/Space and Other Sciences

- ★ Investigate the role of aquifers and aquatards in ground water contamination.
- ★ Study the impact of water treatment systems.
- ★ Analyze the economic, environmental, political and social issues surrounding an environmental problem.

Science, Technology, and Society

- ★ Explain and apply the basics of safety practices and procedures.
- ★ Retrieve mathematical data accurately for scientific analysis.
- ★ Distinguish fact from opinion and science from pseudoscience.
- ★ Explore interaction of resource acquisition, technological development, and ecosystem impact and estimate costs of such interactions.
- ★ Explore natural resource conservation and management programs, propose plans for increased efficiency, evaluate their effect on natural resources and the local economy, and research the past, current, and future local programs and plans.

Safety and Practices of Science

- ★ Identify and reduce potential hazards in science activities.
- ★ Identify and demonstrate proper use of laboratory equipment.



Social Studies

The study of social studies helps students develop the ability to make informed and reasoned decisions for the public good. Students are preparing to become citizens of a culturally diverse, democratic society in an interdependent world. The curriculum integrates the disciplines of social science to promote civic competence.

Big Idea/Topic: Power Shifts That Affect Our Nation and the World. (20th-21st Centuries)

Political Science/Government

- ★ Describe how changing interpretations of the powers and limitations of our Constitution have affected rights and responsibilities of groups and individuals.
- ★ Analyze how public policy issues are influenced by government actions.
- ★ Recognize the responsibilities of some of the departments and regulatory agencies of the federal government.
- ★ Compare and contrast the roles and influence of various individuals, groups, and media in shaping current public policy issues.
- ★ Describe the development of the United States as world leader in international relations.
- ★ Compare and contrast the development of democratic systems with other kinds of political systems.

Economics

- ★ Explain how supply, demand, and price relate to one another in a free market economy.
- ★ Analyze the differences between a market and command economy.
- ★ Analyze the potential impact of current events on the price of consumer goods or services.
- ★ Explain why shortages and surpluses occur in a market economy and provide real-world examples of each.
- ★ Provide examples of government policies that have affected society, environment, or economy.

History

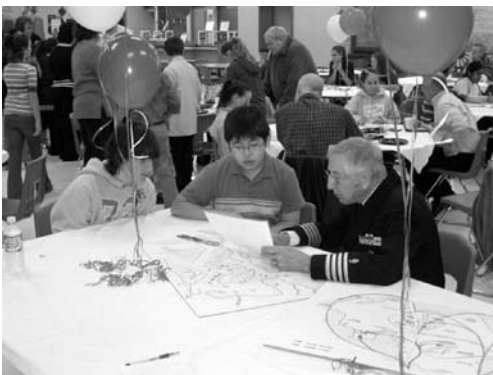
- ★ Evaluate the significance of multiple causes leading to an historical event.
- ★ Assess the significance of a watershed event in United States political history.
- ★ Identify the point of view of the author as found in a primary source document.
- ★ Compare and contrast episodes of cooperation and conflict among proponents of opposing political ideologies.
- ★ Assess the origins of significant environmental issues confronting the United States and North America.
- ★ Assess the progress made by national organizations in addressing environmental issues in the United States since 1945.

Geography

- ★ Use maps, tables, graphs, charts, and diagrams to depict the geographic implications of world events.
- ★ Evaluate which maps and graphics in an atlas are appropriate to answer questions about geographic issues.
- ★ Support with evidence how the geography of a region impacted a particular event.
- ★ Analyze rapidly growing urban centers to determine the impact of urban sprawl on the physical and human environment.
- ★ Explain how human induced alterations of the environment have resulted in human migration.
- ★ Analyze major urban centers in the United States and the world to determine how migration of different ethnic groups has altered their population and functions

Social Science

- ★ Identify and analyze how various cultural groups have combined to create a larger multicultural American society.
- ★ Analyze advantages and disadvantages of living in a pluralistic society.
- ★ Demonstrate how increases in productivity result from advances in technology and other resources.
- ★ Analyze the relationship of unions and standards in the work place and quality of life.
- ★ Evaluate how technology impacts cultural values and creates a global society.
- ★ Explain how inclusion of groups based on gender and race have changed.
- ★ Explain likely consequences for non-conformity in a social group.
- ★ Assess the reactions of groups of people to diversity within their society.



Veterans from World War II through Desert Storm were interviewed by eighth grade students on "Take a Vet to School Day."

Technology

Technology is one of many tools that students have at their disposal as they engage in the learning process. Educational technology is the application of technology to the learning process. Technologically literate students access and acquire knowledge, exchange ideas and opinions, solve problems, and create, innovate, and express themselves through the skillful use of a variety of technologies. Technology is integrated into the classroom through regular planned activities and is used by students when its use will increase understanding and enhance learning.

Tools, Knowledge, and Skills

- ★ Apply strategies for identifying and solving routine hardware and software problems.
- ★ Develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- ★ Utilize a wide variety of current and emerging technologies and media with various activities.
- ★ Use content-specific tools, software, and simulations (environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.
- ★ Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.
- ★ Design, develop, publish, and present products (Web pages, videos) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
- ★ Collaborate with peers, experts, and others using collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.
- ★ Select and use appropriate tools and technology resources to accomplish a variety of tasks and to design solutions to solve problems.
- ★ Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.
- ★ Research and evaluate the reliability of Internet resources.
- ★ Know and model ethical, legal, and responsible behavior using technology.

Physical Development and Health

Physical development programs offer students the opportunity to enhance the capacity of their minds and bodies. Healthy minds and bodies are basic to academic success and, later in life, to enhancing the ability to contribute to a productive work environment. The health curriculum focuses on health promotion, safety, and understanding the human body and how it grows and develops. Problem solving, communication, responsible decision making, and team-building skills are major emphases, as well. More specific goals

are outlined in the curriculum guide in the following areas: movement skills, physical fitness, team-building, principles of health promotion, human body systems, and promoting health and well-being.

Working Toward Independence Using a Balance of Social, Physical and Emotional Skills

- ★ Use a variety of resources to help in evaluating and improving overall fitness and well-being.
- ★ Make life-style choices that are beneficial to one's body.
- ★ Develop interpersonal skills to promote one's optimal growth and health.
- ★ Enhance personal and group performance by applying knowledge and practicing appropriate physical skills.

Fine Arts

In addition to their intrinsic value, the arts contribute to children's development and enrich the quality of life. The fine arts – dance, drama, music, and visual arts – are fundamental ways of knowing and thinking. The fine arts curriculum addresses the language of the fine arts, sensory elements, organizational principles, expressive qualities, and how the arts are

similar, different, or related to one another. Students also learn how to interpret visual images, sounds, movement, and story. The creation and performance of the arts is emphasized along with the role of the arts in civilization.

Global Influences and the Arts

- ★ Understand what influences the arts have on the world.
- ★ Demonstrate a greater awareness of how various elements and qualities combine to create an emotional effect in various art forms.
- ★ Use the elements and principles to create and analyze the arts