



MY CHILD'S LEARNING:

a Parent's Guide to the Iowa Core



This guide provides an overview of what your child will learn by the end of 6th grade as directed by the Iowa Core, our statewide academic standards. The guide focuses on key concepts and skills in mathematics, literacy, science, social studies and 21st Century skills. In addition, the Iowa Core builds a strong foundation for success in other subjects he or she studies throughout the school year. If your child meets the expectations outlined in the Iowa Core, he or she will be well prepared for 7th grade.

Why are Academic Standards Important?

Academic standards are important because they help ensure that all students, no matter where they live or what school they attend, are prepared for success in college and the workforce. They help set clear and consistent expectations for what students should know and be able to do from kindergarten through 12th grade. Standards are a set of goals, not a curriculum, so decisions about teaching remain with local schools.

High standards help teachers and parents work together to ensure students succeed. They guide parents and teachers to know when students need extra assistance or when they need more challenge in the classroom. They also help your child develop critical-thinking skills that will prepare him or her for college and career.



Some content adapted from the National PTA's *Parent's Guide to Student Success*.

How are the standards organized?

Some of the Iowa Core standards are arranged grade-by-grade, while others are grouped into a span of grade levels. In all cases, the standards set appropriate expectations for what students need to learn, but not how to teach.

- Literacy, mathematics, and science: These standards are arranged grade-by-grade for kindergarten through 8th grade. For high school, literacy standards are arranged by grade span (9-10 and 11-12) and math and science standards are arranged by discipline within the content area.
- Social studies and 21st century skills: These standards are arranged in grade spans of K-2, 3-5, 6-8, and 9-12.



Mathematics

The skills and understanding your child will gain are among the most important foundations for college and career readiness. These include working with ratios and rates, and variables and variable expressions, which are the building blocks of algebra. Many of this year's topics will remain a major emphasis throughout middle school and into high school.

Examples of Your Child's Work at School:

- Understand ratios and rates and solve problems that involve proportional relationships (e.g., if it took seven hours to mow four lawns, then at that rate how many lawns could be mowed in 35 hours? At what hourly rate were lawns being mowed?).
- Divide fractions and solve related word problems (e.g., how wide is a rectangular strip of land with a length of $\frac{3}{4}$ mile and an area of $\frac{1}{2}$ square mile?).
- Work with variables and expressions by generalizing the way numbers work (e.g., when adding numbers, the order doesn't matter, so $x + y = y + x$; likewise, properties of addition and multiplication can be used to rewrite $24x + 18y$ as $6(4x + 3y)$, or $y + y + y$ as $3y$).
- Understand the process of solving simple equations.
- Write equations to solve word problems and describe relationships between quantities (e.g., the distance D traveled by a train in time T might be expressed by an equation $D = 85T$, where D is in miles and T is in hours).
- Reason about relationships between shapes to determine area, surface area and volume.

How to Help Your Child at Home:

Look for "word problems" in real life. Some 6th grade examples might include:

- Determine the average speed of a family trip, based on the distance traveled and the time taken; or estimate the time that a trip will take, given the distance and an estimate of the average speed. Use examples from the news -- for example, a swimmer crossing the English Channel or a space probe traveling to another planet.
- Find the surface area of the walls and ceiling in a room to determine the cost of painting the room.

English Language Arts & Literacy

Students apply skills they learned in earlier grades to make sense of longer, more challenging books and articles. They are able to better understand how authors try to influence readers and find reasons to support their ideas. By focusing on how authors make their points and support their arguments with evidence and reasoning, students will sharpen their ability to write and speak with more clarity and coherence. They will expand their vocabularies and use new words in their stories, reports and essays.

Examples of Your Child's Work at School:

- Analyze how chapters of a book, scenes of a play or stanzas of a poem fit into the overall structure of the piece and contribute to the development of ideas or themes.
- Gain knowledge from materials that make extensive use of elaborate diagrams and data to convey information and illustrate concepts.
- Evaluate the argument and specific claims in written materials or a speech, and distinguish claims that are supported by reasons and evidence from claims that are not.
- Present claims and findings to others orally, by sequencing ideas logically and by accentuating main ideas or themes.
- Write arguments that provide clear reasons, relevant evidence and use credible sources.
- Determine the correct meaning of a word based on the context in which it is used (e.g., the rest of the sentence or paragraph; a word's position or function in a sentence).

How to Help Your Child at Home:

- Listen with your child to a television reporter, politician, or other speaker. Ask your child to tell you the speaker's main points (e.g., was the speaker trying to convince the audience of something? How?).
- Visit a library or book store together and ask the librarian or bookseller to recommend young adult books, such as *Roll of Thunder, Hear My Cry* by Mildred D. Taylor.
- Invite your child to participate in an adult gathering, such as a meal with friends, to practice his or her listening skills and to make conversation.
- Encourage your child to learn at the library or on the Internet what life in your community was like 100 years ago. Have your child write a story, poem, or play about that time.



Science

In 6th grade students' engage in the core science ideas of *Structure of matter and chemical reactions, Structure and function of living things, Earth materials and systems, and Engineering Design*. Activities include, but are not limited to, using models, providing arguments with evidence, obtaining and analyzing data about relationships and interactions among observable components of different systems.

Examples of Your Child's Work at School:

- Analyze and interpret data on the properties of substances.
- Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
- Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- Define the criteria and constraints of a design problem to ensure a successful solution.

How to Help Your Child at Home:

- Encourage finding answers to questions through research and experimentation.
- Join club or group that offers activities like robotics or computer programming.
- Provide opportunities to observe and talk about changes in matter related to cooking.
- Visit local observatories and planetariums with your child.
- Encourage the playing of "maker" games or apps such as Minecraft that develop engineering and collaboration skills.

Social Studies (6-8)

Children will learn about the history and culture of the world around them through the lens of history, behavioral sciences, economics, geography and civics. They will learn the various ways people live throughout the world and how it affects them on a local level. Children will begin to think globally and act locally by taking what they learn about the world and applying it to their daily lives.

Examples of Your Child's Work at School:

- Evaluate the ways in which both individual and group decisions affect society in order to understand the complexity of current social issues.
- Determine the factors that influence global economic dependence and independence.
- Understand the connections between geographic and human characteristics and how these factors influence culture and regions.
- Explain how cause and effect relationships influence historical issues and events.
- Demonstrate knowledge of the three branches of government in order to develop effective strategies for political action at the local, state and national levels.

How to Help Your Child at Home:

- Encourage your child to read every day and to especially seek out rich non-fiction materials related to social studies.
- Investigate your family's cultural heritage and discuss how this contributes to our national diversity.
- Visit local museums and cultural institutions and discuss the cause and effect of historical issues and events, both nationally and internationally.
- Ask your child what he or she is learning in social studies and encourage your child to apply his or her understandings to important issues in the greater community.



21st Century Skills (6-8)

Your child will apply literacy and critical-thinking skills to interpret and understand health, financial and technology concepts. Students will practice career-readiness skills necessary for success in every job; refine their written/oral communication skills; and choose from a variety of exploratory courses to broaden their life skill experiences. They will have opportunities to volunteer within their schools and in the community.

Examples of Your Child's Work at School:

- Use technology (monitors) to record heart rate during different types of exercise and analyze the results.
- Understand how volunteerism contributes to the good of society.
- Demonstrate legal and ethical use of technology and copyrighted material, and an understanding of how disregard for this responsibility affects others.
- Explore employability skills by creating a list based on current research from websites and/or interviews, and write and publish an article about the findings.
- Explain the difference between saving and investing money.

How to Help Your Child at Home:

- Visit www.stopbullying.gov.
- Encourage your child to read and discuss books with 21st Century skills content: *What Color Is Your Parachute for Teens: Discovering Yourself and Defining Your Future* by Carol Christen, *The 7 Habits of Highly Effective Teens* by Sean Covey, and *The Voluntweens: A Guide* by Stephanie Moncilovich.
- Help your child develop a personal spending plan for money he or she receives through gifts, allowance or work.
- Include your child in lifelong activities you enjoy, such as golf, handball, running, or tennis.



www.iowacore.gov