



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 7th 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 8th 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 of a 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

Your child will continue work in proportional relationships, equations, and positive and negative numbers. These topics will remain a major emphasis throughout the middle school years and into high school. A good command of rates and proportional relationships, including percentages, is an important life skill. Your child will begin to understand how a random sample can be used to make inferences about a population.

### Examples of Your Child's Work at School:

- Analyze proportional relationships (graphing in the coordinate plane), and distinguish proportional relationships from other kinds of mathematical relationships.
- Solve percent problems (e.g., tax, tips, and markups and markdowns).
- Add, subtract, multiply and divide positive and negative numbers, and solve related word problems.
- Solve word problems that have a combination of whole numbers, fractions and decimals.
- Solve equations such as  $\frac{1}{2}(x - 3) = \frac{3}{4}$  efficiently, and write equations of this kind to solve word problems (e.g., "I knocked over a carton of milk, and 3 cups were spilled before I set the carton upright again. When I poured out the remaining milk equally into two measuring cups, there was  $\frac{3}{4}$  of a cup of milk in each one. How much milk was originally in the carton?").
- Use statistics to draw inferences and make comparisons (e.g., decide which candidate is likely to win an election based on a survey).

### How to Help Your Child at Home:

Look for "word problems" in real life. Some 7th grade examples might include:

- Figure the amount of a 15% tip or determine what percentage of weekly income goes to pay taxes.
- Use a scale diagram in a manual or a newspaper article to determine lengths, areas, distances, or other measures.
- For a long-term project, help your child choose a stock and follow its value on the stock market by using the newspaper or the Internet. Have your child calculate the stock's percent increase or decrease each month.

## English Language Arts & Literacy

Your child will analyze, define, compare and evaluate ideas when reading, writing, speaking and listening. He or she will continue to analyze how themes in fiction and nonfiction develop over the course of a book or article. Readings will include classic and contemporary pieces with diverse perspectives. Your student's ability to cite specific evidence when interpreting a text matures. Students will use relevant evidence to support their own points in writing and speaking, make their reasoning clear to readers or listeners, and constructively evaluate others' use of evidence.

### Examples of Your Child's Work at School:

- Cite several sources of specific evidence from a piece when offering an oral or written analysis of a book, essay, article or play.
- Determine an author's point of view or purpose in a nonfiction work and analyze how the author takes a position different from other authors.
- Organize and focus writing with supporting statements and conclusions based on evidence, and show that the evidence is accurate and reliable.
- Avoid plagiarism and follow a standard format for citations (e.g., footnotes, bibliography).
- Evaluate a speaker's key points and reasoning, ask questions, and state his or her own well-supported ideas in discussions.
- Use common, grade-appropriate Greek or Latin affixes and roots as clues to define the meaning of a word (e.g., semi-, semi-annual, semicircle).

### How to Help Your Child at Home:

- Visit a local art museum together. Take time to closely observe the details of the paintings or other art objects and talk about what you see there.
- Let your child help plan a family outing by using the Internet or library to research a place he or she is interested in.
- Ask your child who his or her favorite authors are. Why does your child like their books? What ideas do the authors write about? Who are your child's favorite characters? Why?



## Science

In 7th grade students' engage in Science and Engineering Practices and apply Crosscutting Concepts to deepen their understanding of science. Core ideas included in 7th grade are *Motion and Stability: Forces and Interactions*, *Energy*, *Earth's Place in the Universe*, *Organisms and Heredity*, *Ecosystems*, and *Engineering Design*. Your child will have multiple opportunities to demonstrate science learning. Including, but not limited to, using models, providing evidence to support arguments, obtaining and analyzing data about relationships and interactions among observable components of different systems.

### Examples of Your Child's Work at School:

- Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
- Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
- Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.
- Plan an investigation to determine the relationships among energy transfer, type of matter, mass, and change in the energy of the particles as measured by the temperature.

### How to Help Your Child at Home:

- Encourage observations of the sun, moon, and stars at home.
- Encourage finding answers to questions through research and experimentation.
- Help your child plant a garden or grow plants in a pot.
- Encourage the playing of "maker" games and apps such as Minecraft that develop engineering and collaboration skills.
- Help your child to collect data and monitor use of energy and water at home.
- Utilize programs offered by your area nature center or recreation area.
- Join a club or group that offers activities such as robotics and computer programming.

## 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](http://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](http://www.iowacore.gov)