



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 4th grade as dictated by the Iowa Core. It focuses on the key concepts and skills your child will learn in the subjects of 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 5th 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 develop efficient and accurate methods by which to multiply and divide whole numbers. He or she also will build knowledge and skills with fractions to prepare for mastering this topic in 5th and 6th grades and to ensure he or she is ready for algebra and advanced math.

Examples of Your Child's Work at School:

- Use whole-number computation to solve word problems that include problems with remainders and measurements.
- Add and subtract whole numbers efficiently (numbers up to 1 million).
- Multiply and divide multi-digit numbers (e.g., multiply $1,638 \times 7$, or 24×17 , and divide 6,966 by 6).
- Understand and apply equivalent fractions (e.g., recognize that $\frac{1}{4}$ is less than $\frac{3}{8}$ because $\frac{2}{8}$ is less than $\frac{3}{8}$).
- Add, subtract and multiply fractions (e.g., $2\frac{3}{4} - 1\frac{1}{4}$, or $3 \times \frac{5}{8}$) and solve related word problems.
- Measure angles and find unknown angles in a diagram.

How to Help Your Child at Home:

Look for "word problems" in real life. Some 4th grade examples might include:

- Ask your child to compare numbers using such phrases as "times as much." For example, if the family cat weighs 8 lbs. and the family dog weighs 56 lbs., how many times as much does the dog weigh?
- Ask your child to help you compare fractional amounts. For example, if one recipe calls for $\frac{2}{3}$ of a cup of oil, but another recipe calls for $\frac{3}{4}$ of a cup of oil, which recipe calls for more oil? (In 5th grade, your child will learn ways to determine exactly just how much more oil.)

English Language Arts & Literacy

Your child will build the stamina and skills that will allow him or her to read challenging fiction, nonfiction and other materials. He or she will continue to learn about the world and build vocabulary skills by reading more complicated stories and poems from different cultures, along with a range of books about history, science, art and music. Students also will make important strides in their ability to plainly explain in detail what a book says — both explicitly and what is implied from its details. Your child will write effective summaries, book reports and descriptions of characters or events that use correct grammar and punctuation.

Examples of Your Child's Work at School:

- Compare ideas, characters, events and settings in stories and myths from different cultures.
- Write summaries or opinions about topics that are supported with a set of well-organized facts, details and examples.
- Independently conduct short research projects about different aspects of a topic using evidence from books and the Internet.
- Paraphrase and respond to information presented in discussions, such as comparing and contrasting ideas and analyzing evidence that speakers use to support particular points.
- Write complete sentences with correct capitalization and spelling.
- Relate words that are common in reading to words with similar meanings (synonyms) and to their opposites (antonyms).

How to Help Your Child at Home:

- Urge your child to use logical arguments to defend his or her opinion. If your child wants a raise in allowance, ask him or her to research common-sense allowance systems and, based on that research, explain reasons why an increase is warranted, supported by facts and details.
- Talk about the news together. Pick one story in the news, read it together, and discuss with your child what it means.
- Keep books, magazines, and newspapers at home. Make sure your child sees you reading.



Science

Students in fourth grade will use quantitative and qualitative data to formulate arguments about evidence, develop models, analyze and interpret data from maps, and construct explanations related to the transfer of matter and energy on earth, in physical interactions, and in organisms. Students will engage in learning activities and investigations designed to formulate answers to questions such as “What are waves and what are some things they can do? What is energy and how is it related to motion?”

Examples of Your Child’s Work at School:

- Describe how the internal and external structures of different plants and animals function to support survival, growth, behavior, and reproduction.
- Plan and conduct investigations to explore how light and sight are related.
- Design a device that uses an electrical current to produce motion, sound, light or heat.
- Explore wave properties and discover how waves can cause objects to move.
- Use patterns of rock formations and fossils to construct an explanation of how environments change over time.
- Make observations or take measurements to determine the effects of weathering and erosion on shaping the land.

How to Help Your Child at Home:

- Have your child collect items found in nature such as rocks, leaves, insects, plants, or seeds. Encourage your child to develop questions about those items and help him/her find answers to those questions either through investigations, by reading nonfiction texts, or by asking appropriate experts.
- Utilize programs offered by your county nature center to identify rock formations and fossils.
- Take a nature walk through your neighborhood, visit parks and hiking, biking, and cross-country trails. Observe how animals use their senses to respond to information from their environment.
- Identify examples of how water, ice, wind, and vegetation have changed or can change the land. Ask your child to consider what things humans have done to lessen the impact of those changes.

Social Studies (3-5)

Your child will learn about Iowa and the United States through the lens of history, civics, economics, geography and the behavioral sciences. He or she will begin to examine and solve real-world issues by acting as an engaged citizen.

Examples of Your Child’s Work at School:

- Compare individual cultural traits to those of other diverse groups.
- Determine the economic tradeoff of purchasing goods and services based upon economic wants and needs.
- Use geographic tools to analyze the relationship between human and physical geography.
- Investigate historical patterns by focusing on the cause and effect of events within the history of Iowa and the United States.
- Explore the meaning of the U.S. Constitution and the Bill of Rights. Use the ideals within them to solve a real-world scenario through the creation of a civic action plan.

How to Help Your Child at Home:

- Read with your child every day. Seek out social studies-related books, both fiction and non-fiction. Check your local library or the National Council for the Social Studies Notable Trade Book List at <http://www.socialstudies.org/notable>.
- Visit museums and cultural institutions and discuss the history of Iowa and its role within the United States.
- Discuss financial responsibility and aspects of money such as saving, spending, budgeting, etc.
- Talk about and explore local and/or national geographical routes, directions, and landmarks using various geographic tools such as paper maps, Global Positioning Systems (GPS), and electronic tools.
- Identify local laws and rules and discuss their impact on our lives.



21st Century Skills (3-5)

Your child will continue to practice fitness skills and begin to understand the long-term benefits of being physically active. Students will learn to accept constructive criticism, strive to complete high-quality work and collaborate with classmates. They will explore concepts related to good financial decision-making and responsible citizenship.

Examples of Your Child's Work at School:

- Use technology (e.g. pedometers, Wii physical activity games) to improve fitness and have fun.
- Identify opportunities for leadership and service in the classroom, school, state and nation.
- Apply prior knowledge of technology to learning how to use new technologies/software.
- Identify and organize materials needed for a task.
- Explain the difference between short-term and long-term financial goals and why it is important to have both.

How to Help Your Child at Home:

- Visit <http://KidsHealthline.com> for videos, games and activities.
- Read with your child from books with 21st Century skills content. Examples: *Jobs People Do* series by DK publishing; *The Marvels of Money for Kids* series by Paul Nourigat.
- Help your child select physical activities to keep moving and have fun.
- Show your child how to appropriately use technology to find games, activities and information.



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