This guide provides an overview of what your child will learn by the end of 5th 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 6th 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.

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 such as 9th-12th grade. In all cases, the standards set appropriate expectations for what students need to learn, but not how to teach.

Read the complete standards at:
www.iowacore.gov

Some content adapted from the National PTA’s Parent’s Guide to Student Success.
### Mathematics

This is the final year that focuses on numbers, operations and fractions. Your child must have an understanding of fractions because even simple equations cannot be solved without them. Attention on using whole numbers to understand computation comes mostly to a close this year, and multiplying and dividing fractions becomes a major focus.

**Examples of Your Child’s Work at School:**
- Add and subtract fractions with unlike denominators (e.g., $2 \frac{1}{4} - 1 \frac{1}{3}$), and solve word problems of this kind.
- Multiply fractions, divide fractions in limited cases and solve related word problems (e.g., find the area of a rectangle with fractional side lengths; determine how many $\frac{1}{2}$-cup servings are in 2 cups of raisins; determine the size of a share if 9 people share a 50-pound sack of rice equally, or if 3 people share $\frac{1}{2}$ pound of chocolate equally).
- Generalize the place-value system to include decimals, and calculate with decimals to the hundredths place (two places after the decimal).
- Multiply whole numbers efficiently ($1,638 \times 753$), and divide whole numbers in simple cases ($6,971$ by $63$).
- Understand the concept of volume and solve word problems that involve volume.
- Graph points in the coordinate plane (two dimensions).

**How to Help Your Child at Home:**
Look for “word problems” in real life. Some 5th grade examples might include:
- Do calculations with decimals (for example, when balancing a checkbook).
- Multiply with fractions (for example, if you used about $\frac{2}{5}$ of a $\frac{3}{4}$-cup measure of vegetable stock, how much stock did you use? About how much is left?).
- Use the length, width, and depth of a garden plot to determine how many bags of garden soil to buy.

### English Language Arts & Literacy

Your child will read from a wide and deep range of high-quality, increasingly challenging fiction and nonfiction materials that derive from diverse cultures and time periods. A key to his or her continued success will be to build knowledge about subjects through research projects and respond analytically to literary and informational sources. Your child will write stories or essays that are several paragraphs long. He or she also will gain control over many conventions of grammar, usage and punctuation.

**Examples of Your Child’s Work at School:**
- Identify and judge evidence that supports particular ideas in an author’s argument to change a reader’s point of view.
- Write opinions that offer reasoned arguments and provide facts and examples that are logically grouped to support the writer’s point of view.
- Write stories, real or imaginary, that unfold naturally and develop the plot with dialogue, description and effective pacing of the action.
- Come to classroom discussions prepared, and then participate fully and engage thoughtfully with others (e.g., contribute accurate, relevant information; elaborate on the remarks of others; synthesize ideas).
- Expand, combine and reduce sentences to improve meaning, interest and style of writing.
- Produce writing on the computer.

**How to Help Your Child at Home:**
- Invite your child to read his or her writing out loud to other family members. Ask questions about your child’s word choices and ideas.
- Discuss your family stories and history. Encourage your child to ask relatives questions about their lives. Put the information together in an album or brainstorm different ways to tell family tales, such as poems or short stories.
- Go to a play or musical with your child. Discuss ways actors bring the words to life.
Science

In fifth grade help students formulate answers to questions such as: “When matter changes, does its weight change? Can new substances be created by combining other substances? How does matter cycle through ecosystems? How do shadows or relative lengths of day and night change from day to day? How does the appearance of some stars change in different seasons?” By studying systems, your child will learn that objects and organisms do not exist in isolation and are connected to, interact with, and are influenced by each other.

Examples of Your Child’s Work at School:

• Use and represent data to study the relationships between objects in the solar system and the impact of those relationships on patterns of events as seen from Earth.
• Develop models to describe how matter and energy cycle through plants and animals, and the ecosystems within which they live.
• Apply math skills and understanding of scale to measure volume and recognize the need for units that express quantities of weight, time, temperature, and other variables during investigations of properties and interactions of matter.
• Independently maintain science journals to record observations, thoughts, ideas, and models by creating diagrams, representing data and observations with plots and tables, and support these with written text.

How to Help Your Child at Home:

• Encourage observations of the sun, moon, and stars at home in the evenings and mornings along with electronic apps to learn about and study the motions of the stars over the course of a year.
• Provide supervised opportunities in the kitchen to measure, observe and talk about changes in matter related to cooking.
• Encourage your child to find leaves and plants in your neighborhood and help him/her use field guides to identify some common trees and plants.
• Collect data and monitor use of energy and water at home.

Social Studies

In fifth grade, students learn about how the founding documents of the United States were developed and how these documents guide decisions. Students explore rights and responsibilities as members of society and active participants of civic life.

Examples of Your Child’s Work at School:

• Determine the credibility of sources.
• Construct responses to compelling and supporting questions with evidence.
• Explain the processes used to change rules and laws.
• Demonstrate ways to monitor how money is spent and saved.
• Explain how economic, political, and social contexts shaped people’s perspectives at a given time in history.
• Explore the content and meaning of the Declaration of Independence and the U.S. Constitution.
• Analyze Iowa’s role in civil rights history.

How to Help Your Child at Home:

• Frequently ask your child about what they are reading. 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 for suggestions of books to read.
• Visit Iowa museums and cultural institutions to understand Iowa’s role in civil rights history. Look for statues and monuments in Iowa as a way of understanding who has shaped the right for citizens within our state and nation.
• Demonstrate how the family uses a budget in order to save and spend money. Work with your child to set up their own budget.
• Discuss the U.S. Constitution and how it impacts citizens at the local, state, and national levels. Talk about which rights are most important to you.
• Explain your own ideas about the rights and responsibilities of each individual within society.
• Talk about who you listen to and allow to influence you, including the credibility of that person/source.
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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