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Great Expectations

Partnering for your child's future



**Department of
Education**

Joel I. Klein, Chancellor

Great Schools Start with Great Expectations

Learning standards describe the foundation of what students should know and be able to do in each grade. These standards ensure that all children are prepared to move forward to the next grade and, later, to succeed in college, earn a living, and become productive members of their communities. Children need to develop a love of learning that will serve them well in a world where crucial information changes and grows rapidly.

To find work in the competitive global economy and function in a quickly changing world, our children will need to know more than ever before. This is true for graduates who plan to enroll in four-year colleges; it is equally true for students who want to start careers right out of high school.

The New York State standards we use are designed to provide our students with rigorous curricula to ensure that they develop the creativity, critical thinking skills, and ability to problem solve that they will need to meet the challenges of the modern world. But standards are a starting point, not a destination. By meeting and building on a solid foundation of knowledge, our students will get the most from their education.

Here you will find examples of what fifth grade students should know and be able to do by the end of the school year in language arts, mathematics, social studies, and science. You also will find ways you can support learning as a family, including things you can do at home, in your neighborhood, and around our great City.

This guide provides only a small sample of the standards for fifth grade. What about the other standards? What should your child have learned before starting fifth grade? What will he or she be learning in sixth grade and beyond? You can find answers to all these questions from your child's teacher or on our Web site at www.nyc.gov/schools/academics.

Good Study Habits

To help your children develop good study habits:

- ❑ Set up a comfortable location at home for doing homework with simple supplies, such as pens, pencils, paper, scissors, and tape, near at hand.
- ❑ Have them write down and organize assignments each day. They need to learn how to manage their time and work toward long-range goals.
- ❑ Encourage them to do the most difficult homework first, not last.
- ❑ Check to see that assignments are complete and on time. Be more concerned with the process they use to complete work than with getting a right answer.

For other ideas, visit www.nyc.gov/schools/academics.

Students with Disabilities

Unless otherwise stated on the student's Individualized Education Program (IEP), students with disabilities will participate in the general education curriculum, which can be adapted for different instructional levels and different settings (such as Collaborative Team Teaching classes or self-contained special education classes). Adaptations may include using instructional aids such as calculators and visual aids, providing additional time to learn new skills, and reducing the length of assignments to help students with disabilities meet the standards.

Ask Your Child's Teacher



Learning standards provide a great opportunity for you to talk with teachers about what your child is learning in school and how you can support this learning at home. Here are some questions you may want to ask.

To learn more about a standard:

- Can you show me examples of student work that meets this standard?
- May I look at some of my child's work related to this standard?
- When will my child work on this standard during the school year?
- What activities and materials are you using in school to help my child meet and exceed this standard? What classwork and homework do you expect to assign?
- What are some exercises I can do with my child to help him or her with this standard?
- Besides the standards covered in this guide, what else is my child expected to learn this year?

To learn how your child is doing in school:

- Is my child working on grade level? Are there any areas that need improvement?
- Is my child reading at grade level? Can you show me some books that my child can read?
- How much time each day does my child spend working on each subject?
- How do you assess my child on these subjects during the year?

To learn how to support your child:

- Besides report cards, what are the best ways to keep up to date on how my child is doing?
- If your child is not on grade level: What support is the school able to offer my child? What can I do at home to help my child do better in school?
- If your child is on grade level or above: What extra enrichment and support do you suggest for my child? How can I help at home?

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Language Arts

By the end of the school year, all students should be able to:

- Skim written text, such as newspaper articles or pages from a book, to get an overview of what is said or to find a specific item.
- Know the difference between information that is relevant (for example, information that supports an idea in the text) and information that is not relevant.
- Use what they already know about a subject to help them understand or develop opinions about information they read.
- Know and use the rules of punctuation, capitalization, and spelling.
- Know and use the different skills that good writers use, such as word choice, organization of ideas, and metaphors and other descriptive devices.
- Read aloud from different kinds of texts, such as books, plays, and poems, using tone of voice, pacing, and emphasis to express the ideas and moods of the texts.
- Make inferences and draw conclusions based on information from the text.
- Use language, grammar, and appropriate vocabulary to communicate ideas when speaking to different audiences.
- Use a variety of different organizational patterns (chronological order, cause/effect) when writing.
- Read to collect and interpret data, facts, and ideas from multiple sources; compare and contrast such information on a single topic.



Learning at Home

The following strategies can be done in the families' native languages as well as in English.

Take your child to a play and watch words come alive. New York has more than two dozen theater companies that offer live performances by and for children of all ages. Find out what's happening at www.nytheatre.com. From the home page, click on "For Kids & Families."

Invite your child to read his or her original writing aloud, sharing poems and short stories with you and other members of the family.

Talk about what you are reading with your child and discuss ideas in books.

Encourage your child to explore new books in different genres, such as poetry or plays. The New York Public Library's Recommended Reading Web portal at kids.nypl.org/reading/recommended.cfm is a great place to start.

Mathematics



Learning at Home

Visit the interactive exhibit *Mathematica: A World of Numbers*, with your child at the New York Hall of Science in Queens, www.nyscience.org.

With your child, collect 100 pennies and agree that each penny equals 1 percent of one dollar. Ask your child to add and subtract the coins to get other percentages.

Find advertisements of sales from different department stores. Which store offers the biggest discount? Talk about other things that determine whether a sale price is a good value.

Check out the Web site for the PBS series *Cyberchase*, pbskids.org/cyberchase, which uses mystery, humor, and action to engage children in math. The site also has tips to help families support their children's math and science learning.

By the end of the school year, all students should be able to:

- Multiply and divide two-digit and three-digit numbers.
- Read and write numbers up to 1 million (1,000,000).
- Find the factors of a number. Factors are numbers that can be multiplied together to form an answer called the product. For example, 3 and 5 are the factors of 15.
- Understand that percents are parts of 100. For example, 20 percent represents 20 parts of 100. Write percents as fractions (50 percent would be $\frac{1}{2}$) and as decimals (20 percent would be 0.20).
- Simplify fractions to their lowest terms—for example, $\frac{20}{100}$ would be $\frac{1}{5}$.
- Classify quadrilaterals (geometric shapes with four sides) according to the properties of their angles and sides. For example, a quadrilateral with four 90-degree angles and four equal sides is a square.
- Use a ruler to measure to the nearest inch, $\frac{1}{2}$ inch, $\frac{1}{4}$ inch, and $\frac{1}{8}$ inch and to the nearest centimeter.
- Understand algebraic expressions. For example, $2x$ is the algebraic expression of "two times a quantity," and $4a + 3b$ is the algebraic expression of "four times one quantity plus three times another quantity."
- List the possible outcomes for a single-event experiment. For example, list all the possible outcomes when a coin is tossed.
- Apply basic math skills to real-world situations. For example, recognize that a 20 percent discount means saving 20 cents of every dollar.

Science

Science in fifth grade explores the nature of scientific inquiry, earth science, food and nutrition, and ecosystems.

By the end of the school year, all students should be able to:

- Formulate questions that can be answered by scientific inquiry, such as observation and collection of data. Design and conduct scientific investigations to answer the questions.
- Use mathematics in scientific inquiry.
- Understand that rocks are composed of minerals.
- Investigate, record, and explain how rocks and soil form.
- Identify events, such as earthquakes and volcanic eruptions, that cause earth movements.
- Design and construct models of land forms.
- Recognize habits that contribute to good health, including avoiding harmful substances such as alcohol and tobacco, eating a nutritious diet, and exercising regularly.
- Understand that food supplies the energy and materials that living things need to grow and repair themselves.
- Observe and identify the living and nonliving parts of an ecosystem.
- Identify examples of human activity that have had beneficial or harmful effects on other organisms.

Learning at Home

With your child, decide on a change that would help your family be healthier, for example, getting more exercise. Ask your child to find reliable sources of information in books or on the Web, and discuss what your family can do to make the change.

Encourage your child to take part in Earth Science Week, sponsored annually by the American Geological Institute. Local and national activities, information, and resources are available at www.earthsciweek.org.

As a family, visit the New York State Environment Hall at the American Museum of Natural History on the Upper West Side to see how the natural landscape of our City and State developed over time. To find online information on rocks of New York and other places, visit www.amnh.org/ology/earth and click on "If Rocks Could Talk."



Learning at Home

“On-Lion” for Kids, kids.nysl.org/holidays/index.cfm/cfm, is the New York Public Library’s portal to holidays and celebrations in the City, the Western Hemisphere, and worldwide. The site offers links to traditions for personal celebrations such as birthdays, as well as official commemorations, such as months for African-American history, Asian-Pacific American history, and Hispanic heritage.

Help your child choose an important current event each week from a newspaper or TV broadcast. Talk about what people might say about the event a year from now, 10 years from now, or 100 years from now.

With your child, explore the history and culture of Native Americans in the Western Hemisphere at the George Gustav Heye Center, part of the Smithsonian Institution’s National Museum of the American Indian in New York City. For information, go to www.nmai.si.edu and click on “Visitor Information,” then “NMAI in New York.”



Social Studies

In fifth grade social studies, students explore the nations of the Western Hemisphere, including the United States, Canada, and the nations of Latin America.

By the end of the school year, all students should be able to:

- Recognize and interpret primary sources of information, such as original letters, diaries, and other documents.
- Interpret information from maps, graphs, charts, and other visuals about the Western Hemisphere.
- Explain how different ethnic groups of the United States, Canada, and Latin America contributed to the cultural diversity of the Western Hemisphere.
- Compare and contrast important events in the history of the Western Hemisphere—for example, the rise and fall of the Aztec civilization in Mexico and the arrival of explorers from Spain.
- Use primary sources, such as letters or other original documents, to research a historic person or event. Create and give a presentation based on the research.
- Understand that political boundaries change over time.
- Locate the major geographic features of the Western Hemisphere, such as continents, rivers, and mountain ranges, using maps, globes, and atlases.
- Know and understand how people in Western Hemisphere nations met their basic needs and wants, for example, for shelter, food, and clothing.
- Express an awareness of the patriotic celebrations of the United States, Canada, and the nations of Latin America.

More Essential Knowledge and Skills

Our fifth grade students are learning much more than to read, write, do math, and understand key concepts in science and social studies.

- **Arts:** Fifth grade students participate in visual arts, dance, music, and theater. They increase their skills in each art form and learn how to discuss the arts using appropriate vocabulary and critical skills. They connect their studies to the historic, cultural, economic, and other factors that influence the arts, and they explore New York City's varied and rich arts resources. For more details, visit www.nyc.gov/schools/artseducation.
- **Fitness and Health:** Students continue to improve their personal health and well-being, the health of their families and friends, and the health of their schools and communities. For instance, across all content areas, students learn how to analyze the influence of family, peers, and media on health behaviors and how to practice healthy behaviors and avoid dangerous behaviors, such as smoking and drugs. For more details, visit www.nyc.gov/schools/academics/fitnessandhealth.
- **Library and Research:** By the end of the year, fifth grade students can use sources to gather background information; write good research questions; find information using print, electronic, and human resources; take different kinds of notes (for example, written and electronic); form an opinion and back it up with evidence; revise their work based on feedback from others; draw conclusions about the theme of a story; and follow safety procedures when using the Internet. For more details, visit www.nyc.gov/schools/academics/libraryservices.
- **Technology:** Students in the fifth grade can discuss basic issues related to responsible use of technology and information, identify scenarios describing acceptable and unacceptable computer use, and describe personal consequences of inappropriate use. Students know procedures for importing and manipulating pictures, images, and charts in documents and spreadsheets, presentations, and other creative works. Students use communication tools (such as e-mail, online discussions, and Web environments) and online resources for collaborative projects inside and outside the classroom with other students who are studying similar curriculum-related content. For more details, visit www.nyc.gov/schools/studentssupport/instructionaltechnology.

Learn More

This guide provides only an overview of the many standards your child will be learning this year. You can view and download copies of these guides for grades K–8 as well as the complete standards for all subjects and all grades on our Web site at www.nyc.gov/schools/academics.

The Division of Teaching and Learning and the Office for Family Engagement and Advocacy (OFEA) offer additional information about your child's education and ideas on how you can support it, both at home and at your child's school. For more information, visit both the Teaching and Learning Web site, www.nyc.gov/schools/offices/teachlearn, and the OFEA Web site, www.nyc.gov/schools/offices/OFEA. You also can contact your school's parent coordinator or OFEA at (212) 374-2323 or ofea@schools.nyc.gov. Plus, you can call 311 for additional cultural and historical institutions in the City to visit with your children.



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