Denver Public Schools has embraced the Colorado Academic Standards to ensure students are equipped for success in the 21st Century. These parent guides provide an overview of what your child will be learning in language arts, math, science and social studies, based on the academic standards, in each grade. They also describe ways you can help at home and include additional helpful resources.
Language Arts

Writing opinion supported by facts, delivering clear and logical class presentations
- Summarize the key details of stories, dramas, poems and nonfiction materials, including their themes or main ideas.
- Compare and contrast stories that deal with similar themes or topics.
- Explain how authors use reasons and evidence to support their points or ideas.
- Draw on information from multiple books, articles or online sources to locate an answer or solve a problem quickly.
- Understand figurative language, such as “She was as quiet as a mouse.”
- Write stories, real or imaginary, that unfold naturally and develop the plot with dialogue, description and effective pacing of the action.
- Write opinions that offer reasoned arguments and provide facts and examples that are logically grouped to support your point of view.
- Participate in classroom discussions by listening, asking questions, sharing ideas and building on the ideas of others.
- Give a class presentation on a topic or tell a story, introducing relevant facts and details in a clear and logical order.
- Expand, combine and reduce sentences to improve meaning, interest and style of writing.
- Build knowledge of academic words with an emphasis on those that signal a contrast in ideas or logical relationships, such as on the other hand, similarly and therefore.

Mathematics

Multiplying and dividing fractions and decimals, measuring volume
- Multiply whole numbers quickly and accurately (such as 1,638 x 753) and divide whole numbers in simple cases (such as 6,971 by 63).
- Add and subtract fractions with unlike denominators (such as 2 ¼ - 1 ⅓).
- Multiply fractions, divide fractions in simple cases and solve related word problems.
- Understand the place value system (the value of where the digit is in the number). For example, in 461, the place value of the 6 is “tens”; in 23.87, the place value of the 7 is “hundredths”; and in 58.902, the place value of the 2 is “thousandths.”
- Read, write and compare decimals to the thousandths place.
- Add, subtract, multiply and divide decimals to the hundredths place.
- Use exponents to express powers of 10 (in $10^2$, 2 is the exponent).
- Understand the concept of volume (the amount of space a substance occupies or that is enclosed within a container).
- Measure volume using multiplication and addition.
- Write and interpret mathematical expressions using symbols such as parentheses. For example, “add 8 and 7, then multiply by 2” can be written as $2 \times (8+7)$.
- Analyze mathematical patterns and relationships.
EXAMPLES OF WHAT YOUR CHILD WILL BE LEARNING IN GRADE 5

Science

Learning about matter, comparing human systems to other organisms

Physical Science (Investigating heat and changes in materials)
- Understand the different states of matter: solids, liquids and gases.
- Learn how matter changes from one state to another by heating and cooling (such as water freezing into ice or boiling into steam).
- Identify the state of any sample of matter.
- Use these lessons in real-world situations, such as figuring out where snow around your school would melt the fastest and/or slowest and why.

Life Science (Investigating human systems)
- Learn that all organisms or living things have structures and systems with separate functions. For example, human body systems have basic structures, functions and needs.
- Compare and contrast a human system to that of another organism, and provide hypotheses (proposed explanations) about why the similarities and differences exist.

Earth Systems Science (Investigating weather systems)
- Learn that weather conditions change because of the uneven heating of the Earth’s surface by the sun’s energy.
- Learn that weather changes are measured by differences in temperature, air pressure, wind and water in the atmosphere.

Social Studies

Examining U.S. history from settlement to government
- Analyze historical sources from multiple points of view to develop an understanding of historical context.
- Examine significant historical documents such as the United States Constitution and the Declaration of Independence.
- Create timelines of eras and themes in North America from 1491 through the American Revolution.
- Learn about the individuals and groups in North America from 1491 through the founding of the U.S. government.
- Explain important political, social, economic and military developments leading to and during the American Revolution.
- Use maps and other geographic tools to answer questions about the geography of the United States.
- Learn about the causes and consequences of discovery, exploration and migration.
- Explain the historical foundation and the events that led to the formation of the U.S. government.
- Understand the foundations of citizenship in the United States, giving examples of civic ideals such as freedom, equality and responsibility.
- Understand the origins, structure and functions of the U.S. government.
- Define a capitalist market economy.
You Play A Key Role

You do not have to be an expert to help your child with homework. The Colorado Academic Standards are focused on critical thinking. So asking your child these three simple questions can help develop deeper understanding:

- Ask “How do you know that?” to prompt your child to think critically about reaching an answer.
- Ask “Can you prove it?” to encourage your child to defend a solution or explain an alternate route.
- Ask “Can you use this in a real-world situation?” to spark thinking about using what’s learned in everyday life.

Language arts

- Provide time and space for your child to read independently, without distractions such as the TV.
- Ask your child what he or she has learned from reading. Have him or her read the most interesting or useful sections out loud, and discuss how that knowledge can be used in real life.
- Assist your child in using references such as the Internet or a dictionary to look up unfamiliar words.
- Make sure your child has a library card.
- Invite your child to read his or her writing out loud to other family members. Ask questions about word choices and ideas.
- Go to a play or musical with your child. Discuss the way the actors bring the words to life.
- 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.

Math

- Look for “word problems” in real life. This includes doing arithmetic with decimals, such as when balancing a checkbook.
  Multiply with fractions. For example, if you used about \(\frac{2}{3}\) of a \(\frac{3}{4}\)-cup measure of vegetable stock, then how much stock did you use? About how much is left?
- Use everyday objects to allow your child to explore the concept of fractions. For example, have your child divide a candy bar or a healthy snack between three people. Ask, “How much does each person receive?” (Each person should receive \(\frac{1}{3}\).) Suppose there are three candy bars that you plan to share with two friends. Have your child describe the amount that each person will receive.
- Have your child explain how to write fractions in different ways. For example, what are some different ways to write \(\frac{4}{5}\)? Examples include 4 (divided by symbol) 3, \(\frac{1}{5}\), \(\frac{2}{5} + \frac{2}{5}\), \(2 \times \frac{2}{5}\), \(\frac{3}{5}\) and \(4 \times \frac{1}{5}\).
- Ask your child to give you a fraction equal to a decimal. For example, what are two fractions that can be used to represent 0.6? Answers include \(\frac{6}{10}\), \(\frac{60}{100}\), \(\frac{12}{20}\) or \(\frac{3}{5}\).
- Use the length, width and depth of a garden plot to determine how many bags of garden soil to buy.

Want to learn more?

Resources: The DPS standards website provides additional information and parent resources on the academic standards and how you can help at home. Visit standards.dpsk12.org to find the following resources:

DPS guides:
- Parent guides for all grade levels.
- Standards and students with special needs.
- Technology expectations by grade level.

These guides were developed using the following outside resources (also available on the DPS standards site):
- Colorado Department of Education grade-level expectations for all 10 Colorado Academic Standards.
- National PTA parent success guides, by grade level, in language arts and math (English and Spanish).
- Council of Great City Schools parent roadmaps, by grade level, in language arts and math (English and Spanish).

Questions:
For questions, please email standards@dpsk12.org.