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

Comparing ideas and characters, writing stories with dialogue

- Identify the theme or main idea of a story, play or poem.
- Describe the basic elements of stories – such as characters, events and settings – by drawing on specific details in the text.
- Explain how an author uses facts, details and evidence to support points.
- Compare ideas, characters, events and settings in stories and myths from different cultures.
- Read and interpret information presented in charts, graphs and illustrations.
- Participate in discussions by listening, asking questions and sharing ideas.
- Takes notes and organize information from books, articles and online sources.
- Independently conduct short research projects on different aspects of a topic using evidence from books and the Internet.
- 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).
- Write stories with dialogue and descriptions of characters’ actions, thoughts and feelings.
- Write research or opinion papers over extended periods of time.

Mathematics

Solving problems with multi-digit numbers, fractions and decimals

- Add and subtract whole numbers up to 1 million quickly and accurately.
- Solve multi-step word problems, including problems involving measurement and converting measurements from larger to smaller units (such as pounds to ounces).
- Multiply and divide multi-digit numbers in simple cases (such as multiplying 1,638 x 7 or 24 x 17, and dividing 6,966 by 6).
- Extending understanding of fractions by comparing the size of two fractions with different numerators (top numbers) and different denominators (bottom numbers). For example, understanding that ¼ is less than ½ because 2/8 is less than 3/8.
- Creating equal fractions (such as 3/4 = 3 x 2/4 x 2 = 6/8).
- Adding and subtracting fractions with the same denominator (such as 3/4 - 2/4).
- Adding, subtracting and multiplying fractions in simple cases (such as 2³/₄ - 1⅓ or 3 x ⅜), and solving related word problems.
- Understanding simple decimals in terms of fractions (such as rewriting 0.62 as 62/100).
- Locate decimals on a number line.
- Compare decimals and fractions using the symbols > (more than), = (equal to) and < (less than).
- Measuring angles and finding unknown angles in a diagram.
Science

Comparing human systems to other organisms, Earth’s changing surface

Physical Science (Investigating physical and chemical properties)
- Understand that mixtures of matter can be separated regardless of how they were created. For example, properties help determine how to separate mixtures.
- Learn that all weight and mass of the mixture are the same as the sum of weight and mass of its parts.

Life Science (Investigating ecosystems)
- Understand that all living things share similar characteristics, but they also have differences that can be described and classified.
- Use evidence to develop a scientific explanation for similarities and/or differences among different living things. For example, humans use technology, such as heating and air conditioning, to survive in some climates.

Earth Systems Science (Investigating the changing Earth)
- Understand that the Earth’s surface is constantly changing through a variety of processes and forces such as erosion and weathering.
- Learn that the Earth and sun provide a diversity of renewable and nonrenewable resources.

Social Studies

Learning Colorado history, geography and government

- Organize and sequence events to understand chronology and cause-and-effect in the history of Colorado.
- Construct a timeline of events showing the relationship of events in Colorado history with events in U.S. and world history.
- Analyze primary source historical accounts related to Colorado.
- Describe the development of the political structure in Colorado history, including an understanding of the Colorado Constitution and the relationship between state and national government.
- Use maps and other geographic tools to answer questions about the geography of Colorado.
- Explain how physical environments have influenced individuals and businesses in decisions to settle in Colorado. For example, Colorado Springs has a dry climate that is favorable for computer companies and ski resorts developed in the Rocky Mountains.
- Define positive and negative economic incentives. For example, the tourism industry uses incentives to attract tourists and government agencies use tickets to discourage speeding.
- Learn how to analyze and debate multiple perspectives on an issue.
- Provide supportive arguments for both sides of a current public policy debate.
- Learn the origins, structure and functions of Colorado government.
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 TV.
- Ask your child what he or she learned from reading and how that knowledge can be used in real life. Have him or her read the most interesting or useful sections aloud.
- Keep track of the time that your child spends reading every day. Note what kind of reading materials he or she likes (books, magazines, newspaper articles, the Internet). Then look for additional materials that will encourage your child to read more.
- Be sure your child has a library card. Children should select books they are interested in to develop a passion for reading.
- 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 commonsense allowance systems and, based on that research, explain reasons why, 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.

Math

- Ask your child to compare numbers using phrases such 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 2/3 of a cup of oil but another recipe calls for 3/4 of a cup of oil, which recipe calls for more oil? (In grade 5, your child will learn ways to determine how much more oil.)
- Have your child write or describe fractions in different ways. For example, what are some different ways to make 3/4? Answers could include 1/4 + 1/4 + 1/4 or 3 x 1/4.
- Ask your child to create and describe equal fractions. For example, have your child take a sheet of paper, fold it in half and then unfold and color half the sheet. Have your child take the same sheet of paper and fold the paper in half again. Unfold the paper and ask your child to discuss the number of parts that are now colored. Have your child to talk about ways to show that 1/2 = 2/4.
- Encourage your child to stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.

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).