

## A Parent's Guide to Student Learning

Examples of what your child will be learning at each grade level

# **GRADE 6**

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.

#### EXAMPLES OF WHAT YOUR CHILD WILL BE LEARNING IN GRADE 6

## Language Arts

#### Reading grade-level fiction and non-fiction closely to support analysis

- Provide detailed summaries of texts.
- **D** Determine the theme or main idea of a text and how it is expressed.
- Describe how a particular story or text unfolds and how characters respond to plot developments.
- **D** Use a range of reading strategies to determine the meaning of unknown words as they are used in a text.
- Compare and contrast various texts, including poems, stories and historical novels.
- Understand the figurative and literal meaning of words and phrases. The figurative meaning of a word or phrase often goes beyond the literal definition, such as the phrase "It's raining cats and dogs."
- Identify and evaluate specific claims or arguments in a text.
- **I** Support written claims or arguments with clear reasons and relevant evidence.
- **D** Produce clear and coherent writing appropriate to the task, purpose and audience.
- Participate in class discussions about various texts and topics.
- **D** Conduct short research projects to answer questions, using several sources.

## Mathematics

#### Analyzing and solving word problems using concepts of ratio and rate

- Understand and apply the concepts of ratios and unit rates, using the correct language to describe them (for example, the ratio of wings to beaks in a flock of birds is 2 to 1, because for every 2 wings there is 1 beak).
- **D** Build on knowledge of multiplication and division to divide fractions by fractions.
- Add, subtract, multiply and divide multi-digit decimals quickly and accurately.
- Understand that positive and negative numbers are located on opposite sides of 0 on a number line.
- Use pairs of numbers, including negative numbers, as coordinates for locating or placing a point on a graph.
- $\Box$  Write and determine the value of expressions with whole-number exponents (such as 15+3<sup>2</sup>).
- □ Identify and write equivalent mathematical expressions by applying the properties of operations. For example, recognize that 2(3+x) is the same as 6+2x.
- Understand that solving an equation such as 2+x=12 means answering the question, "What number does x have to be to make this statement true?"
- Represent and analyze the relationships between independent and dependent variables.
- □ Solve problems involving area and volume.

## Science

#### Focusing on Earth science: natural resources, geology and weather

- □ Learn how forces inside Earth and on the surface build, destroy and change Earth's crust.
- □ Analyze how Earth's crust changes over time due to forces such as earthquakes and landslides.
- Understand how water on Earth is distributed and circulated through oceans, glaciers, rivers, ground water and the atmosphere.
- Research and evaluate data and information to learn about the types and availability of Earth's various natural resources.
- Learn how major geologic events such as earthquakes, volcanic eruptions, mid-ocean ridges and mountain formation are associated with Earth's plate boundaries and attributed to plate motions.
- Understand that geologic time, history and changing life forms are indicated by fossils and successive sedimentation, folding, faulting and uplifting of layers of sedimentary rock.
- Understand that weather is a result of complex interactions of Earth's atmosphere, land and water that are driven by energy from the sun, and can be predicted and described through complex models.
- Learn that the relative positions and motions of the Earth, moon and sun can be used to explain observable effects, such as seasons and eclipses.

## Social Studies

#### Examining the Western Hemisphere, how different governments relate to citizens

- □ Analyze and interpret historical sources to ask and research historical questions.
- Identify ways different cultures record history.
- Learn about the historical eras, individuals, groups, ideas and themes in regions of the Western Hemisphere and understand their relationships with one another.
- Understand how the use of geographic tools can solve problems. For example, technology can help in identifying the spread of disease.
- Understand how human and physical systems vary and interact. For example, nations use such geographic information to determine where to locate cities, establish trade routes and create security systems like forts.
- Identify and analyze different economic systems, including traditional, command, market and mixed economies.
- **D** Learn that saving and investing are key contributors to financial well-being.
- Analyze the interconnectedness of the United States and other nations. For example, consider how political ideas and significant people have interacted and influenced nations.
- Compare multiple systems of government.
- Identify how different forms of government relate to their citizens. Topics include democracy and authoritarian government.



#### HOW YOU CAN HELP YOUR CHILD AT HOME

## 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

- D Provide time and space for your child to read independently, without distractions such as TV.
- D Make time for conversation at home. Discuss current events, shared interests and future aspirations for education and career.
- Listen with your child to a television reporter, politician or other speaker. Ask your child to tell the speaker's main points. Was the speaker trying to convince the audience of something? How?
- Encourage your child to learn at the library or on the Internet what life in your community was like 100 years ago. Have your child write a story, poem or play about that time.
- Visit museums, zoos, theaters, historical sites, aquariums and other educational places to help increase your child's exposure to new knowledge and vocabulary.
- Use technology to help build your child's interest in reading. There are several websites where children can read books or articles online. The computer will help with words your child cannot read independently. Libraries also have computers children can use to access those sites. Feel free to ask a librarian or teacher for suggestions.

#### Math

- Look for "word problems" in real life. For example, ask your child to determine the average speed of a family trip, based on the distance traveled and the time taken; or estimate the time that a trip will take, given the distance and an estimate of the average speed.
- Ask your child to calculate the unit rates of items purchased from the grocery store. For example, if 2 pounds of flour cost \$3.00, how much does flour cost per pound?
- Have your child determine the amount of ingredients needed when cooking. For example, if a recipe calls for 8 cups of rice to serve 4 people, how many cups of rice do you need to serve 6 people?
- **I** Find the surface area of the walls and ceiling in a room to determine the cost of painting the room.
- D 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, including activities to help your child at home.
- Standards and students with special needs.
- Technology expectations by grade level.

#### **Questions:**

For questions, please email **standards@dpsk12.org**.

### 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).

