

Eighth grade instructional programs in USD 379 are committed to helping each child meet the academic and intellectual competencies expected at this grade level and become active, engaged learners in a classroom setting. The following summary of the instructional program provides an overview of the eighth grade year. The eighth grade program builds on skills and knowledge children have learned in seventh grade and at home. It encourages critical thinking, creativity, and respect for self and others. Expectations are modified or expanded to meet a child's needs and abilities.

Curriculum standards are what all grade-level students are expected to know and be able to do by the end of a school year. Key concepts and standards of eighth grade education are included. If you would like a complete description of eighth grade standards, they can be downloaded from the [Kansas State Department of Education](#) website.

If you have questions about curriculum, please contact your child's teacher.

### English Language Arts

#### READING - Literature and Informational Text

- Cite evidence from text that most strongly supports an analysis of what is explicitly stated and/or implied from a book, article, poem, or play. For example, students may read a text such as *Freedom Walkers: The Story of the Montgomery Bus Boycott*, create a claim about the purpose of the boycott, and support it with evidence from the book.
- Analyze how differences in the points-of-view of characters and the audience or reader create such effects as suspense or irony.

#### WRITING

- Plan and conduct research projects that include several steps and use many credible and documented print and/or digital sources through multiple drafts of a written report or multi-media presentation.

- Write narratives that engage the reader by establishing a clear point-of-view, introducing a narrator and characters, and organizing a sequence of events that unfolds logically and naturally.
- Write arguments using formal style to support claims with clear reasons and relevant evidence.
- Draw evidence from literary or informational texts to support analysis and research.

#### LANGUAGE

- Form and use verbs in the active and passive voice by selecting verbs that best fit the purpose and mood of sentences that make up a written composition (e.g., Active voice: The students are reading the book. Passive voice: The book is being read by the students).

#### Science Topics:

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| <ul style="list-style-type: none"> <li>• MS.Structure and Properties of Matter</li> <li>• MS.Chemical Reactions</li> <li>• MS.Forces and Interactions</li> <li>• MS.Energy</li> <li>• MS.Waves and Electromagnetic Radiation</li> </ul> | <ul style="list-style-type: none"> <li>• MS.Structure, Function, and Information Processing</li> <li>• MS.Growth, Development, and Reproduction of Organisms</li> <li>• MS.Matter and Energy in Organisms and Ecosystems</li> <li>• MS.Interdependent Relationships in Ecosystems</li> </ul> | <ul style="list-style-type: none"> <li>• MS.Natural Selection and Adaptations</li> <li>• MS.Space Systems</li> <li>• MS.History of Earth</li> <li>• MS.Earth's Systems</li> <li>• MS.Weather and Climate</li> <li>• MS.Human Impacts</li> <li>• MS.Engineering Design</li> </ul> |
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## Mathematics

### EXPRESSIONS AND EQUATIONS

- Compute with square roots (e.g.,  $\sqrt{36} = 6$  and  $\sqrt{20} = 2\sqrt{5}$ ) and compute powers of numbers (e.g.,  $4^3 = 64$ ).
- Solve equations and graph lines.

### FUNCTIONS

- Define, evaluate, and compare functions. Functions are simply the pairing of each number in a given set with exactly one number in another set.
- Use functions to model relationships between quantities.

### THE NUMBER SYSTEM

- Know that there are numbers that cannot be written as fractions. These numbers are called irrational numbers (e.g.,  $\pi$  and  $\sqrt{2}$ ).

### STATISTICS AND PROBABILITY

- Find patterns between two characteristics of a set of objects (e.g., car weight and miles per gallon).

### GEOMETRY

- Use the Pythagorean Theorem to compute lengths of sides of right triangles.
- Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

## Social Studies: United States History

Establishing America (1787—1830s)

Regionalism and Expansion (1800s—1850s)

March to War (1850s—1861)

Toward a More Perfect Union (1861—1877)

The Rise of America (1870s—1900)

1. Choices have consequences.
2. Individuals have rights and responsibilities.
3. Societies are shaped by beliefs, idea, and diversity.
4. Societies experience continuity and change over time.
5. Relationships between people, place, idea, and environments are dynamic.

# SUPPORTING YOUR CHILD'S LEARNING AT HOME

## English Language Arts: At home, you and your child can:

- Use time in your family's schedule for discussions about events going on in the community, in our nation, or around the world. Encourage your child to research solutions to issues in school or the community in order to be informed about how to address common concerns.
- Visit the University of Nevada, Las Vegas; the Community College of Southern Nevada; or other local college campuses. Begin talking about college early. What does your child expect from college? What high school

courses will your child need to pass to prepare for college?

- Keep books and magazines around the house that your child will both learn from and enjoy reading.

For a list of book recommendations, refer to [www.corestandards.org/assets/Appendix\\_B.pdf](http://www.corestandards.org/assets/Appendix_B.pdf).

**For Student Writing Samples, refer to [http://www.corestandards.org/assets/Appendix\\_C.pdf](http://www.corestandards.org/assets/Appendix_C.pdf)**

## Mathematics: At home, you and your child can:

- Explain what the exponent (2 or 3) means in square centimeters ( $\text{cm}^2$ ) or cubic centimeters ( $\text{cm}^3$ ).
- Record the amount of time you watch television and the type of programs watched over a one-week period. Create as many graphs as possible depicting the data collected.
- Measure a round object such as a baseball. Determine the dimensions of boxes that could hold 3, 6, and 12 counts of the object. Arrange the objects in a variety of ways inside the

boxes and then calculate the dimensions of the boxes that use the least amount of cardboard.

- Find the point equidistant from three other points on a map, such as the point equidistant from your home, a grocery store, and a movie theater.

For additional online support, refer to [www.brightstorm.com/math](http://www.brightstorm.com/math), [www.mathforum.org/dr/math](http://www.mathforum.org/dr/math), or [KahnAcademy.org](http://KahnAcademy.org).