CURRICULUM OVERVIEW
2018–2019

6–8
MESSAGE FROM THE SUPERINTENDENT

Dear Secondary School Parent/Guardian:

Welcome to the 2018-2019 school year. The Clark County School District is committed to working in partnership with families to create an exciting and engaging learning environment which provides the best educational experience possible for all students. The Curriculum Overview provides a sample of the content that your child should master by the end of each school year. Additionally, it includes activities for families to engage in at home. While this document is not inclusive of all content material required to graduate, it does serve as a resource that can be used when supporting your child throughout the school year.

The Nevada Academic Content Standards provide the framework for instruction within Clark County School District. The standards establish clear guidelines for each content area and are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our students need for success in college and a career. Nevada’s standards, which promote critical thinking, reasoning, and application of knowledge, are expected to drastically reduce the need for remedial classes. For additional information, please visit www.doe.nv.gov/Families/.

Infinite Campus is an information system that you can use to effectively monitor your child’s academic progress on a daily basis. You can access the Campus Parent Portal at https://campus.ccsd.net/campus/portal/clark.jsp. In addition, communication with your child’s teacher, in person, via telephone, or through e-mail, will provide you with insight on how you can best support your child’s learning at home. Your child’s counselor is another resource for academic planning to ensure your child is on track for college and/or a career. The District’s website at www.ccsd.net/parents is also a valuable resource. It includes various documents available to you to assist your child in his or her academic career.

We know that students are more likely to succeed in school when their families are engaged in their day-to-day educational activities. We encourage you to stay involved in your child’s education. Access the school website, read school newsletters, participate in school events, follow your child’s school on social media, monitor your child’s academic progress, and provide encouragement.

Thank you for working with us to ensure your child graduates ready for success in college and/or a career.

Sincerely,

Pat Skorkowsky
Superintendent of Schools

“Every student in every classroom, without exceptions, without excuses”
TOGETHER – PREPARING OUR STUDENTS

LEARNING EXPECTATIONS
This document presents learning expectations for students based on the Nevada Academic Content Standards for English Language Arts, Mathematics, Science, and Social Studies. Also included are learning expectations in the areas of health, library, music, physical education, world language, and fine arts education. The learning expectations presented in this document can help you know how your child is doing in middle school.

Tips and activities are also provided to help your child learn at home. Contact your child’s teacher to learn more and discuss how you can help your child meet these learning expectations.

NEVADA PROFICIENCY EXAMINATION PROGRAM (NPEP)—MIDDLE SCHOOL
The Criterion Referenced Tests (CRT), more commonly referred to as the Smarter Balanced Assessments, are the Nevada system for assessing students in grades 6-8 in Mathematics and English Language Arts. The computer adaptive format and on-line administration of these assessments represent a realistic baseline that provides a more accurate indicator of student success as they work to meet the rigorous demands of college and career readiness. A Science CRT is administered to eighth-grade students in an online environment. For additional information on Nevada state assessments, refer to www.doe.nv.gov.

INFINITE CAMPUS
The District’s student information system is Infinite Campus. This system provides real-time information about student achievement and so much more. From the Campus Portal, parents/guardians and students can access a student’s Academic Plan that updates in real time with information on grades, homework assignments, and classwork. Parents/guardians can view the plans from a calendar view that captures every child within the household who is enrolled in a Clark County school.

COMPUTER ACCESS
If you do not have a home computer, then please remember computers may be available at your child’s school and at public libraries.

RESPONSE TO INSTRUCTION
Clark County School District (CCSD) embraces Response to Instruction and Intervention (RTI²). The RTI² Framework uses three levels, or tiers, of support for all students in pre-kindergarten through twelfth grade. Throughout the tiers of support, all students are provided access to grade-level curriculum and behavioral supports.

- Tier I supports all students. Emphasis is placed on the delivery of high-quality, standards-based instruction that is differentiated to meet the needs of students.
- Tier II supports students who are not adequately responding to Tier I instruction.
- Tier III supports students who demonstrate ongoing lack of sufficient progress or growth.

Within the RTI² Framework, CCSD has established structures that schools use to provide additional classes that are paired with core courses if additional support is needed.

Within the RTI² Framework, CCSD has established structures that schools use to provide additional classes that are paired with core courses if additional support is needed.
MIDDLE SCHOOL COURSE PROGRESSION

Throughout the middle school years, CCSD values and emphasizes a well-balanced educational program. The middle school course progression is provided in the table below.

<table>
<thead>
<tr>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MATHEMATICS</td>
<td>• U.S. HISTORY/NEVADA HISTORY</td>
<td></td>
</tr>
<tr>
<td>• SCIENCE</td>
<td>(Cultures will be taught as it relates to the development of U.S. History.)</td>
<td></td>
</tr>
<tr>
<td>• PHYSICAL EDUCATION/COMPUTER LITERACY</td>
<td>Minimum of one semester of P.E. and one semester of Computer Literacy.)</td>
<td>(Minimum of one semester of P.E. and nine weeks of Health. The required sex education/AIDS component will be taught by an appropriate certified teacher.)</td>
</tr>
<tr>
<td>(Minimum of one semester of P.E. and one semester of Computer Literacy.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ENGLISH or ELA Block</td>
<td>• ELECTIVE</td>
<td>• ENGLISH</td>
</tr>
<tr>
<td>• READING</td>
<td>• U.S. HISTORY/NEVADA HISTORY</td>
<td></td>
</tr>
<tr>
<td>• ELECTIVE</td>
<td>(Cultures will be taught as it relates to the development of U.S. History.)</td>
<td>• WORLD GEOGRAPHY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ELECTIVE</td>
</tr>
</tbody>
</table>

For specific information on promotion, retention, and demotion of students, refer to District Regulation 5123 at csd.net/district/policies-regulations/pdf/5123_R.pdf.

GUIDANCE AND COUNSELING PROGRAM OVERVIEW

As part of the educational team, school counselors play an integral role in the academic, career, and social/emotional development of all students. School counselors implement strategies and activities to support and maximize each student’s ability to learn and help prepare students to make informed choices regarding post-secondary options to complete future career goals. Additionally, the school counseling program provides the foundation for personal social/emotional growth as students progress through school and into adulthood.

Below are several planning documents available from the Guidance and Counseling webpage at cpd.vegas > Departments > Guidance and Counseling.

DOCUMENT LIBRARY

The Moving On To Middle School Transitional Planning Guide provides incoming sixth-grade students important information about the transition to middle school. There are several documents available on the guidance and counseling webpage to assist parents and students in planning for future coursework and in preparing for post-secondary education.

The Moving on to High School Transitional Planning Guide provides eighth-grade students important information about their transition to high school. Refer to cpd.vegas > Departments > Guidance and Counseling to access this document.

TIPS FOR PARENTS

The Parents Still Make the Difference! monthly newsletter provides information on topics such as encouraging reading, test success, and building self-esteem. Support Your Child’s Education provides a suggested list of activities to support the academic development of your child.

SafeVoice

Students, parents and faculty throughout Nevada now have access to SafeVoice, an anonymous reporting system used to report threats to the safety or well-being of students. SafeVoice was established by the Nevada Department of Education under SB 212 in 2017 to protect student wellness, prevent violence and save lives.

In partnership with the Nevada Department of Public Safety, the SafeVoice program provides students a safe place to submit tips concerning their own safety or that of others. A fully trained professional team of experts responds in an appropriate manner 24/7/365. Tips always stay anonymous.
TALKING WITH YOUR CHILD’S TEACHER

When you talk to your child’s teacher about the learning expectations, here are some questions you may want to ask.

• How can we support at home what you’re doing in the classroom?
• What would you like to know about my child that would help you as his/her teacher?
• In addition to the learning expectations in this document, what else is my child learning?
• May I see examples of my child’s work and how it does or doesn’t meet these learning expectations?
• How is my child’s academic and behavioral progress measured throughout the year?
• Is my child on grade level? If not, what support will the school offer my child? How can I help at home?
• If my child is at or above grade level, what enrichment and support will the school offer? How can I help at home?

"Is my child on grade level? If not, what support will the school offer my child? How can I help at home?"

TALKING WITH YOUR CHILD

Talking together often about school and progress toward learning expectations helps you know how to support your child’s learning.

• Praise your child for hard work at school. Take time to read and talk about papers and projects your child brings home from school. Ask what your child has done that makes him/her most proud.
• Ask your child to show you his/her work and talk about what he/she is learning in school. What does your child think is most interesting? What seems hard? Note any comments on work that are made by the teacher.
• Ask questions to learn more about your child’s thinking: How do you know? What do you notice? Why did you do it this way?
• Check progress reports and report cards for grades, attendance, and behavior and ask your child about his or her thoughts on the report card. This information can be accessed by parents and students in Infinite Campus.

EXTENDING LEARNING AT HOME

Learning continues at home. Here are some ways you can support your child.

• Use this document to focus on a few of the learning expectations. Try some of the suggestions for learning at home.
• Set up and maintain routines at home for homework, studying, and learning.
• Check to see that your child has done all the work assigned. Sign the homework if required by your child’s school.
• Set up a quiet and comfortable place for you and your child to read and learn.
• Put books, puzzles, games, etc., in a special place your child can access whenever he/she wants.
• Discuss activities your child can do at home that relate to what he/she is learning at school.
ENGLISH LANGUAGE ARTS
Below is a sample of content your child should know and be able to do by the end of sixth grade.

READING - Literature and Informational Text
• Read a variety of texts for a variety of audiences and purposes to examine how authors use evidence from the text to support their arguments and analyze the strength of the author’s argument. For example, students read speeches, such as Winston Churchill’s "Blood, Toil, Sweat, and Tears."
• Read to determine a theme or central idea of a literary text and how it is conveyed through specific details used by the author.

WRITING
• Write arguments to support claims with clear reasons and relevant evidence. Students will form an opinion, create a claim to support that opinion, research information to support their claim, and create essays that demonstrate their research.
• Write narratives that develop real or imagined experiences or events using an event sequence that unfolds naturally and logically.
• Compare and contrast thematically-based texts in different genres (e.g., poems, historical novels, and fantasy stories).
• Write routinely over short and extended time frames for a variety of tasks, purposes, and audiences.

LANGUAGE
• Recognize variations from Standard English in his/her own and others’ writing and speaking, and apply that knowledge to his/her own writing and speaking.

To learn more about the Nevada Academic Content Standards for English Language Arts, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/ELA.

SUPPORTING YOUR CHILD’S LEARNING AT HOME
At home, you and your child can:
• Bring home texts that interest your child from his/her school library. Librarians in CCSD schools are a great resource for connecting your child with a variety of texts.
• Listen to a television reporter, politician, or other speaker. Ask your child to tell you the speaker’s main points. Was the speaker trying to convince the audience of something? How did the speaker convince others?
• Participate in an adult gathering, such as a meal with friends, to practice listening skills and making conversation.

For additional online support, refer to www.pta.org/4446.htm.

FOR STUDENT WRITING SAMPLES, REFER TO http://www.corestandards.org/assets/Appendix_C.pdf.
SIXTH GRADE MATHEMATICS

Below is a sample of content your child should know and be able to do by the end of sixth grade.

RATIOS AND PROPORTIONAL RELATIONSHIPS
• Understand ratio concepts and use ratio reasoning to solve problems (e.g., Unit rates involving such topics as pricing and speed).

THE NUMBER SYSTEM
• Apply and extend understandings of multiplication and division to dividing fractions by fractions.
• Compute fluently with multi-digit numbers.
• Apply and extend number understanding to include the rational number system (positive numbers, negative numbers, decimals, and fractions).

EXPRESSIONS AND EQUATIONS
• Apply and extend previous understandings of arithmetic to expressions with variables.
• Reason about and solve one-variable equations and inequalities (e.g., Solve for \( x \) if \( 2x = 6 \). Since \( 2 \times 3 = 6 \), then \( x = 3 \)).
• Represent and analyze quantitative relationships between dependent and independent variables (e.g., distance and time).

GEOMETRY
• Solve real-world and mathematical problems involving area, surface area, and volume.

STATISTICS AND PROBABILITY
• Develop understanding of statistical variability.
• Summarize and describe distributions based on a variety of attributes such as measures of center (median and mean) and measures of variability (interquartile range and mean absolute deviation).

To learn more about the Nevada Academic Content Standards for Mathematics, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Mathematics.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

At home, you and your child can:
• Determine the best value per ounce of various items at the store.
• Describe patterns in your surroundings and how the pattern would look if it continued. For example, tiles on the floor or petals on a flower.
• Look at a variety of graphs in the newspaper or on the Internet. Describe what each graph is showing, the scale used in each graph, and the relationships shown in each graph. Go from micro to macro. Put the steps developmentally in order.
• Calculate the amount of ingredients needed for a recipe. If a recipe uses 2 cups of sugar to make 4 dozen cookies, how many cups of sugar would be needed to make 10 dozen?

For additional online support, refer to mathforum.org/dr/math, or www.kahnacademy.org.

Chart the fraction of each candy color found in a bag of candy. Repeat with another bag of candy and compare fractions.
SCIENCE

Below are the science concepts your child will learn by the end of sixth grade.

• Energy
• Weather and Climate
• Human Impact
• From Cells to Organisms
• Body Systems and Information Processing

The Nevada Academic Content Standards for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. Their purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

Science and Engineering Practices

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Crosscutting Concepts

1. Pattern
2. Cause and Effect: Mechanism and Explanation
3. Scale, Proportion, and Quantity
4. Systems and System Models
6. Structure and Function
7. Stability and Change

For information on the Nevada Academic Content Standards for Science, refer to http://www.deoe.nv.gov/Standards/Instructional_Support/Nevada_Academic_Standards/Science/.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

At home, you and your child can:

• Encourage your child to observe, ask questions, experiment, and seek their own understanding of natural and human-made phenomena around them.
• Look at a weather map and predict the weather for tomorrow in a few different cities around the United States and the world.
• Brainstorm a list of some simple things your child can do as an individual to help save the world.
• Describe the importance of how body systems work together to perform life functions. Choose your favorite animal. How do their body systems compare to a human? Look for similarities and differences.
• Visit local science sites including the Wetlands Park, the Springs Preserve, or the Las Vegas Natural History Museum.
ENGLISH LANGUAGE ARTS

Below is a sample of content your child should know and be able to do by the end of seventh grade.

READING - Literature and Informational Text

• Read to determine an author’s point of view or purpose in a nonfiction work; analyze how the author takes a position different from other authors. For example, students may read Narrative of the Life of Frederick Douglass an American Slave and compare the author’s purpose to another narrative from a different perspective on the same topic.

• Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

WRITING

• Organize and focus writing, including supporting statements and conclusions with evidence, and show that the evidence is accurate and reliable.

• Write narratives that use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

• Conduct short research projects to answer a question by using multiple sources and generating additional related questions for further investigation.

• Develop arguments with clear reasons and relevant evidence.

LANGUAGE

• Determine the meaning of unknown and multiple-meaning words and phrases based on seventh grade reading and content by choosing from a range of strategies such as using context clues, applying Greek or Latin affixes (e.g., replace, replaceable, irreplaceable), or consulting reference materials such as dictionaries and glossaries.

To learn more about the Nevada Academic Content Standards for English Language Arts, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/ELA.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

At home, you and your child can:

• Research a family activity by using the internet or library to explore the museums, parks, or special events in your community. Have your child plan a day of local exploration through his/her research for you and your family to enjoy.

• Share articles or current events from national news organizations, both in print and online, and ask your child about his/her opinions. Ask your child to find facts from the articles to support his/her opinions.

• Find out what type of books your child likes to read. Does your child enjoy literary or nonfiction texts? If your child enjoys specific hobbies or genres, encourage him/her to read books or find websites on the Internet that provide more information on specific interests. Encourage your child to find a book on a topic he/she enjoys, and schedule time for your child to tell you about what he/she learned from the text.

For additional online support, refer to www.pta.org/4446.htm.

FOR STUDENT WRITING SAMPLES, REFER TO http://www.corestandards.org/assets/Appendix_C.pdf.
MATHEMATICS
Below is a sample of content your child should know and be able to do by the end of seventh grade.

RATIOS AND PROPORTIONAL RELATIONSHIPS
• Solve real-world problems using fractions, decimals, percents, and rates.

THE NUMBER SYSTEM
• Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers (fractions, decimals, and positive and negative whole numbers).

EXPRESSIONS AND EQUATIONS
• Use properties of operations to generate equivalent expressions (e.g., Using the following, since $3 \times 21 = 3(20 + 1) = (3 \times 20) + (3 \times 1) = (60 + 3)$).
• Solve problems involving rational numbers (positive numbers, negative numbers, fractions, decimals) and algebraic expressions and equations.

GEOMETRY
• Draw, construct, and describe geometric figures (angles, triangles, prisms, pyramids, etc.) and describe the relationships between them.
• Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

STATISTICS AND PROBABILITY
• Use random sampling to draw inferences about a population.
• Draw inferences about populations based on samples.
• Compute the theoretical probability of chance events and compare this with experimental results.

To learn more about the Nevada Academic Content Standards for Mathematics, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Mathematics.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

At home, you and your child can:
• Make a scale drawing of a room. Compute the perimeter, area, and volume of the room, objects, etc.
• Use magazine illustrations to find objects that form angles of various degrees. Measure the angles with a protractor.
• Flip a penny 50 times and record the results. Then spin the penny on a hard surface 50 times and record the results. Compare the results of the experiments to each other and determine the number of times you would expect each result to occur.

For additional online support, refer to www.brightstorm.com/math, mathforum.org/dr/math, or www.kahnacademy.org.
Below are the science concepts your child will learn by the end of seventh grade.

- Matter and Chemical Reactions
- Matter and Energy in Ecosystems
- Interdependent Relationships in Ecosystems
- Earth’s Resources
- Dynamic Earth

The Nevada Academic Content Standards for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. Their purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

**Science and Engineering Practices**

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

**Crosscutting Concepts**

1. Pattern
2. Cause and Effect: Mechanism and Explanation
3. Scale, Proportion, and Quantity
4. Systems and System Models
6. Structure and Function
7. Stability and Change

For information on the Nevada Academic Content Standards for Science, refer to http://www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Science/.

**SUPPORTING YOUR CHILD’S LEARNING AT HOME**

At home, you and your child can:

- Ask questions to link material learned in science class to real-world scenarios: How are mountains formed? Why do eclipses occur? What materials are mined in Nevada?
- Help with recycling in your home (paper, plastic, metal).
- Visit local treasures such as Red Rock Canyon or Lake Mead National Recreation Area and identify geological features and wildlife.
- Visit local science sites including the Wetlands Park, the Springs Preserve, or the Las Vegas Natural History Museum.
- Discuss sources of energy and how energy is used in your home.
- Practice chemistry at home. When you cook, discuss the changes in matter that occur. What does the energy do?
SOCIAL STUDIES

Below is a sample of content your child should know and be able to do by the end of seventh grade.

ESSENTIAL HISTORY SKILLS

• Analyze primary and secondary source documents, such as the Declaration of Independence or a newspaper article.
• Use argumentation and narrative writing to examine history.
• Discuss contemporary issues that may require public solutions.
• Understand the impact of interest groups, public opinion, the media, and political parties on the political process.

UNITED STATES/NEVADA HISTORY

• Describe the motivation for European explorations and colonization in the Americas and the impact this had on the Native Americans.
• Determine the causes and effects of the French and Indian War and the American Revolution by studying the Intolerable Acts, the Continental Congress, and other key events from 1763-1783.
• Explain the key elements in the creation of the United States Government.
• Describe the interactions among pioneers and Native American groups in the West as the country began to expand.
• Analyze the long-term consequences of the Civil War on America.
• Describe how the populist and progressive movements rose in American history, and explain how they reflected social change.
• Identify how American expansion impacted American influence in the world.
• Examine how the United States was involved in World War I and the long-term consequences of post-war America.
• Determine the causes and effects of World War II including the Holocaust.

To learn more about the Nevada Academic Content Standards for Social Studies, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/SocialStudies.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

At home, you and your child can:

• Read primary source documents related to historical events.
• Explore museums related to Nevada history.
• Discuss the importance of voting and participating in society.
• Study the founding documents of American history.
• Explain what it means to be a leader.
• Discuss the sources of information you use to form an opinion.
• Connect your family history to historical events discussed in class.

For additional online support, refer to www.softschools.com/social_studies and www.history.com/shows/classroom.
ENGLISH LANGUAGE ARTS

Below is a sample of content your child should know and be able to do by the end of eighth grade.

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).

To learn more about the Nevada Academic Content Standards for English Language Arts, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/ELA.

SUPPORTING YOUR CHILD’S LEARNING AT HOME

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 College of Southern Nevada; or other local college campuses. Talk to your child about different college opportunities. 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.

FOR STUDENT WRITING SAMPLES, REFER TO http://www.corestandards.org/assets/Appendix_C.pdf.

Encourage your child to research solutions to issues in school or the community in order to be informed about how to address common concerns.
**MATHEMATICS**

Below is a sample of content your child should know and be able to do by the end of eighth grade.

**THE NUMBER SYSTEM**
- Know that there are numbers that cannot be written as fractions. These numbers are called irrational numbers (e.g., \( \pi \) and \( \sqrt{2} \)).
- Compare irrational numbers, approximately locate them on a number line, and estimate the value of expressions (e.g., \( \pi^2 \)).

**EXPRESSIONS AND EQUATIONS**
- Use exponents and square roots (e.g., \( \sqrt{36} = 6 \) and \( \sqrt{20} = 2\sqrt{5} \)) and cube roots (e.g., \( \sqrt[3]{27} = 3 \)) to represent and solve equations (e.g., \( x^2 = 64, \sqrt{x^2} = \sqrt{64}, x = \pm 8 \)).
- Understand slope and graph linear equations.
- Analyze and solve linear equations and systems of linear equations (e.g., solve for \( x, 3x + 2 = 23 \)).

**FUNCTIONS**
- Define, evaluate, and compare functions.
- Use functions to model relationships between quantities.

**GEOMETRY**
- Understand congruence and similarity.
- 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.

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

*To learn more about the Nevada Academic Content Standards for Mathematics, refer to [www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Mathematics](http://www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Mathematics).*

---

**SUPPORTING YOUR CHILD’S LEARNING AT HOME**

At home, you and your child can:
- Explain what the exponent (2 or 3) means in square centimeters (cm\(^2\)) or cubic centimeters (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.
- Find the volume of an 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.
- Look at pictures in a magazine or on the Internet to find examples of similar geometric figures.

*For additional online support, refer to [www.brightstorm.com/math](http://www.brightstorm.com/math), [mathforum.org/dr.math](http://mathforum.org/dr.math), or [www.kahnacademy.org](http://www.kahnacademy.org).*
SCIENCE
Below are the science concepts your child will learn by the end of eighth grade.
• Forces and Interactions
• Gravity and Space Systems
• Waves and Information Transfer
• Heredity
• Natural Selection and Adaptation
The Nevada Academic Content Standards for Science identify eight practices of science and engineering and seven crosscutting concepts that are essential for every student to use. Their purpose is to help students deepen their understanding of science content and develop a coherent, scientifically-based view of the world.

Science and Engineering Practices
1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Crosscutting Concepts
1. Pattern
2. Cause and Effect: Mechanism and Explanation
3. Scale, Proportion, and Quantity
4. Systems and System Models
6. Structure and Function
7. Stability and Change

For information on the Nevada Academic Content Standards for Science, refer to http://www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/Science/.

SUPPORTING YOUR CHILD’S LEARNING AT HOME
At home, you and your child can:
• Relate forces and motion to the movement of a car.
• Find an article about a scientific discovery and synthesize what it tells you.
• Research how a cell phone or garage door opener really works.
• Practice chemistry in your kitchen by mixing baking soda with vinegar and observe the chemical reaction. See if you can explain what is happening and then research the results.
• Read an article from a scientific journal.
SOCIAL STUDIES
Below is a sample of content your child should know and be able to do by the end of eighth grade.

ESSENTIAL GEOGRAPHY SKILLS
• Analyze primary and secondary source documents, such as world maps or newspaper articles.
• Use argumentation and narrative writing to examine geography.
• Identify the five themes of geography.
• Describe the elements of culture.

WORLD GEOGRAPHY
• Describe and compare the physical and human features of the world.
• Identify cultural characteristics around the world.
• Study the foreign policy of the United States to understand their diplomatic interactions with other countries.
• Explain the traditions of Buddhism, Christianity, Hinduism, Islam, and Judaism.
• Analyze the role ancient civilizations played in the development of modern civilizations.
• Explain the impact of major world events up to the Middle Ages.
• Analyze political movements throughout history.
• Describe the multiple economic systems used in the world.
• Identify migration patterns throughout history.

To learn more about the Nevada Academic Content Standards for Social Studies, refer to www.doe.nv.gov/Standards_Instructional_Support/Nevada_Academic_Standards/SocialStudies.

SUPPORTING YOUR CHILD’S LEARNING AT HOME
At home, you and your child can:
• Read primary source documents related to historical events.
• Use maps while traveling, and practice giving directions.
• Discuss the importance of culture and how it impacts history.
• Examine the culture of your family.
• Describe the role religion plays in your culture.
• Study the important geographic features around the world.
• Discuss appreciation and understanding of other cultures within the community.

For additional online support, refer to www.softschools.com/social_studies/ and http://education.nationalgeographic.com.
LEARNING BEYOND THE CORE

Each middle school has a library with resources to support learning in the classroom. The library promotes life-long learning through:

INFORMATION LITERACY

Students access information to solve an information problem or question using a variety of digital and printed resources. They recognize accurate, relevant, and comprehensive information in stating both broad and specific questions. They develop a plan to use a variety of sources and can explain the kinds of information found in each, distinguishing between fact, point of view, and opinion.

INDEPENDENT LEARNING

Students explore a range of sources to find information of personal interest or well-being and apply the information to real-life purposes. They read various genres of literature including mythology, short stories, drama, poetry, fiction, and non-fiction. They evaluate the information-seeking process at each stage as it occurs and make adjustments as necessary to improve the process and the product. They revise, improve, and update their own work.

SOCIAL RESPONSIBILITY

Students organize information into formats for presentation, whether working individually or in groups. They help to organize and integrate the contributions of all the members of a group into an information product. Students use ethical behavior in regard to information and information technologies, plagiarism, and citation of sources.

Other areas of learning beyond the core areas of reading and writing, mathematics, science, and social studies include:

COMPUTER LITERACY (6th Grade)

Students identify the major components of a computer system and use ergonomics to demonstrate proper keyboarding skills. They develop basic skills in word processing, spreadsheet applications, database applications, multi-media presentations, and electronic communications. They practice computer ethics and safe use of the Internet. They also explore computer-related career opportunities.

HEALTH (8th Grade)

Students focus on the mental, physical, social, emotional, and environmental aspects of human wellness. They learn life-long skills including communication, decision making, and goal setting to enhance overall health and well-being. Students examine the following health education topics: wellness, nutrition and physical activity, body systems, substance use and abuse, communicable and non-communicable diseases, violence prevention, safety, and environmental and consumer health. Students receive instruction on the human reproductive systems, related communicable diseases, HIV/AIDS, and sexual responsibility within established guidelines. This one semester course fulfills the health requirement for 8th grade.

Note: A signed parent/guardian permission slip for the Sex Education unit of instruction is required.

PHYSICAL EDUCATION (6th, 7th, and 8th Grades)

Students will focus on developing a health-enhancing level of physical fitness while participating in a variety of physical activities. They will develop motor skills, manipulative skills, and movement patterns while focusing on safety. Health-enhancing fitness concepts will be explored through personal goal setting and self-evaluation.

Students will be moderately to vigorously physically active for fifty percent of the instructional time. One semester of physical education is required for sixth, seventh, and eighth grade students.
WORLD LANGUAGE

At many schools, students in grades 6–8 may take an exploratory course that provides an introduction to several of the different languages offered at high schools in the District. In addition, students may begin taking high school credit bearing world language courses beginning in the sixth grade.

The goals of the secondary world language program are to develop students’ communicative skills in the target language and to lead students to intermediate and/or advanced-level proficiency. The focus is communication in the target language incorporating an understanding of the target cultures, connecting with other disciplines, comparing native language to the target language, and participating in multicultural communities. It is recommended that at least ninety percent of the instructional time in class will be conducted in the target language.

Based on student requests and teacher availability, courses may be offered in the following languages:

- American Sign Language
- Arabic
- Chinese (Mandarin)
- Filipino (Tagalog)
- French
- German
- Italian
- Japanese
- Korean
- Latin
- Russian
- Spanish
- Spanish Literacy
- French
- Spanish
- German
- Italian

Note: Many out of state colleges and universities require a minimum of two to three years of study in the same language to fulfill entrance requirements.

FINE ARTS EDUCATION (6th, 7th, and 8th Grades)

For students who elect to participate in fine arts courses, middle school sites provide a variety of opportunities to develop individual and group skills to create, perform, and respond in the disciplines of music, dance, theatre, and the visual arts. Standards-based, sequential instruction in the arts is offered to all students and provide the basis for continued high school study and career opportunities. Programs of study may include:

- **Dance:** Beginning and Intermediate
- **Music:** Band, Orchestra, Choir, Guitar, Mariachi, and Jazz Band
- **Theatre:** Beginning and Intermediate
- **Visual Arts:** Beginning, Intermediate, and Advanced

Students develop basic skills in word processing, spreadsheet applications, database applications, multi-media presentations, and electronic communication.
ONLINE DATABASES

The following online databases are funded by the State of Nevada and the Curriculum and Professional Development Division of the Clark County School District. Note: See your school librarian for guidance and access codes.

ABC-CLIO is a publisher of educational and reference products. These databases focus on history and social studies resources for the scholar, student, teacher, and librarian in universities and secondary schools. Refer to databases. abc-clio.com.

CultureGrams fosters understanding and appreciation of the world's countries and people by creating and publishing excellent content. CultureGrams is a widely used cultural reference and curriculum product. Refer to online. culturegrams.com.

EBSCO provides a wealth of access to newspaper, magazines, and professional periodicals, as well as, a wealth of other online resources. There are also professional resources for educators. Refer to search.ebscohost.com.

LearningExpress Library provides a comprehensive collection of academic and career-related resources including math, reading, and writing tutorials, test preparation materials, and information on in-demand careers. Refer to www.learningexpresslibrary3.com.

TeachingBooks.net is a collection of resources designed to generate enthusiasm for books and reading by bringing authors, illustrators, and engaging resources about books for children and teens to every school, library, and home. Refer to www.teachingbooks.net/home.

World Book Online includes Early World of Learning, World Book Kids, World Book Student, World Book Advanced, and Enciclopedia Estudiantil Hallazagos. These databases provide a wealth of information and tools for all grade levels and curriculums. Refer to worldbookonline.com.