

EDUCATIONAL PLANNING

CAREER EXPLORATIONS

It is expected that students will:

- Explore their individual skills and talents
- Examine different life and career options through each of the Nevada Career Clusters
 - Art/Communications Pathway
 - Business Pathway
 - Health Pathway
 - Human Services Pathway
 - Natural Resources Pathway
 - Technology Pathway
- Demonstrate their abilities as:
 - A planner
 - A learner
 - A citizen
 - An employee
- Present publicly the results of their explorations and investigations
- Formulate a record of their explorations and investigations

Statement of Non-Discrimination

The Lander County School District does not knowingly discriminate against any person on the basis of race, color, creed, religion, national or ethnic origin, sex, age, or disability in admission or access to, or treatment or participation in its programs and activities.

LANDER COUNTY SCHOOL DISTRICT

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CORE CURRICULUM LANDER COUNTY SCHOOL DISTRICT

CURRICULUM

OVERVIEW

JUNIOR HIGH SCHOOL

GRADES 7-8

AUSTIN ELEMENTARY SCHOOL

200 HIGHWAY 305 SOUTH

AUSTIN, NEVADA 89310

BATTLE MOUNTAIN JUNIOR HIGH SCHOOL

650 ALTENBURG AVENUE

BATTLE MOUNTAIN, NEVADA 89820

CONTACT PERSONNEL

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Eliza Pierce Elementary School

Tom Brannan, Principal

Eleanor Lemaire Elementary School

Amy Kester, Principal

Battle Mountain Junior High School

Austin Elementary School

Austin Senior High School

Toby Melver, Principal

Battle Mountain Senior High School



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GUIDANCE AND COUNSELING PROGRAM

Lander County schools offer a comprehensive guidance and counseling program which is integrated with the junior high school curriculum for seventh and eighth grades. Counselors are professionally trained in the social, emotional, educational, and career development of these students.

This counselors assist students with:

- Educational planning
- Interpretation of test scores
- Career information
- Social/emotional growth
- High school and postsecondary options

Counselors implement the curriculum in three settings:

- Group Activities which provide information in areas such as:
 - Problem-solving
 - Decision-making
 - Goal setting
 - Conflict resolution
- Small group settings which address issues such as:
 - Divorce adjustment
 - Test anxiety
 - Anger management
 - Peer relationships
- Individual counseling which focuses on a student's school success.

Guidance counselors act as a resource for parents and teachers by:

- Providing information on community referrals and parenting programs
- Facilitating communication between home and school

The school counselors support a team approach when dealing with the junior high school student's academic needs, and the rules and responsibilities of home and school. Parents are encouraged to access their child's school counselor to assist with needs to ensure school success.



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JUNIOR HIGH SCHOOL PROMOTION REGULATIONS

Throughout the junior high school years, we value and emphasize a well-balanced educational program.

The importance of all coursework cannot be underestimated. Mathematics, reading and English at this level are foundational courses. With a strong level of skill in these disciplines, one is better able to understand and prepare to learn social studies and science concepts. The time and effort that one invests in all of the courses of study will predict a student's success on the mandatory Nevada Proficiency Exams in mathematics, reading, writing, and science. Students must pass these exams to graduate from high school. Likewise, students who pursue postsecondary education or training will have a stronger knowledge base in all areas to perform successfully on the SAT and ACT exams.

Successful performance in high school, college, trade school, and work-related life-long learning programs is directly related to the depth of understanding and foundational skills in all of these courses offered here. The Nevada State Board of Education and the Lander County School District have adopted promotion standards and regulations to help ensure that students be held accountable to acquire basic foundational skills.

STATE OF NEVADA REGULATION FOR PROMOTION TO HIGH SCHOOL

According to Nevada Administrative Code (NAC) 389.445, all current junior high school students must complete one and one-half units of credit in mathematics and one and one-half units of credits in English or reading with a passing grade during seventh and eighth grade for promotion to high school. One-half unit of credit is the equivalent of one semester.



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A WORD FROM THE SUPERINTENDENT

Dear Parents,

This curriculum overview has been developed to help you understand what is expected of students at each grade level in the core subject areas. It provides a listing of the Nevada Content Standards and many of the specific skills and concepts that are being taught. This information may serve as a guide to help you evaluate the progress of your child in these subjects. Additionally, such benchmarks foster accountability in our schools and help ensure that we provide all children with a quality education. More comprehensive information about the curriculum for all subject areas may be obtained from your school's principal.

Sincerely,

Steve Larsgaard, Superintendent

FROM THE PRINCIPAL

Effective educational programs depend upon a strong partnership between parents, the community and the school. I believe that parental involvement enriches the academic experiences of all children. Your participation is encouraged and welcomed and I invite you to contact me or your child's teacher if you have any suggestions or questions.

Many thanks for your commitment to your child's education.

Amy Kester, Principal



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NEVADA CONTENT STANDARDS

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ENGLISH LANGUAGE ARTS/READING

1. Students know and use word analysis skills and strategies to comprehend new words encountered in text.
2. Students use reading process skills and strategies to build comprehension.
3. Students read to comprehend, interpret, and evaluate literature from a variety of authors, cultures, and times.
4. Students read to comprehend, interpret, and evaluate informational texts for specific purposes.
5. Students write a variety of texts that inform, persuade, describe, evaluate, or tell a story and are appropriate to purpose and audience.
6. Students write with a clear focus and logical development, evaluating, revising, and editing for organization, style, tone, and word choice.
7. Students write using standard English grammar, usage, punctuation, capitalization, and spelling.
8. Students listen to and evaluate oral communications for content, style, speaker's purpose, and audience appropriateness.
9. Students speak using organization, style, tone, voice, and media aids appropriate to audience and purpose.
10. Students participate in discussions to offer information, clarify ideas, and support a position.
11. Students formulate research questions, use a variety of sources to obtain information, weigh the evidence, draw valid conclusions, and present findings.

MATHEMATICS

1. To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.



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EIGHTH GRADE—SOCIAL STUDIES

HISTORY (Continued)

- Define capitalism and free market economy
- Describe contributing factors in the development of a national identity, such as: the cotton gin, Erie Canal, the factory system, immigration and nativism, Monroe Doctrine, railroads, telegraph, War of 1812
- Describe Manifest Destiny and the expansion of the United States, including: Lewis and Clark and the Louisiana Purchase, Trail of Tears, the Battle of the Alamo, Treaty of Guadalupe-Hidalgo, Oregon and California Trails, Spanish Trail, Santa Fe Trail, Central Overland Trail, Mormon Trail, Donner Party, California Gold Rush
- Describe the Mormon influence on the political and economic development of pre-territorial Nevada
- Identify the causes, key people, events, and outcome of the Civil War, including: states' rights and slavery, President Lincoln, Emancipation Proclamation, Vicksburg and Gettysburg, Geesburg Address, Generals Grant and Lee
- Identify the 13th, 14th, and 15th Amendments to the Constitution
- Describe the contributions of Sarah Winnemucca Hopkins to Native Americans in Nevada and the United States
- Describe the goals and accomplishments of labor unions in Nevada and the United States
- Describe the women's suffrage movement and the 19th amendment
- Identify causes, outcome, and consequences of World War I, including Sarajevo, alliances and nationalism, weapons and tactics, Treaty of Versailles
- Explain how literature, music, and visual arts were a reflection of the times
- Describe the causes and effects of the Great Depression and the New Deal on life in the United States and Nevada, including: stock market crash, family life, Hoover Dam, government programs
- Identify key elements of the Holocaust, including: "Aryan supremacy," Kristallnacht, "Final Solution," concentration and death camps
- Identify the effects of the Cold War on the United States, including: arms race and nuclear testing, McCarthyism, space race, Cuban Missile Crisis
- Discuss how science and technology changed life in the United States after WW II, including: television, electronics and computers, medical advances
- Identify the major issues, events, and people of the modern Civil Rights movement in the United States and Nevada, including: Rosa Parks, Martin Luther King, Jr., Brown v. Board of Education, voting rights, integration, Grant Sawyer, César Chávez
- Describe the effects of tourism and gaming on Nevada
- Describe major world, national, and local issues, including: ethnic and religious conflicts, environmental issues, gaming, health issues, water and resource allocation
- Identify the role of the media in the changing political climate



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GEOGRAPHY (Continued)

- Describe ways in which technology affects how cultural groups use places and regions
- Explain the role regions have played in selected historical events
- Explain how natural hazards alter Earth's environments
- Compare and contrast the biodiversity and productivity of various ecosystems on Earth
- Describe how history has been affected by the movement of people, goods, and ideas
- Compare the elements of economic development and quality of life between developing and developed countries
- Compare and contrast changes in cultural, political, and economic organizations over time
- Compare how conflict and cooperation among people contribute to political, economic, and cultural divisions on Earth's surfaces
- Explain the role of technology in the human modification of the physical environment
- Describe the patterns of change caused by human modification of the physical environments
- Select a resource and evaluate different viewpoints regarding its use
- Examine a contemporary issue using geographic knowledge, skills, and perspectives
- Describe several future outcomes for a geographic issue and defend one possible solution

HISTORY

It is expected that students will:

- Describe how a current event is presented by multiple sources
- Frame historical questions that examine multiple viewpoints
- Identify significant characteristics of early agricultural societies, including: farming, domestication of animals
- Describe achievements made by ancient and classical civilizations, including, the Americas, China, Egypt, Greece, India, Mesopotamia, Rome
- Describe the characteristics of the Mayan, Aztec, and Incan civilizations, including: contributions, geography, political systems, religion, social structure
- Define the Renaissance in terms of science and fine arts
- Explain interactions among Native Americans, Europeans, and Africans
- Describe, compare and contrast lifestyles in the New England, Middle, and Southern colonies
- Describe the African slave trade
- Explain the major ideas expressed in the Declaration of Independence, including: equality, right to change government, "life, liberty, and the pursuit of happiness"
- Identify the Articles of Confederation



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MATHEMATICS (CONTINUED)

2. To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.
3. To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.
4. To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties.
5. To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.
6. Students will develop their ability to solve problems by engaging in developmentally appropriate problem solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts in order to: formulate their own problems; find solutions to problems from everyday situations; develop and apply strategies to solve a wide variety of problems; and integrate mathematical reasoning, communication, and connections.
7. Students will develop their ability to communicate mathematically by solving problems in which there is a need to obtain information from the real world through reading, listening, and observing in order to: translate this information into a mathematical language and symbols; process this information mathematically; and present results in written, oral, and visual formats.



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NEVADA CONTENT STANDARDS

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MATHEMATICS (CONTINUED)

8. Students will develop their ability to reason mathematically by solving problems in which there is a need to investigate significant mathematical ideas and construct their own learning in all content areas in order to justify their thinking; reinforce and extend their logical reasoning abilities; reflect on and clarify their own thinking; and ask questions to extend their thinking.
9. Students will develop the ability to make mathematical connections by solving problems in which there is a need to view mathematics as an integrated whole, identifying relationships between content strands and integrating mathematics with other disciplines, allowing the flexibility to approach problems in a variety of ways within and beyond the field of mathematics.

SCIENCE

1. Forces and Motion—Students understand that forces such as gravitational, electrical, and magnetic influence the motion of objects.
2. Structure and Properties of Matter—Students understand that materials have distinct properties which depend on the amount of matter present, its chemical composition, and structure.
3. Energy and Matter: Interactions and Forms—Students understand that changes in temperature and pressure can alter states of matter. Energy exists in many forms, and one form can change into another.
4. Chemical Reaction—Students understand that chemical reactions change substances into different substances.
5. Nuclear and Electromagnetic Energy—Students understand that nuclear energy and electromagnetic energy are produced from both natural and human-made sources in many forms.
6. Structure and Function—Students understand that all life forms, at all levels of organization, use specialized structures and similar processes to meet life's needs.
7. Internal and External Influences on Organisms—Students understand that organisms respond to internal and external influences.



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EIGHTH GRADE—SOCIAL STUDIES

ECONOMICS (Continued)

- Explain gross domestic product and how it is used to describe a country's economic output
- Distinguish between a high rate and a low rate of un-employment for the US economy over time
- Distinguish between high and low interest rates for the US economy over time
- Give examples of markets in which people benefit from trade
- Explain the purposes and functions of financial institutions (e.g., to channel funds from savers to borrowers)
- Illustrate how prices stated in money terms help people compare the value of products
- Explain how consumer and producer reactions to price changes affect resource allocation
- Explain the circular flow of economic activity
- Explain how investment improves standards of living by increasing productivity
- Illustrate how competition among sellers decreases prices, while competition among buyers increases prices
- Give examples of the kinds of goods and services that government provides
- Give examples of ways government protects property
- Describe how economic interdependence among countries affects standards of living in those countries

GEOGRAPHY

It is expected that students will:

- Use a variety of research skills, including field work and computer resources, to collect geographic information
- Make generalizations by developing and presenting combinations of geographic information to answer geographic questions
- Use map elements including scale, latitude and longitude, and projection, to identify and locate physical and human features in Nevada, the US, and regions of the world
- Compare and contrast maps of similar areas for purpose, accuracy, content, and design
- Compare how cultural characteristics affect different points of view with regard to places and regions



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EIGHTH GRADE—SOCIAL STUDIES

Eighth grade students increase the depth of their study of United States history focusing on its inhabitants and its place in the global interaction of history. Students will continue to be introduced to the people and events that contributed to the development of our nation as they examine the impact of economic, political, social, and technological ideas. The role of Nevada and the American west will be integrated throughout this study.

CIVICS

It is expected that students will:

- Describe the significance of the Declaration of Independence and the US Constitution as foundations of US democracy
- Describe how the US Constitution serves as a device for preserving national principles and as a vehicle for change, including knowledge of the formal process of amending the US Constitution
- Explain the historic compromises that created a two-house Congress and identify the responsibilities of each
- Describe the duties of the executive branch, including: cabinet/ departments, regulatory commissions, White House staff
- Explain how the supremacy clause of the US Constitution defines the relationship between state and national governments
- Provide examples of how political parties changed
- Describe the process by which public policy is formed and carried out
- Identify the rights, privileges, and responsibilities associated with US citizenship, including voting, holding office, jury duty, or military, community, or public service
- Identify examples of conflict resolution that respect individual rights at school and in the community, within the United States
- Describe the juvenile, civil, and criminal court systems
- Define the world's major economic systems, including: capitalism, mixed economy, socialism, command economy
- Define foreign policy and describe ways nations interact diplomatically, including: treaties, trade, humanitarian aid, military intervention

ECONOMICS

It is expected that students will:

- Explain that self-interest is a motivational factor when people respond to incentives



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NEVADA CONTENT STANDARDS

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SCIENCE (CONTINUED)

8. Heredity and Diversity—Students understand that life forms are diverse and that they pass some characteristics to their offspring.
9. Evolution—The Process of Biological Change—Students understand that life forms change over time.
10. Earth Structures and Composition—Students understand that the Earth is composed of interrelated systems of rocks, water, air, and life.
11. Earth Models—Students understand that the Earth may be represented by a variety of maps and models.
12. Earth History—Students understand that Earth systems (such as weather and mountain formation) change or vary.
13. Cycles of Matter and Energy—Students understand that Earth systems have a variety of cycles through which energy and matter continually flow.
14. The Solar System and the Universe—Students understand that the Earth is part of a planetary system within the Milky Way Galaxy, which is part of the known universe.
15. Ecosystems—Students demonstrate an understanding that ecosystems display patterns of organization, change, and stability as a result of the interactions and interdependencies among the life forms and the physical components of the Earth.
16. Natural Resources—Students demonstrate and understand that natural resources include renewable and non-renewable materials and energy. All organisms, including human, use resources to maintain and improve their existence, and use of resources can have positive and negative consequences.
17. Conservation—Students understand that humans have the unique ability to change personal and societal behavior based on ethical considerations regarding other organisms, the planet as a whole, and future generations.
18. Scientific, Historical, and Technological Perspectives—Students understand that science is a unique way of knowing about things. Many men and women have contributed to the tradition of science. The ability to pursue activities and careers in science is accessible to people from all cultures and all levels of ability.



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NEVADA CONTENT STANDARDS

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SCIENCE (CONTINUED)

19. Reasoning and Critical Response Skills—Students understand that many decisions require critical consideration of scientific evidence.
20. Systems, Models, Risk, and Predictions—Students understand that a variety of models can be used to describe and predict things and events.
21. Scientific Values and Attitudes—Students understand that science is an active process of systematically examining the natural world.
22. Communication Skills—Students understand that a variety of communication methods can be used to share scientific information.
23. Scientific Applications of Mathematics—Students understand that scientific inquiry is enhanced and often communicated by using mathematics.
24. Laboratory Skills and Safety—Students can appropriately and safely apply the tools and techniques of scientific inquiry.

SOCIAL STUDIES

Civics

1. Rules and Law—Students know why society needs rules, laws, and governments.
2. The U.S. Government—Students know the United States Constitution and the government it creates.
3. National and State Government—Students can explain the relationship between the states and national government.
4. The Political Process—Students describe the roles of political parties, interest groups, and public opinion in the democratic process.
5. Citizenship—Students know the roles, rights, and responsibilities of United States citizens and the symbols of our country.
6. State and Local Government—Students know the structure and functions of state and local governments.



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EIGHTH GRADE—SCIENCE

EARTH AND SPACE SCIENCES—Earth's Composition and Structure

It is expected that students will:

- Identify sedimentary rocks and fossils as providing evidence of changing environments and the constancy of geologic processes
- Identify the weathering of rocks at Earth's surface
- Identify the continental and oceanic crust and its properties
- Investigate and describe how the combination of constructive and destructive forces result in formation of landforms
- Identify and sort the abundances and properties of different minerals
- Identify the properties of soil including color, texture, water capacity and nutrients for providing and sustaining life
- Identify the characteristics of renewable and non-renewable resources focusing on their abundance and accessibility
- Recognize and distinguish beneficial or harmful changes in a physical environment
- Report unintended consequences of technologies that can cause resource depletion and environmental degradation contrasted with technological increases in resource availability and utilization
- Explain how some changes on the Earth's surface are due to slow processes, and others due to rapid processes
- Explain that energy cannot be created or destroyed, but only changed from one form to another



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LIFE SCIENCE—Diversity of Life (Continued)

- Explain and illustrate that changes in genes of eggs and sperm can cause changes in inherited characteristics
- Research and map how fossils provide evidence of how life and environmental conditions have changed throughout geologic time
- Explain and illustrate how an organism’s behavior is based on both experience and on the species’ evolutionary history

EARTH AND SPACE SCIENCES—Atmospheric Processes and the Water Cycle

It is expected that students will:

- Analyze the seasons as caused by variations in the amounts of the sun’s energy reaching the Earth’s surface due to the planet’s axial tilt
- Investigate and describe how seasons, eclipses, moon phases, and tides are caused by the effects of relative motion and positions of the sun, Earth, and moon
- Explain how water, which covers the majority of the Earth’s surface, circulates through the crust, oceans, and atmosphere
- Explain how global patterns of atmospheric movement, topography, and proximity to bodies of water influence local weather, and seasons are caused by variations in the amount of the sun’s energy hitting the surface due to the tilt of the Earth’s axis

EARTH AND SPACE SCIENCES—Solar System and Universe

It is expected that students will:

- Identify solar system objects including planetary moons, asteroids, and comets
- Identify characteristics of planets in our solar system
- Describe the placement of the Earth and the solar system within the Milky Way Galaxy
- Define how most objects in the solar system are in regular and predictable motion noting phenomena as the day, the year, phases of the moon, and eclipses



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SOCIAL STUDIES (CONTINUED)

7. Political and Economic Systems—Students explain the different political and economic systems in the world.
8. International Relations—Students know the political and economic relationship of the united States and its citizens to other nations.

Economics

1. The Economic Way of Thinking—Students will use fundamental economic concepts, including scarcity, choice, cost, incentives, and costs versus benefits to describe and analyze problems and opportunities, both individual and social.
2. Measuring U.S. Economic Performance—Students will demonstrate a knowledge of past and present U.S. economic performance, identify the economic indicators used to measure that performance, and use this knowledge to make individual decisions and discuss social issues.
3. Functioning of Markets—Students will demonstrate an understanding of how markets work, including an understanding of why markets form, how supply and demand interact to determine market prices and interest rates, and how changes in prices act as signals to coordinate trade.
4. Private U.S. Economic Institutions—Students will describe the roles played by various U.S. economic institutions, including financial institutions, labor unions, for-profit business organizations, and not-for-profit organizations.
5. Money—Students demonstrate an understanding of various forms of money; how money makes it easier to trade, borrow, save, invest, and compare the value of goods and services; and how the Federal Reserve System and its policies affect the U.S. money supply.
6. The U.S. Economy as a Whole—Students will demonstrate an understanding of the U.S. economic system as a whole in terms of how it allocates resources; determines the nation’s production, income, unemployment, and price levels; and leads to variations in individual income levels.



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SOCIAL STUDIES (CONTINUED)

7. An Evolving Economy—Students will demonstrate an understanding of how investment, entrepreneurship, competition, and specialization lead to changes in an economy’s structure and performance.
8. The Role of Government in a Market Economy—Students will explain the role of government in a market economy.
9. The International Economy—Students explore the characteristics of non-U.S. economic systems in order to demonstrate an understanding of how they are connected, through trade, to people and cultures throughout the world.

Geography

1. The World in Spatial Terms—Students use maps, globes, and other geographic tools and technologies to locate and derive information about people, places, and environments.
2. Places and Regions—Students understand the physical and human features and cultural characteristics of places and use this information to define and study regions and their patterns of change.
3. Physical Systems—Students understand how physical processes shape Earth’s surface patterns and ecosystems.
4. Human Systems—Students understand how economic, political, and cultural processes interact to shape patterns of human migration and settlement, influence and interdependence, and conflict and cooperation.
5. Environment and Society—Students understand the effects of interactions between human and physical systems and the changes in use, distribution, and importance of resources.
6. Geographic Applications—Students apply geographic knowledge of people, places, and environments to interpret the past, understand the present, and plan for the future.
7. Geographic Skills—Students ask and answer geographic questions by acquiring, organizing, and analyzing geographic information.



LIFE SCIENCE—Structure of Life

It is expected that students will:

- Describe, explain and illustrate that disease can result from defects in body systems or from damage caused by infection
- Describe, explain and illustrate that some organisms are made of just one cell and that multi-cellular organisms can consist of thousands to millions of cells working together
- Describe, explain and illustrate that the cell is the basic structural unit for all living things
- Describe, explain and illustrate how cells grow, divide and take in nutrients which they use to provide energy for cell functions
- Show how cells combine to form tissues that combine to form organs and organ systems that are specialized to perform life functions

LIFE SCIENCE—Organisms and Their Environment

It is expected that students will:

- Illustrate and show how matter and energy are transferred through food webs in an ecosystem
- Classify and characterize organisms in any ecosystem by their functions
- Evaluate how changes in environments can be beneficial or harmful
- Research, interpret, debate and analyze how unintended consequences of technologies can cause resource depletion and environmental degradation, but technology can also increase resource availability, mitigate environmental degradation, and make new resources economical
- Research, interpret, debate and analyze inter-related factors that affect the number and type of organisms an ecosystem can support

LIFE SCIENCE—Diversity of Life

It is expected that students will:

- Organize, demonstrate and show characteristics of a species
- Show, illustrate, and demonstrate the passage of genetic instructions from one generation to the next generation



EIGHTH GRADE—SCIENCE

PHYSICAL SCIENCE—Forces and Motion (Continued)

- Construct and formulate demonstrations showing the effects of balanced and unbalanced forces on an object's motion
- Identify, report and describe an object's motion graphically

PHYSICAL SCIENCE—Energy

It is expected that students will:

- Analyze the seasons as caused by variations in the amounts of the sun's energy reaching the Earth's surface due to the planet's axial tilt
- Explain and describe how visible light is a narrow band within the electromagnetic spectrum
- Explain and describe how vibrations (e.g., sounds, earthquakes) move at different speeds in different materials, have different wavelengths, and set up wave-like disturbances that spread away from the source uniformly
- Explain and describe the transfer of energy involving physical, chemical, and nuclear reactions
- Explain and describe that energy cannot be created or destroyed, in a chemical or physical reaction, but only changed from one form to another
- Explain and describe that forms of energy can be considered to be either kinetic energy or potential energy
- Examine, explain and describe how heat energy flows from warmer materials or regions to cooler ones through conduction, convection, and radiation
- Show, demonstrate and apply how electricity can flow in series and parallel circuits

LIFE SCIENCE—Heredity

It is expected that students will:

- Show, illustrate, and demonstrate the passage of genetic instructions from one generation to the next generation
- Explain and illustrate that changes in genes of eggs and sperm can cause changes in inherited characteristics
- Organize, demonstrate and show characteristics of a species
- Explain that some characteristics of an organism are the result of a combination of interaction with the environment and genetic information



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SOCIAL STUDIES (CONTINUED)

History

1. Chronology—Students use chronology to organize and understand the sequence and relationship of events.
2. History Skills—Students will use social studies vocabulary and concepts to engage in inquiry, in research, in analysis, and in decision making.
3. Prehistory to 400 CE—Students understand the development of human societies, civilizations, and empires through 400 CE.
4. 1 CE to 1400—Students understand the characteristics, ideas, and significance of civilizations and religions from 1 CE to 1400.
5. 1200 to 1750—Students understand the impact of the interaction of peoples, cultures, and ideas from 1200 to 1750.
6. 100 to 1865—Students understand the people, events, ideas, and conflicts that led to the creation of new nations and distinctive cultures.
7. 1860 to 1920—Students understand the importance and impact of political, economic, and social ideas.
8. The Twentieth Century, a Changing World: 1920 to 1945—Students understand the importance and effect of political, economic, technological, and social changes in the world from 1920 to 1945.
9. The Twentieth Century, a Changing World: 1945 to 1990—Students understand the shift of international relationships and power as well as the significant developments in American culture.
10. New Challenges, 1990 to the Present—Students understand the political, economic, social, and technological issues challenging the world as it approaches and enters the new millennium.



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SEVENTH GRADE—LANGUAGE ARTS/READING

Instruction in this area focuses on expanding students' reading, writing, speaking, listening, and research skills. It strengthens critical thinking and study skills. Grammar, usage, and mechanics are taught as necessary elements of the writing process. Literature is used to stimulate discussion and to model good writing.

WORD KNOWLEDGE

It is expected that students will:

- Apply high-frequency spelling rules in writing
- Recognize multiple-meaning words
- Use word parts to determine word meaning
- Use context clues to determine word meaning
- Explain differences between literal and figurative language

GRAMMAR, USAGE, AND MECHANICS

It is expected that students will:

- Use the eight parts of speech in writing
- Write using standard English grammar, usage, and mechanics

THE READING PROCESS

It is expected that students will:

- Apply reading process skills and strategies to aid comprehension
- Confirm, deny, and revise predictions while reading
- Make inferences from text
- Read and respond to various types of literature

LITERATURE

It is expected that students will:

- Identify the characteristics and elements of various literary forms
- Identify stages of plot development
- Distinguish between main plot and subplot
- Identify various types of conflict
- Determine the effects of an author's use of point of view
- Compare a variety of themes and cite textual evidence as support

INFORMATIONAL TEXT

It is expected that students will:

- Identify and use text features to gain meaning
- Identify main idea and differentiate from the supporting evidence or details
- Interpret information in new contexts



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EIGHTH GRADE—SCIENCE

THE NATURE OF SCIENCE—Science, Technology, and Society

It is expected that students will:

- Investigate and describe how living and non-living components of ecosystems interact in various ways, both positively and negatively
- Show and demonstrate that scientific knowledge is revised through a process of incorporating new evidence gained through on-going investigation and collaborative discussion

PHYSICAL SCIENCE—Matter

It is expected that students will:

- Explain that particles are arranged differently in solids, liquids, and gasses of the same substance
- Use the periodic table to show repeating patterns that group elements with similar properties
- Show and demonstrate techniques of applying properties to separate mixtures
- Explain that atoms often combine to form molecules, and that compounds form when two or more different kinds of atoms chemically bond
- Explain using the atomic theory why mass is conserved in physical and chemical changes
- Report and describe that matter is made up of tiny particles called atoms
- Identify and explain the characteristics of electrons, protons, and neutrons
- Explain that substances containing only one kind of atom are elements which cannot be broken into smaller pieces by normal laboratory reactions

PHYSICAL SCIENCE—Forces and Motion

It is expected that students will:

- Manipulate and show that electric currents can produce magnetic forces and magnets can cause electric currents
- Show and demonstrate that every object exerts gravitational force on every other object; explain that the magnitude of this force depends on the mass of the objects and their distance from one another



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EIGHTH GRADE—MATHEMATICS

MATHEMATICAL REASONING (Continued)

- Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems

MATHEMATICAL CONNECTIONS

It is expected that students will:

- Link new concepts to prior knowledge
- Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- Use models to explain the relationship of concepts to procedures
- Identify practical applications of mathematical principles that can be applied to other disciplines
- Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)
- Identify, explain, and use mathematics in everyday life

EIGHTH GRADE—SCIENCE

Instruction in eighth grade science provides an deeper and more expansive view of concepts in the nature of science and its role in society and technology. Principles of scientific inquiry are explored with topics covered in the physical, life, earth and space sciences.

THE NATURE OF SCIENCE—Scientific Inquiry

It is expected that students will:

- Identify and evaluate critically the use of statistics, data, and graphs
- Critically evaluate information to distinguish between fact and opinion when responding to information
- Analyze data from two groups, comparing both their middles and ranges; explore different explanations that can be given for the same evidence
- Evaluate results through scientific inquiry and scientific investigations, experiments, observations, theoretical and mathematical models, and explanations proposed by other scientists



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SEVENTH GRADE—LANGUAGE ARTS/READING

INFORMATIONAL TEXT (Continued)

- Find similarities and differences in a text in the treatment, scope, or organization of ideas
- Evaluate how authors' ideas and purposes shape the content of texts
- Identify and trace the development of an author's viewpoint in text
- Assess the adequacy of evidence used to support an author's position
- Identify unsupported inferences, faulty reasoning, and propaganda techniques in texts
- Analyze the historical and cultural perspective of nonfiction
- Follow multi-step written directions to complete a task
- Practice interpreting maps, charts, and graphs
- Practice real-life reading skills
- Read independently to gather information

THE WRITING PROCESS

It is expected that students will:

- Apply the five stages of the writing process
- Compare and contrast the actions of different characters
- Make inferences supported by text about an author's cultural and historical perspectives
- Compare and contrast features of consumer materials
- Write responses to literary selections
- Write responses to literature that demonstrate an understanding of theme
- Write summaries of nonfiction text
- Write with clarity and express ideas concisely
- Apply the analytic writing traits assessed by the Nevada State Proficiency Exam in writing
- Write compositions in the descriptive, narrative, expository, and persuasive modes
- Compose various letters for business and personal use



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SEVENTH GRADE—LANGUAGE ARTS/READING

THE RESEARCH PROCESS

It is expected that students will:

- Formulate a plan for research to answer a focused question
- Locate and use primary and secondary sources
- Distinguish between information from primary and secondary sources
- Paraphrase and synthesize information from several sources
- Record information using note-taking and organizational formats
- Document research sources according to a given format
- Present research findings using written text and/or media

COMMUNICATION/STUDY SKILLS

It is expected that students will:

- Speak and listen cooperatively
- Practice active listening skills
- Distinguish relevant information to support an opinion
- Develop logical arguments in support of opinions
- Evaluate effective speaking techniques
- Organize and deliver a persuasive speech appropriate to audience and purpose
- Evaluate oral presentations
- Follow multi-step oral directions
- Give clear and concise multi-step directions to complete a task
- Apply techniques to aid memory
- Practice test-taking strategies
- Apply test-taking strategies



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EIGHTH GRADE—MATHEMATICS

PROBLEM SOLVING (Continued)

- Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable
- Use technology, including calculators, to understand quantitative relationships (e.g., for skip counting and pattern exploration)
- Use technology, including calculators, to investigate, define, and describe qualitative relationships such as patterns and functions

MATHEMATICAL COMMUNICATION

It is expected that students will:

- Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems
- Identify and translate key words and phrases that imply mathematical operations
- Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats
- Explain and justify thinking about mathematical ideas and solutions
- Make conjectures and present arguments in discussions of mathematical ideas
- Use everyday language to explain thinking about strategies and solutions to mathematical problems
- Express mathematical ideas and use them to define, compare, and solve problems orally and in writing
- Use mathematical notation to communicate and explain mathematical situations

MATHEMATICAL REASONING

It is expected that students will:

- Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems
- Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning
- Ask questions to reflect on, clarify, and extend thinking



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SPATIAL RELATIONSHIPS AND GEOMETRY

It is expected that students will:

- Use models, properties and coordinate geometry to solve problems
- Solve problems involving coordinate geometry including finding the slope, midpoint, and distance
- Formulate conclusions about properties of geometric shapes
- Solve problems using the Pythagorean Theorem
- Construct geometric figures and bisect angles and line segments
- Apply concepts to solve problems involving perimeter, area, and volume

DATA ANALYSIS

It is expected that students will:

- Display, read, organize, and analyze data
- Find the theoretical probability of an event
- Analyze, evaluate, and make reasonable inferences based on sets of data

PROBLEM SOLVING

It is expected that students will:

- Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts
- Apply previous experience and knowledge to new problem-solving situations
- Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation
- Try more than one strategy when the first strategy proves to be unproductive
- Generalize solutions and strategies from earlier problems to new problem situations



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Instruction in seventh grade mathematics forms a bridge between arithmetic and the mathematics applications used in the real world. Emphasis is on using multiple strategies for solving problems including patterns and algebraic relationships, as well as developing estimation skills and speed and accuracy in computation skills. The use of technology, manipulatives and other visual tools are incorporated into instructional design to assist students in the process of becoming proficient at mathematical computation and estimation, reasoning, and problem solving. Communication skills will be developed through note-taking, student presentations and connections to relevant, real-world situations.

NUMBERS, NUMBER SENSE, AND COMPUTATION

It is expected that students will:

- Compute, read and write integers, ratios, and proportions
- Solve problems by applying integers, ratios, proportions, absolute value and the properties of real numbers
- Estimate and round
- Compute with decimals and fractions
- Compare, order and translate among fractions, decimals and percents

PATTERNS, FUNCTIONS, AND ALGEBRA

It is expected that students will:

- Create and use coordinate graphs to identify, model and evaluate patterns and relationships
- Evaluate algebraic expressions for given values of a variable
- Use algebra to represent mathematical situations
- Combine like terms in algebraic expressions
- Solve linear equations and inequalities using order of operations
- Solve linear equations by graphing ordered pairs

MEASUREMENT

It is expected that students will:

- Estimate, convert, and compare units of mass and volume
- Develop accuracy and precision in measurement using customary and metric measurements
- Estimate and use formulas to find volume and surface area
- Solve proportions and problems involving elapsed time



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SEVENTH GRADE—MATHEMATICS

SPATIAL RELATIONSHIPS AND GEOMETRY

It is expected that students will:

- Classify and compare polygons; find the sum of the interior angles
- Solve perimeter, area and volume problems
- Create scale drawings
- Demonstrate geometric transformations
- Model 3-dimensional figures from 2-dimensional drawings
- Find the slope and midpoint of a line
- Describe geometric properties and use geometric tools to construct angles and parallel and perpendicular lines
- Solve problems using the Pythagorean Theorem

DATA ANALYSIS

It is expected that students will:

- Organize, display, read and analyze data
- Select and use multiple measures of variability; such as, range, distribution, and outliers
- Estimate and explain predictions of y-values from a set of data

PROBLEM SOLVING

It is expected that students will:

- Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts
- Apply previous experience and knowledge to new problem-solving situations
- Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation
- Try more than one strategy when the first strategy proves to be unproductive
- Generalize solutions and strategies from earlier problems to new problem situations



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EIGHTH GRADE—MATHEMATICS

NUMBERS, NUMBER SENSE, AND COMPUTATION (Continued)

- Compare, order, and find relationships between fractions, decimals and percents
- Compute with whole numbers, fractions, and decimals

PATTERNS, FUNCTIONS, AND ALGEBRA

It is expected that students will:

- Analyze and generalize patterns to find the missing term in arithmetic and geometric patterns
- Evaluate function relationships
- Add and subtract binomials
- Model and solve linear equations and inequalities using order of operations
- Evaluate formulas and algebraic expressions
- Add, subtract, multiply, divide, and factor polynomials
- Simplify rational algebraic expressions
- Solve quadratic equations and inequalities using the quadratic formula, zero product property, and completing the square
- Solve systems of equations, linear and quadratic, using graphing, substitution, and linear elimination methods

MEASUREMENT

It is expected that students will:

- Use appropriate tools to measure precisely and accurately
- Solve problems using formulas and identify relationships between area, volume and distance
- Formulate conclusions about properties of geometric shapes
- Apply concepts to solve problems involving perimeter, area, and volume
- Solve problems using rates, ratios, and proportions



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EIGHTH GRADE – LANGUAGE ARTS/ READING

RESEARCH

It is expected that students will:

- Formulate questions and statements of purpose to guide cross-curricular research
- Locate and select relevant information from multiple primary and secondary sources
- Paraphrase and synthesize information from several sources
- Record information using note-taking and organizational strategies
- Document research sources according to a given format
- Present research findings using written text and appropriate media

COMMUNICATION/STUDY SKILLS

It is expected that students will:

- Practice effective speaking techniques
- Organize and deliver a planned presentation appropriate to audience and purpose
- Apply active listening skills
- Follow multi-step directions
- Give clear and concise multi-step directions to complete a complex task
- Ask for and provide specific evidence in support of an opinion
- Practice and apply study strategies and memory skills
- Practice test-taking strategies

EIGHTH GRADE – MATHEMATICS

Eighth grade students continue to study mathematics with more formal studies. Emphasis is on patterns and formal structure within the real number system. Topics include simplifying and evaluating expressions, solving equations, graphing, and problem solving strategies.

NUMBERS, NUMBER SENSE, AND COMPUTATION

It is expected that students will:

- Develop accuracy in computation using integers, exponents, and scientific notation
- Solve problems applying number theory and the properties of real numbers
- Solve problems using rates, ratios, and percents



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SEVENTH GRADE – MATHEMATICS

PROBLEM SOLVING (Continued)

- Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable
- Use technology to understand quantitative relationships
- Use technology to investigate, define, and describe qualitative relationships such as patterns and functions

MATHEMATICAL COMMUNICATION

It is expected that students will:

- Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems
- Identify and translate key words and phrases that imply mathematical operations
- Use physical materials, diagrams, models, pictures, writing, and tables to represent and then communicate mathematical ideas through oral, verbal, and written formats
- Explain and justify thinking about mathematical ideas and solutions
- Make conjectures and present arguments in discussions of mathematical ideas
- Use everyday language to explain thinking about strategies and solutions to mathematical problems
- Express mathematical ideas and use them to define, compare, and solve problems orally and in writing
- Use mathematical notation to communicate and explain mathematical situations

MATHEMATICAL REASONING

It is expected that students will:

- Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems
- Apply deductive and inductive reasoning in mathematical situations to extend logical reasoning
- Ask questions to reflect on, clarify, and extend thinking
- Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems



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SEVENTH GRADE—MATHEMATICS

MATHEMATICAL CONNECTIONS

It is expected that students will:

- Link new concepts to prior knowledge
- Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics
- Use models to explain the relationship of concepts to procedures
- Identify practical applications of mathematical principles that can be applied to other disciplines
- Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science)
- Identify, explain, and use mathematics in everyday life

SEVENTH GRADE—SCIENCE

Instruction in seventh grade science provides an overview of concepts in the nature of science and its role in society and technology. Principles of scientific inquiry are explored with topics covered in the physical, life, earth and space sciences.

THE NATURE OF SCIENCE—Scientific Inquiry

It is expected that students will:

- List and construct charts and graphs by gathering data and statistics
- Compare and distinguish between various forms of fact and opinion examining the characteristics of data
- Organize and manipulate data to illustrate a pattern of relationship and connection
- Classify, distinguish and examine relationships through investigation methods

THE NATURE OF SCIENCE—Science, Technology, and Society

It is expected that students will:

- Define and identify the components of an interactive ecosystem
- Explain how perceptions have changed with the inclusion of new information



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EIGHTH GRADE — LANGUAGE ARTS / READING

Eighth Grade English continues to expand the students' reading, writing, speaking, listening, and research skills. It strengthens critical thinking and study skills. Grammar, usage, and mechanics are taught as necessary elements of the writing process. Literature serves as a model for writing and critical thinking.

WORD KNOWLEDGE

It is expected that students will:

- Apply high-frequency spelling rules in writing
- Recognize multiple-meaning words
- Use word parts to determine word meaning
- Use context clues to determine word meaning
- Analyze idioms, analogies, metaphors, and similes

GRAMMAR, USAGE, AND MECHANICS

It is expected that students will:

- Use the eight parts of speech in writing
- Write using standard English grammar, usage, and mechanics

WRITING

It is expected that students will:

- Apply the five stages of the writing process
- Apply the analytic writing traits assessed by the Nevada State Proficiency Exam in writing
- Write compositions in the descriptive, narrative, expository, and persuasive modes
- Write responses to literary selections that demonstrate an understanding of the work
- Compose various letters for business and personal use
- Write with clarity and express ideas concisely

LITERATURE/INFORMATIONAL TEXT

It is expected that students will:

- Apply reading process skills and strategies to aid comprehension
- Read and respond to various literary forms
- Evaluate elements of various literary forms
- Compare characteristics and elements of various literary forms
- Analyze the use of imagery, figurative language, and sound
- Assess the accuracy and adequacy of evidence that supports authors' ideas
- Read and follow multi-step directions



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HISTORY (Continued)

- Describe the western frontier, including: communication (e.g., pony express, telegraph), farming and water issues, mining, ranching, transportation
- Identify immigrant and native groups involved in mining, ranching, railroads, and commerce in Nevada and the United States
- Describe United States expansion, including: Alaska, Hawaii, Panama Canal, Spanish American War
- Identify scientific and technological advancements and their impacts, including: airplane, radio, automobile, household appliances
- Identify causes, effects, and outcome of World War II, including: legacy of WW I, Pearl Harbor, Allies, Axis Powers and leaders, atomic bomb, United Nations
- Identify the effects of WW II on the home front in the United States and Nevada, including: end of the Great Depression, internment camps, rationing, propaganda, “Rosie the Riveter”
- Identify the Cold War, including: Marshall Plan, Berlin Blockade, NATO
- Summarize the changes in the United States’ demographics
- Identify the causes and effects of the Vietnam war, including: Tet Offensive, Gulf of Tonkin Resolution, anti-war movement, draft and lottery, POWs and MIAs
- Identify key people and events that contributed to the end of the Cold War, including: recognition of China, détente, disarmament, Strategic Defense Initiative
- Describe scientific and technological developments, including: personal computers, Internet, satellites, medical advances
- Identify how literature, music, and the visual arts are a reflection of the time

**PHYSICAL SCIENCE—Matter**

It is expected that students will:

- Define different arrangements of particles within substances
- Explain how the periodic table is constructed
- Identify and explain various properties of mixtures
- Define the properties and observations of scientists explaining chemical and atomic bonding
- Define and outline the basic ideas of atomic theory
- Observe and define various forms of matter, sorting items by their similarities and differences
- Define the properties of electrons, protons and neutrons
- Define and sort differences and characteristics of various elements

PHYSICAL SCIENCE—Forces and Motion

It is expected that students will:

- Explain the characteristics of various electrical forces
- Explain, observations of gravitational force and magnetic properties
- Explain, predict and organize a set of observations regarding balanced and unbalanced forces
- Define and label different object movement patterns and possibilities

PHYSICAL SCIENCE—Energy

It is expected that students will:

- Explain, sort and characterize various seasonal differences across the Earth’s surface
- Define the electromagnetic spectrum
- Observe and define vibration energy
- Define different reactions and observe the transfer of energy that occurs through them
- Define the properties of energy and reactions; define the elements of transformation
- Define and observe the properties that separate kinetic and potential energy



SEVENTH GRADE—SCIENCE

PHYSICAL SCIENCE—Energy (Continued)

- Explain the ideas of heat flow; define conduction, convection and radiation
- Explain the theory of the flow of electricity through various circuits

LIFE SCIENCE—Heredity

It is expected that students will:

- Identify and explain genetic coding
- Identify and sort the different roles of genes and their combination
- Explain and document characteristics that can be shared in a species; explain and document characteristics that separate within a species
- Define characteristics that delineate environment and genetic information

LIFE SCIENCE—Structure of Life

It is expected that students will:

- Identify various infections; separate intrusive from symbiotic
- Observe and define different types of cells
- Describe and identify different types of cells in higher order life forms
- Explain how various cells specialize in function and their role in a higher level life form

LIFE SCIENCE—Organisms and Their Environment

It is expected that students will:

- Document and explain the roles of matter and energy in an ecosystem
- Explain how an ecosystem is sustained by the functions of the organisms involved
- Speculate and draw conclusions regarding the effects of altering various environments
- Explain and observe the uses and roles of technological advances in altering environmental conditions



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SEVENTH GRADE—SOCIAL STUDIES

HISTORY

It is expected that students will:

- Create a tiered time line
- Read and use informational tools, including: charts, diagrams, graphs, maps, political cartoons, photographs, tables
- Explain the characteristics of hunter-gatherer
- Describe the lifestyles of Nevada's Desert Archaic people
- Describe the origin, traditions, customs, and spread of western and eastern world religions, including: Buddhism, Christianity, Hinduism, Islam, Judaism
- Describe the lifestyles of Nevada's Native American cultures, including: Northern Paiute, Southern Paiute, Washoe, Western Shoshone
- Describe motivations for Scandinavian and European explorations, including: all-water routes to Asia, trade, religion
- Explain where and why colonies were established in the Americas by European nations and how those colonies were governed
- Describe the effect of laws and taxes enacted by the British on the American colonies, including: Stamp Act, Intolerable Acts, Quartering Act
- Describe key people and events of the American Revolution including: King George III, George Washington, Lexington and Concord, Battle of Saratoga, Valley Forge
- Describe the early development of the United States government including: Washington's cabinet, *Marbury v. Madison*, political parties
- Recognize the development of an emerging United States culture, including contributions from: literature, language development, poetry, music
- Describe the contributions of the explorers and settlers in pre-territorial Nevada and their influences on the future, including: Kit Carson, John C. Fremont, James Beckwourth, Peter Skene Ogden, Joseph Walker, Jedediah Smith
- Define abolition and identify the key people and events of the movement, including: Frederick Douglass, Harriet Tubman, Underground Railroad, Sojourner Truth
- Identify the Black Codes and Jim Crow Laws



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SEVENTH GRADE – SOCIAL STUDIES

ECONOMICS

- Describe the advantages and disadvantages of being an entrepreneur
- Give examples of how specialization is facilitated by trade
- Identify methods by which government redistributes income
- Compute prices of US products in terms of other countries' currencies

GEOGRAPHY

It is expected that students will:

- Identify and define geographic problems and issues by asking geographic questions
- Use maps, graphic representations, aerial photographs, satellite images, and computer resources to compare Earth's physical and human systems
- Construct maps and charts to display information about human and physical features
- Describe the relationship between physical and human features, such as landforms and political boundaries
- Describe how and why regions change over time
- Describe the interdependence among soil, climate, plant life, and animal life within ecosystems
- Formulate a hypothesis about the changing nature of an ecosystem and use appropriate research skills to draw conclusions
- Define the reasons for human migration and settlement and explain the effects on places and cultures
- Identify the different patterns of migration and settlement in developing and developed countries
- Identify a regional or international economic issue and explain it from a spatial perspective
- Identify international alliances and organizations that influence conflict and cooperation among independent nations
- Describe and predict the regional or global impact of changes in the physical environment
- Identify and locate examples of renewable and non-renewable natural resources
- Explain how different characteristics of people, places, and resources have affected events and conditions in the past



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SEVENTH GRADE – SCIENCE

LIFE SCIENCE—Organisms and Their Environment (Continued)

- Demonstrate a symbiotic inter-dependent ecosystem; test out elements of the system; explain flaws and potential hazards of the design

LIFE SCIENCE—Diversity of Life

It is expected that students will:

- Identify those characteristics that are shared by a species
- Describe genetic passage
- Label and sort possible genetic alterations and their connection to inherited characteristics
- Show how fossil evidence illuminates environmental conditions through Earth's geological cycles
- Define and describe how an organisms's behavior is connected to its species history

EARTH AND SPACE SCIENCES—Atmospheric Processes and the Water Cycle

It is expected that students will:

- Illustrate the causal relationship between sun and the Earth
- Observe and record the role of water on the Earth
- Define the elements of atmospheric conditions; define various extreme weather conditions; map possible causes of these conditions

EARTH AND SPACE SCIENCES—Solar System and Universe

It is expected that students will:

- Define and sort the various components of the universe
- Define the characteristics that make up a planet as contrasted with other objects
- Define and sort the various objects in the universe and the placement of the earth and the solar system in relationship to them



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SEVENTH GRADE—SCIENCE

EARTH AND SPACE SCIENCES—Earth's Composition and Structure

It is expected that students will:

- Define and observe the difference between rocks and fossils
- Define the elements that identify the age of rocks and fossils
- Define the differences between layers of rock
- Define the various forces that interact with the Earth's surface; sort and list the various landforms on the Earth's surface
- Define and observe the content of soil
- Define the properties of resources; sort them by their stability and life span
- Define the essential elements of a supporting environment
- Observe and list technological advances through the history of man
- List the elements that would influence cultures and progress; recount events in the Earth's environment that have changed a culture
- Define the different available energy resources available on Earth

SEVENTH GRADE—SOCIAL STUDIES

Seventh grade students engage in a study of United States history from the time of the early North American inhabitants to the present as well as the global interaction of this history. Students will be introduced to the people and events that contributed to the development of our nation as they explore the impact of economic, political, social, and technological ideas. The role of Nevada and the American west will be integrated throughout this study.

CIVICS

It is expected that students will:

- Explain the difference between the rule of law and the rule of man (such as divine right of monarchs, dictatorships)
- Explain popular sovereignty and the need for citizen involvement at all levels of US government
- Examine the organization of the US Constitution and describe the structure it creates, including the executive, legislative, and judicial branches



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SEVENTH GRADE—SOCIAL STUDIES

CIVICS (Continued)

- Explain the functions of the three branches of government (executive, legislative, and judicial) as found in the US Constitution
- Describe the duties of the President, such as presenting a budget proposal
- Define federalism
- Describe the election process
- Provide examples of contemporary public issues that may require public solutions
- Explain the significance of mottoes and symbols including: e pluribus unum, national anthem, flag, Statue of Liberty, Great Seal, oath of office, Pledge of Allegiance
- Compare the organization and purpose of state, local, and tribal government
- Define the world's major political systems, including: monarchy, totalitarian dictatorship, presidential system, communism, socialism
- Identify nations that play a significant role in US Foreign policy

ECONOMICS

It is expected that students will:

- Identify the additional benefits and the additional costs that result from choosing a little more or a little less
- Identify the unemployment rate as the percentage of people in the labor force who are not working, but who are actively pursuing work
- Explain why riskier loans command higher interest rates than safer loans
- Explain how supply and demand function to determine market prices
- Explain the purpose and functions of labor unions (e.g., collective bargaining)
- Describe the transition from the use of commodities as money to the use of modern forms of money
- Explain ways in which households, schools, or community groups allocate resources
- Identify factors that can affect an individual's likelihood of being unemployed



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