

Washoe County School District Family Guide to Learning

*How you can help your child succeed
in elementary school*



Washoe County
School District



4th Grade Curriculum Guide

Washoe County School District **4th Grade Family Guide to Learning**

How you can help your child succeed in elementary school

This guide provides an overview of what your child will learn by the end of fourth grade as determined by the Nevada Academic Content Standards (NVACS), our statewide academic standards. The NVACS describe what all students should know and be able to do from kindergarten through the 12th grade. The NVACS is a set of minimum expectations, not a curriculum, so decisions about how to help students meet learning goals remains in the hands of the District, schools, and teachers.

The guide focuses on the key concepts in literacy, mathematics, science, and social studies as well as library, music, computers, 21st Century Skills, and Social & Emotional Learning. If your child meets the expectations outlined in the NVACS, he or she will be well prepared for 5th grade.

If you have any questions or would like more information, please feel free to contact your child's teacher.

For additional ideas for learning at home, or to learn more about the Nevada Academic Content Standards please visit us online at <http://www.washoeschools.net/Page/1002>.



Washoe County School District

Every Child, By Name And Face, To Graduation SM

ENGLISH LANGUAGE ARTS

As part of helping your elementary student become College and Career Ready, your child's teacher will be

1. Helping your student get into the habit of using evidence in speaking, reading and writing.
2. Building knowledge using non-fiction text.
3. Developing skills necessary for your student to work with challenging texts and its academic vocabulary.

Reading– Foundations, Literature, and Informational Text

- Determine the main idea of a text; explain how it is supported by details.
- Summarize the text.
- Figure out the meaning of unfamiliar words using knowledge of syllables, Greek and Latin root words (e.g., spect, dict, auto, bio, tele), and prefixes and suffixes (e.g., mid-, mis-, pre-, -less, -ment, -y).
- Recognize and use features of digital text (e.g. hyperlinks, annotation tools).

Writing

- Write informative texts to examine a topic; present ideas and information clearly with supporting evidence.
- Write opinion pieces on topics or texts. Support a point of view and include reasons and information for that point-of-view.
- Use print and digital resources to build knowledge; investigate different aspects of a topic for a research project.

Language

- Use correct capitalization, punctuation, and spelling when writing.
- Choose words and phrases to communicate precise meaning.
- Recognize and explain the meaning of simple similes and metaphors.

Supporting Your Child's Learning at Home

- *Read news and magazine articles; discuss the main idea and important details.*
- *Read aloud chapter books. Discuss the plot and characters. Ask questions such as, "What is the problem in the story?" "How is the main character changing and why?" Make connections to other books you have read together.*
- *Read/write stories or watch plays together.*
- *Write about real-life experiences. For example, write a letter to a family member to share recent events.*
- *Practice typing on the computer.*
- *Compare events or themes from two different stories.*
- *Encourage your child to find and use online information when researching topics for school or personal interest.*
- *Encourage your child to create digital content, and share it with friends and family through tools like a family blog, and ask relatives to post comments.*
- *If you use social networking sites, consider creating collaborative posts with your child to help them understand appropriate online language and behaviors.*

MATHEMATICS

Operations and Algebraic Thinking

- Solve problems using addition, subtraction, multiplication, and division (+, -, ×, ÷)
- Be familiar with factors in the range of 1 to 100
 - Factors are two numbers that can be multiplied together to make another number, for example 1, 2, 3, and 6 are all factors of 6.
- Be familiar with multiples in the range of 1 to 100.
 - Multiples are a multiple of that number. For example, the multiples of 4 are 4, 8, 12, 16...

Number and Operations in Base 10

- Understand a digit in one place is ten times the place value of the digit to its right. Explore these patterns up to one million. For example, the number 20 is ten times as much as the number 2 or the seven in 700 is ten times the value of the seven in 70.

Number and Operations - *Fractions*

- Use visual models (fraction strips, number lines, rectangles) to explain why two fractions are equivalent.
- Compare two fractions with different numerators or denominators (e.g., $\frac{1}{3}$ and $\frac{3}{5}$) by creating common denominators or by comparing to a baseline fraction such as $\frac{1}{2}$.
- Use and understand decimal notation for fractions (e.g., 0.62 as $\frac{62}{100}$).
- Build fractions from unit fractions. Unit fractions are fractions with a numerator of 1. In 4th grade these are $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{12}$, $\frac{1}{100}$.
- Use and understand decimal notation for fractions (e.g., 0.62 as $\frac{62}{100}$).

Measurement and Data

- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit (e.g., kilograms to grams; feet to inches; pounds to ounces; hour to minutes).
- Understand angles are geometric shapes formed when two rays share a common endpoint.
- Measure angles in whole-number degrees using a protractor.
- Represent and interpret data.

Supporting Your Child's Learning at Home

- *Give your child a number 1-100 and have them find all the factors or multiples of that number? Ask them how they figured it out. Is there another way to find all the factors or multiples of a number?*
- *Use Fact Triangles to solve multiplication and division problems by covering one of the corners each time you play.*
 - *For a challenge, use place value understanding to extend what you know to multiples of 10 or a 100. For example, $630 \div 7 = 90$ because $90 \times 7 = 630$ or $700 \div 10 = 70$.*
- *Have your child solve simple measurement problems using tools. Have your child convert measurements from a larger unit to a smaller unit. Discuss why you may need to convert a measurement in real life? When might you need to use a smaller unit? When are larger units more appropriate?*
- *Find shapes in the environment and discuss the properties of these shapes discussing angles, lines, parallel lines and perpendicular lines.*
- *Encourage your child to use digital tools and apps that support development of mathematical concepts and skills.*

MATHEMATICS (continued)

Geometry

- Draw and identify lines (e.g., parallel and perpendicular) and angles (e.g., right, acute, obtuse), and classify shapes by properties of their lines and angles.
 - For example: A shape with 4 angles and one set of parallel lines is what shape? What if there are two sets of parallel lines? What shape or shapes would this be? What larger category do these shapes fit in?

SOCIAL STUDIES

History

- Identify the lifestyle and contributions of Nevada's Native Americans, pioneers, and early immigrants.
- Describe the settlement of Nevada, including compromises and conflicts over life, society, and resources.
- Explain how Nevada became a state.
- Analyze primary sources (historical sources) from Nevada's history, including those found online.
- Use the Internet to find information and create digital products.

Geography

- Identify technology, customs, and traditions in Nevada.
- Discuss the geographic regions and conditions of Nevada.
- Explain the rural and urban settlement patterns of Nevada.

Economics

- Describe the natural resources found in Nevada.
- Recognize the role consumers play in economics.
- Compare rural (country/farming), suburban (residential, outlying part of a city), and urban (cities) areas of Nevada, using printed and online information.

Civics

- Describe why local governments are created.
- Define the three branches of state government and the role each branch plays in state government.
- Explain why we celebrate Nevada Day.

Supporting Your Child's Learning at Home

- *Discuss major news events, both local and state levels, and use social media and online tools to monitor events.*
- *Define and practice social responsibility.*
- *Use maps of your community, including online maps, for directions.*
- *Study and discuss major economic issues in Nevada.*
- *Practice trading items to understand how consumers behave in society.*
- *Describe the role money and resources play in society.*
- *Identify the role of local government officials.*
- *Explain what it means to be a good citizen both in person and online.*

SCIENCE

Energy

What is energy and how is it related to motion? How is energy transferred? How can energy be used to solve a problem?

- Define energy including stored energy.
- Energy transfer and its products.
- Connect energy and forces.
- Electrical currents how they are produced and used.*
- Energy's tie to renewable and nonrenewable sources including environmental impact.

Waves

What are waves and what are some things they can do?

- Waves in water – their patterns including amplitude and wavelength.
- Waves sent over distances can be converted for use (information and entertainment).*

Structure, Function and Information Processing

How do internal (inside) and external (outside) structures support the survival, growth, behavior, and reproduction of plants and animals?

- Vision and reflected light from objects as it enters the eye.
- Visible (macroscopic) external and internal structures and their functions in plants and animals as they relate to growth survival, behavior, and reproduction.
- Your five senses receive, process and respond to sensory information and transmit the information to your brain. Your brain interprets these signals, making you aware of your surroundings.

Earth's Systems

How can water, ice, wind and vegetation change the land? What patterns of Earth's features can be determined with the use of maps?

- Natural hazards: patterns, locations and effects and how people deal with them (earthquakes, volcanoes, tsunamis, etc.).*
- Rock formations/layers show the history of Earth's forces; fossils date the timeline.
- Effects of water, wind, ice, living organisms and gravity on the Earth.

*Engineering opportunities that allow children to apply what they have learned in science and mathematics. These activities are based on real-world problems to see how science and mathematics are relevant to children's lives.

Supporting your child's learning at home

- Encourage your child to observe, ask questions, experiment, find information online, and seek their own understandings of natural and human-made phenomena around them.
- Turn on a flashlight and talk about the energy flow, where does the light come from, what do the batteries do?
- Explore the way magnets attract and repel each other and how they react to different objects.
- Investigate the rate of water evaporation using different variables.
- Let children make waves in a sink or tube
- Discuss what is necessary to survive for humans, animals and plants. How are they the same? How are they different?
- Look at maps (both print and online) of our area, the United States, and the world and discuss what the features mean.

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

Music

- Sing with proper posture and energy.
- Match pitch on diatonic melodies using do, re, mi, fa, so, la, ti, and high do.
- Read, write, and perform melodies from music staff using do, re, mi, fa, so, la, ti and high do.
- Sing in two-parts by performing partner songs, rounds, canons, or a melody with a repeated melodic pattern (ostinato).
- Improvise short rhythmic or melodic patterns in question-answer form.
- Read melodies from the music staff using the treble clef: A, B, C, D, E, F, and G.
- Read and perform rhythm using dotted half notes, whole notes, triplets, half rest, and whole rest.
- Play the recorder as an introduction to wind instruments.
- Identify the musical form of a piece by performing and creating introductions, codas, and interludes in known songs.
- Play in a small ensemble of classroom instruments by playing melody and accompaniment using solid and broken bordun (a repeated pattern using the 1st and 5th notes of the scale), bassline, or I and V chords.
- Describe musical works and styles by using simple music vocabulary.
- Evaluate own and others' performance by using music vocabulary.
- Categorize orchestral instruments into instrument families: string, percussion, woodwind, and brass.
- "Tinker" with digital apps and tools for creating music and understanding music theory.

Library

- Information literacy by determining whether additional information (beyond their own knowledge) is needed to solve a complex problem or question; using the library catalog and digital sources to find resources by conducting author, title, subject, and keyword searches; identifying, interpreting, and analyzing the qualities of well-written literature including fiction and non-fiction; and comparing and contrasting sources related to a topic to determine which sources are more accurate and relevant.
- Independent learning by exploring a range of sources (in the library and online) to find information on aspects of personal interest or well-being; assessing each step of the information-seeking process at each stage as it occurs; and recognizing and reading a variety of literature from various cultures.
- Social responsibility by recognizing multicultural books that reflect the heritage and traditions of groups within the United States; recording resources used to prepare a bibliography and citing sources properly; and helping to organize and integrate the contributions of all the members of the group into information products.
- Digital citizenship, copyright and fair use, and digital footprints.

Computers

Fourth graders will engage in searching for information on-line. They will be able to identify credible Internet resources and reference materials such as dictionaries, glossaries, and thesauruses. Fourth graders will find, evaluate, and use information on the Internet to support their written statements. They will be introduced to the risks in posting personal information on-line. They will practice using proper communication skills as they communicate with others on the Internet. They will also continue to develop resources to cope with on-line bullying. Fourth graders will use software technologies, such as Microsoft Office products and online tools and apps, to publish their own written work. Fourth graders will demonstrate command of keyboarding skills. They will practice mathematics, writing, reading, and keyboarding skills through various interactive software products.

Social and Emotional Competencies

Social and Emotional Learning (SEL) is a process for helping children and adults develop the fundamental skills for life effectiveness. SEL teaches the skills we all need to handle ourselves, our relationships, and our work, effectively and ethically.

- Self-Awareness: Recognizes thoughts are linked to emotions, behaviors, and consequences.
- Self-Management: Identifies how obstacles are overcome to achieve goals, and that success happens because of learning and practice.
- Social Awareness: Better-able to see how his/her behavior affects others and how to determine if social interactions are improving.
- Relationship Skills: Able to give and receive compliments to and from family, friends, and teachers.
- Responsible Decision-Making: Understands the importance of being dependable and responsible with regard to family and friends.

21st Century Learning

Students need to be prepared for this rapidly changing world and it is critical that we give them a well-rounded experience that includes not only strong academic content, but essential skills that prepare them for careers and college and help them to think critically, solve real-world problems, speak and write clearly, and work productively with others. These competencies, known as 21st century competencies, include:

- Collaboration: working effectively in pairs or groups
- Knowledge Construction: generating ideas and understandings about the world
- Real-World Problem Solving and Innovation: defining and developing solutions to problems
- Use of Technology for Learning: using technology creatively to construct knowledge
- Self-Regulation: planning and improving work over time
- Skilled Communication: connecting and expressing ideas to an audience

Students in fourth grade will also be exposed to visual arts, physical education, and health concepts as applicable.

MATHEMATICS LITERACY SCIENCE
SOCIAL STUDIES
Social and Emotional Learning
library music computers
21st Century Skills



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