4th Grade Science

Semesters 1 and 2

Student success at school:

- Describe how the components of the Solar System as well as constellations appear to move through the sky.
- · Understand atmospheric processes and the water cycle.
- Construct an explanation relating the speed of an object to that object's energy.
- Recognize how energy is transferred through sound, light, heat, and electric currents.
- Design and refine a device that converts energy from one form to another.
- Explain that energy and fuels are derived from natural resources and their uses have an environmental impact.
- Create a model to show how waves can cause objects to move.
- Construct an argument that plants and animals have structures that function to support survival and growth.
- Explore how animals use their senses to receive and process information in different ways.

Student success at home:

- Learn how something works. Choose a technology or machine with your child and research how that object works using books and Internet sources.
- Start family discussions on Earth's natural resources.
- · Research famous scientists in the field of energy.
- Discuss the cause and effect associated with a natural phenomenon.
- Visit a dam, reservoir, lake, or stream to observe the flow and interactions of water with the Earth.
- Encourage the engineering design process: Generate and compare many solutions to a problem. Plan and conduct fair tests to improve a design.
- Connect science with a family vacation. Explore non-formal education sites (museums, zoos, science centers, and aquariums).
- Find out how magnets are used around the home.
- Discuss the importance of engineering, science, and technology in the world.
- Investigate different plants and animals to discover the environments that support their well-being, and attempt to determine the optimal environments for some of the organisms.

Websites to Support Reading and Mathematics Skills



www.pbskids.org



www.readkiddoread.com



www.coolmath4kids.com



www.mathisfun.com



Successful in



4th Grade 2016-2017

Your child's achievement is a partnership between you and your child's teacher. Below is information about the CCSD English Language Arts, Mathematics, and Science fourth grade curriculum resulting from the ongoing implementation of the Nevada Academic Content Standards (NVACS).

Tips for Reading with Your Child at Home

There is nothing more important to academic success than being a proficient reader. Studies show that regularly reading aloud to children will produce significant gains in reading comprehension, vocabulary, and the decoding of words. To help your child reach this goal, here are a few tips to ensure their success:

- Make reading a regular activity in your home.
- Read a book together. This is the perfect opportunity for you to model what reading should sound like for your child and listen to your child read aloud.
- Ask questions to check for understanding. Ask them to retell the story or summarize what they have read. If they are reading informational text, have them determine the main idea and important facts. Discuss any new vocabulary that they encounter in the reading.
- Your child will be more engaged with the reading if they are able to select their own topics.
- · Remember reading is not just books anymore!
- Encourage your child to read to younger siblings.
- Remember when your child is selecting a book, make sure it is "just right" for their reading level. Have your child read the front and back cover and the first page of the book. If there are more than five words that he cannot pronounce or understand in context, the book may be too challenging. Be supportive about finding a more perfect fit.

If your child has trouble reading a word, allow for five to ten seconds before providing support or assistance. Some tips for support may include:

- What word would make sense?
- What do you think the word could be?
- Skip over the word and read to the end of the sentence or paragraph. Then, ask what word would make sense and reread the sentence or paragraph.
- Help your child sound out the word or tell them the word.

Remember reading should be a pleasant experience for your child. Provide encouragement and time to read together.



4th Grade English Language Arts

Semester 1

Student success at school:

- Read literature and informational books and materials.
- Explain what the text says explicitly and when drawing inferences.
- Use charts, graphs, diagrams and timelines to comprehend text.
- Write narratives that include characters, a sequence of events, dialogue, and description.
- · Compare and contrast points of view from different stories.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- Explain how an author uses reasons and evidence to support points.
- Plan, revise, and edit writings with support from peers and adults.
- Read poetry accurately and expressively.
- Use print and digital sources to collect information and provide references



Student success at home:

- Read informational texts such as news and magazine articles and discuss the main ideas and important details.
- Read narrative texts and ask your child questions to encourage deeper explanations; have him/her use parts of the story to explain his/her thinking.
- Encourage your child to write daily and keep a personal journal or log.
- Look for main ideas in text and how the author supports the main ideas
- Show your child how to use quotation marks.

Semester 2

Student success at school:

- Read stories and informational books and materials.
- Compare and contrast similar themes and topics (e.g., good vs. evil) in stories, myths, and traditional literature from different cultures.
- Explain events, procedures, ideas, or concepts in an informational
 tout.
- Conduct short research projects to investigate a topic.
- Write opinion pieces on topics or texts to support a point of view, include reasons or information for that point of view, link ideas within categories of information using words and phrases (e.g., another, for example, also), and provide a concluding statement or section related to the presented information.
- Use technology to add audio recordings/visual displays to presentations, produce and publish writing, as well as to interact and collaborate with others.

Student success at home:

- Read and watch stories, poetry, or dramas together and discuss the characters and themes.
- Ask your child questions about stories he/she is reading; have him/ her use parts of the story to explain his/her thinking.
- · Discuss informational texts on a topic of interest to your child.
- Encourage research and writing at home by showing your child how
 to use books and online resources to gather information on a topic.
 Include your child in real-life writing experiences such as writing
 letters to family and friends.

4th Grade Mathematics

Semester 1

Student success at school:

- Interpret multiplication as a comparison (e.g., 35 = 5 x 7 as 35 is 5 times as many as 7).
- Multiply or divide to solve word problems involving multiplicative comparison.
- Recognize that a digit in one place in a number represents ten times what it represents in the place to its right.
- Read, write, and compare multi-digit numbers using base-ten numerals, number names, and expanded form.
- Fluently add and subtract using the standard algorithm.
- Round whole numbers to any place value.
- Use place value strategies to multiply a whole number of up to four digits by one digit (e.g., 4,291 x 6) and multiply two two-digit numbers (e.g., 23 x 91).
- Use the four operations to solve word problems involving time, volume, and money.



Student success at home:

- Practice explaining multiplication as a comparison.
- Encourage your child to use both drawings and equations when solving problems.
- Choose two numbers and have your child compare the numbers based on the meanings of the digits in their place.
- Practice rounding numbers to any place (e.g., round 2,939 to the hundreds place).
- Practice multiplying and dividing large numbers by a one-digit number.
- Practice multiplying two two-digit numbers using place-value strategies.
- Practice adding and subtracting monetary amounts when shopping, creating budgets, or paying bills.

Semester 2

Student success at school:

- Fluently add and subtract using the standard algorithm.
- Generate a number or shape pattern that follows a given rule.
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors (e.g., 5,941 ÷ 6).
- Add and subtract fractions referring to the same whole.
- Draw and identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.
- Use knowledge of multiplication to multiply a fraction by a whole number.
- Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 (e.g., 3/10 = 30/100).
- Use decimal notation for fractions with denominators 10 or 100 (e.g., rewrite 0.62 as 62/100.)
- Recognize angles as geometric shapes that are formed when two rays share the same endpoint.

Student success at home:

- Discuss number patterns created when starting with a given number such as 1, and stating a given rule, such as add 4.
- Practice identifying lines and angles in two-dimensional figures.
- Practice showing fractions by creating models or drawings when given a fraction as a number.
- Look for angles in everyday life. Name the angles (e.g., straight, right, obtuse, acute).
- Practice using a protractor to measure angles.