

# **Mathematics**

The mathematics standards in the elementary years focus on number and operations. Ideas from measurement and geometry help students learn about numbers and quantities. In each grade, students make sense of problems, explain their thinking, and describe their world with mathematics.

### **Expectations for 2nd Grade Students:**

- Number and Quantity: Use an understanding of place value to add and subtract within 100.
- Algebra and Functions: Fluently (consistently) add and subtract within 20 using mental strategies.
- Data, Statistics, and Probability: Read and create pictographs and bar graphs; relate addition and subtraction to length, time and money.
- **Geometry**: Build, draw, and analyze 2-dimensional shapes (squares and triangles) and 3-dimensional shapes (cubes and pyramids).

- Mentally adding and subtracting problems like 17 5, 13 + 6, and 15 - 12.
- Skip counting by 5s (5, 10, 15), 10s (10, 20, 30), and 100s (100, 200, 300) starting at different numbers.
- Solving two-digit addition and subtraction problems using a variety of strategies.
- Using number lines to solve addition and subtraction word problems.
- Exploring the features of shapes and ways to break shapes into halves, thirds, and fourths.



#### Music

The music standards in the elementary years focus on general music knowledge and skills to ensure a solid foundation for the opportunity for more specialized musical study in later years. In each elementary grade, students investigate and perform various music styles and genres, examine the language of music through identifying and writing simple music notation, consider simple musical composition processes, and develop the ability to describe their own musical preferences as well as critique the music of others.

### **Expectations for 2nd Grade Students:**

- Expression of Music (Perform/Present): Perform simple musical patterns, songs, and respond to teacher and peer feedback to improve musical skills.
- **Creation of Music (Create)**: Create instrumental and vocal patterns to accompany poems, rhymes, and stories.
- Theory of Music (Know/Comprehend): Use musical vocabulary to accurately identify music elements (dynamics-loud/soft, simple types of notes, patterns of notes, types of tones-low/high); recognize changes in tempo (speed) and dynamics (volume), and recognize types of instruments.
- Aesthetic Valuation of Music (Appreciate and Understand): Explore and discuss music from various cultures and discuss music students like.

- Singing or playing a variety of simple songs.
- Choosing movements to complement sounds.
- Composing, with a teacher and fellow students, new sounds or ideas.
- Demonstrating learned rhythms through a variety of ways.
- Discussing a song from another culture.
- Expressing opinions (like and dislikes) about particular prices of music.



# **Physical Education**

The physical education standards in the elementary years focus on enhancing movement concepts and skills, understanding basic health-related components and skill-related components of fitness and how it relates to personal fitness, demonstrating respect, and the ability to follow directions. In each grade, students demonstrate various movement concepts; assess personal behaviors; connect fitness development to body systems; demonstrate respect for self, others, and various physical activity environments; and utilize safety procedures during physical activities.

### **Expectations for 2nd Grade Students:**

- Movement Competence and Understanding:
   Demonstrate the elements of movement in combination with a variety of locomotor skills (e.g., walking, running, sliding); demonstrate control and balance in traveling and weight-bearing activities using a variety of body parts and implements; use feedback to improve performance.
- Physical and Personal Wellness: Identify healthy habits for personal wellness.
- **Social and Emotional Wellness**: Demonstrate positive and helpful behavior and words toward other students.
- Prevention and Risk Management: Apply rules, procedures, and safe practices in the classroom.

- Demonstrating skipping, hopping, galloping, and sliding while transitioning on command and identifying major characteristics of the skills walking, running, jumping, hopping, and leaping.
- Creating a routine that includes two types of body rolls such as a log roll, egg roll, shoulder roll, or forward roll and a stationary balance position after each roll.
- Demonstrating static and dynamic balance on lines or low beams and benches.
- Using instructor feedback to identify strengths and weaknesses.
- Identifying healthy food choices to fuel the body.
- Encouraging others by using verbal and nonverbal communication.
- Maintaining safety within personal space while using implements.



# Reading, Writing, and Communicating

The reading, writing, and communicating standards move from developing skills in reading, writing, and communicating to applying these literacy skills to more complex texts through the elementary years. Standards at each grade emphasize skills related to speaking and collaborating with others as students work with literature and informational readings and participate in individual and group research projects.

#### **Expectations for 2nd Grade Students:**

- Oral Expression and Listening: Learn new information, expand understanding, and engage in better conversations by listening actively (eve contact, asking questions, body posture).
- Reading for All Purposes: Decode (sound out and pronounce)
  words with accuracy based on spelling patterns and word parts (root
  words, prefixes, suffixes); read fluently (with proper speed, accuracy,
  and expression) by using skills and strategies to help them
  understand books, stories, poems and informational books ("how to"
  books, instructions).
- Writing and Composition: Use the writing process (plan, write, clean up, share) to write stories, information, and opinion pieces; use correct spelling, capitalization, grammar, and punctuation at grade level.
- Research Inquiry and Design: Use different materials and resources to find information and answer questions about a topic; use questions to determine if something "makes sense" in the resources.

- Using phonics and knowledge of words (spelling patterns, root words, prefixes, and suffixes) to read fluently (with appropriate speed, accuracy, and expression); using decoding skills (sound out and pronounce) to read and understand stories, informational books ("how to" books, books about inventors and inventions), and opinion pieces (favorite movies, activities, games); identifying key ideas and supporting details in reading to understand and talk about a story, poem, or book.
- Drawing and writing in response to readings as a way to "think through" ideas; sharing ideas about topics or the readings in small group discussions; building on others' comments in shared discussions; asking questions of group members; actively listening (using eye contact, body posture) when working with fellow students.
- Discussing the author's word choices and use of images in a story, poem, or book; explaining how words and illustrations, charts, visuals and photos work together in a story or book; comparing two stories (characters, themes, setting) or two informational books (main ideas, details, illustrations).
- Writing narratives (real or imagined stories) to describe events; writing to explain a topic ("how to" steps, instructions); writing to express an opinion (favorite writer, favorite character); using resources to find answers to questions; using details to improve writing; talking about writing with classmates and adults; using writing mechanics (capitalization, commas, apostrophes, and different sentence beginnings) consistently.



# **Science**

Three-dimensional science standards in the elementary grades lay the foundation for students to work and think like scientists and engineers. In elementary grades students will explore disciplinary core ideas in Physical, Life, and Earth and Space sciences by engaging with phenomena in the world around us. Learners in elementary grades develop and ask testable questions, collect and analyze different types of evidence, and write and communicate our understanding. We also see strong connections to skills students will use to be successful with literacy and mathematics. Mastery of these standards will result in young learners who have a deep understanding of how scientific knowledge can provide solutions to practical problems we see in our world.

### **Expectations for 2nd Grade Students:**

- Physical Science: Matter exists as different substances that have observable properties.
- **Life Science**: Plants depend on water and light to grow and on animals for pollination or to move their seeds around; living things live in a variety of places.
- Earth Science: Some events on Earth occur quickly, others can occur slowly; wind and water can change the shape of the land, and models can show the shape and these changes.

- Conducting investigations to describe and classify different kinds of materials by their observable properties.
- Constructing an argument with evidence that some changes caused by heating or cooling can be reversed, and some cannot.
- Planning and conducting an investigation to see if plants need sunlight and water to grow.
- Making observations of plants and animals to compare the diversity of life in different habitats.
- Comparing multiple solutions designed to slow or prevent wind or water from changing the shape of the land.
- Using evidence from several sources to provide evidence that Earth events can occur quickly (ex. volcanic explosions) or slowly (ex. erosion of rocks).



### **Social Studies**

The social studies standards in the elementary years begin with individuals and families and move from there to explorations of neighborhoods, communities, the state of Colorado, and the United States. In each grade, students investigate historical events, examine geographic features and resources, consider economic decision-making processes, and define civic roles and responsibilities.

### **Expectations for 2nd Grade Students:**

- History: Use timelines, artifacts, and documents to consider the different people, perspectives, and events that make up the historical story of their community and or neighborhood.
- Geography: Use different kinds of maps to describe a community or neighborhood, explain how communities manage nonrenewable and renewable resources, explain how communities have developed, explain the relationship between communities and their environmental characteristics, and how community members have adapted to the physical environment.
- Economics: Explain how resources are scarce. Personal Financial Literacy: Investigate cost and benefits to make informed personal financial decisions.
- Civics: Consider options for how people participate in decision making in the community and identify the ways in which community members can work together to resolve conflicts.

- Creating and using timelines to sequence, examine, and explain historical events in the community; examining photos, newspaper articles, and other sources of historical community news.
- Using map keys, symbols, and legends to locate and identify information on globes and maps; categorizing various physical/environmental aspects of the community (landforms, water sources).
- Giving examples of why resources are scarce; identifying products and services made and available in the community; creating examples of personal financial decisions (saving v. spending).
- Defining and describing the characteristics of a responsible community member (actions, attitude); generating examples of civic responsibilities; crafting sets of rules that particular communities (classrooms, schools, neighborhoods) might agree upon; discussing problems and solutions within the community.



## **Visual Arts**

The visual arts standards in the elementary years focus on general art knowledge and skills to help create a foundation for artistic study in later years (drawing, painting, sculpture, graphic design, media arts). In each grade K-5, students explore techniques of various artistic styles, follow developmentally appropriate steps in the creation process, learn how to critique works of art, identify art in the world and daily life, and discover ways that artwork helps people better understand cultures and historical eras.

## **Expectations for 2nd Grade Students:**

- Observe and Learn to Comprehend (Know/Comprehend): Explain the reasons behind and/or decisions for making a piece of art; use basic art terms when discussing their art and the art of others.
- Envision and Critique to Reflect (Critique/Evaluate/Refine): Express the meaning or personal importance of a work of art.
- Invent and Discover to Create (Create/Present): Use familiar symbols in artwork; use personal ideas to explore different ways to make art.
- Relate and Connect to Transfer (Connect/Apply/Transfer): Make art about family, school, and community life.

- Identifying elements in a piece of art such as simple shapes, lines, colors.
- Trying out many different ways to make artwork that represents personal thoughts and ideas.
- Finding symbols from daily lives to use and place in artwork.
- Identifying art in daily life and why the presence of art is important.



English Language Proficiency (ELP) standards are required by Colorado state and federal law. On December 10, 2009, the Colorado State Board of Education voted unanimously to adopt the English Language Development (ELD) standards developed by WIDA as the Colorado English Language Proficiency (CELP) Standards. Grounded in scientific research on best educational practices in general, English as a Second Language (ESL) and bilingual education, WIDA created and adopted its comprehensive ELP standards which address both social and academic English. This site is designed to provide a hub of information regarding the CELP standards, as well as to provide educators with resources to facilitate teaching the CELP standards to support the academic achievement of all Colorado students through teaching academic language. The CELP standards are an essential guide for all educators to help English Learners (ELs) access grade level academic content while learning English.

#### There are 5 CELP Standards:

- 1. English Learners communicate for **Social and Instructional** purposes within the school setting.
- 2. English Learners communicate information, ideas, and concepts necessary for academic success in the content area of **Language Arts**.
- 3. English Learners communicate information, ideas, and concepts necessary for academic success in the content area of **Mathematics**.
- 4. English Learners communicate information, ideas, and concepts necessary for academic success in the content area of **Science**.
- 5. English Learners communicate information, ideas, and concepts necessary for academic success in the content area of **Social Studies**.