



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 5th Grade Students:

- **Number and Quantity:** Fluently (consistently) multiply multi-digit whole numbers; extend the idea of place value to decimals; begin to divide using multi-digit divisors (fluency isn't expected until sixth grade); multiply fractions; add and subtract fractions by creating equivalent fractions ($1/2$ is the same as $2/4$); understand the relationship between fractions and division ($2/5$ means $2 \div 5$); solve simple word problems involving the division of fractions with pictures (the formal procedure for dividing fractions is taught in sixth grade).
- **Algebra and Function:** Write and interpret numerical expressions.
- **Data, Statistics, and Probability:** Convert within the metric system; find the volumes of rectangular prisms using multiplication.
- **Geometry:** Graph points on a grid using positive numbers.

Throughout 5th Grade You May Find Students:

- Exploring patterns (using a calculator) that occur when multiplying by powers of ten (10, 100, $1/10$, $1/100$).
- Making connections between whole numbers and decimals.
- Playing with money to explore how to add and subtract numbers involving decimals.
- Solving fair share problems (3 submarine sandwiches fairly shared among 4 people) to explore the relationship between fractions and division.
- Drawing pictures to solve simple word problems involving the division of fractions by whole numbers and whole numbers by fractions.
- Filling boxes with cubes to explore the concept of volume and its connection to area.
- Exploring how to find the volume of objects that can be broken into several rectangular boxes.
- Playing games involving coordinates-location on a grid ("Battleship").



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 5th Grade Students:

- **Expression of Music (Perform/Present):** Perform notated songs with accuracy and apply teacher, peer feedback and self-reflection to improve musical skills.
- **Creation of Music (Create):** Create melody and accompaniment.
- **Theory of Music (Know/Comprehend):** Identify and demonstrate complex notated patterns using advanced techniques.
- **Aesthetic Valuation of Music (Appreciate and Understand):** Compare music from various cultures and evaluate the quality of a performance.

Throughout 5th Grade You May Find Students:

- Singing and playing songs with accurate rhythm, technique, and timing.
- Modifying a song to fit a certain group of musicians.
- Creating and playing an original song.
- Writing or using music software programs to demonstrate an understanding of a simple piece of music.
- Connecting musical performances to certain cultures, histories, and/or geographic places.
- Evaluating performances using musical terms.



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 5th Grade Students:

- **Movement Competence and Understanding:** Demonstrate mature form for all basic locomotor (e.g., walking, running), non-locomotor (e.g., twisting, stretching), manipulative skills (e.g., catching, throwing, striking) and rhythmic skills (e.g., dancing, jumping rope); demonstrate understanding of how to combine and apply movement concepts and principles to learn and develop motor skills; understand why feedback can improve performance.
- **Physical and Personal Wellness:** Demonstrate understanding of skill-related components of fitness (agility, balance, coordination, power, reaction time, speed) and how they affect physical performance; set personal goals for improving health-related fitness.
- **Social and Emotional Wellness:** Identify personal activity interests and abilities and take responsibility for individual and team performance; work cooperatively and productively in a group.
- **Prevention and Risk Management:** Implement safety procedures in the utilization of space and equipment.

Throughout 5th Grade You May Find Students:

- Throwing and catching an object demonstrating both accuracy and force.
- Dribbling a ball (by hand or foot) while preventing another person from stealing the ball.
- Developing and refining a gymnastics or creative dance sequence, and demonstrating smooth transitions.
- Using basic understanding of the knowledge of strategies in activity settings such as moving to open space to receive a pass or intercepting an object.
- Analyzing and correcting errors in throwing, catching, dribbling with hands and feet, striking a ball, and volleying while demonstrating control and accuracy.
- Creating a plan using the six skill-related components to improve performance in a chosen activity.
- Identifying activities that will help to improve cardio-respiratory, muscular endurance, muscular strength, flexibility, and body composition.
- Accepting responsibility for one's own performance without blaming others.
- Demonstrating the ability to resolve conflicts with peers.
- Reviewing components of safe participation and what constitutes a safe environment.



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 5th Grade Students:

- **Oral Expression and Listening:** Speak to an audience to express an opinion, to persuade, or to explain an idea/process; actively listen during a presentation using listening strategies (asking questions, paraphrasing, and displaying positive body posture).
- **Reading for All Purposes:** Read literary (stories and poems), informational, and persuasive texts in order to understand, interpret, and compare ideas from a variety of authors.
- **Writing and Composition:** Use a writing process – planning, drafting, revising, editing, sharing – to produce effective, unique, well-researched, and grammatically correct writing for different audiences and purposes (telling a story, explaining a topic, building an argument).
- **Research Inquiry and Design:** Gather and organize information from different sources and produce a well-organized, well-thought-out written or verbal presentation that answers a specific question.

Throughout 5th Grade You May Find Students:

- Reading stories and informational texts to gain new understandings of the world and its people; using different strategies to understand complex texts (generating questions, summarizing, marking the text); working individually and with others to deepen understanding on a topic or text; making connections within and between different texts.
- Writing about texts as they “think through” ideas; directly quoting from the sources to support explanations; sharing writing ideas with others; generating questions based on reading to do research; reflecting on reading.
- Exploring the decisions a writer makes; critiquing a writer’s reasoning; comparing different authors’ writings about the same topic; evaluating graphics in texts.
- Writing narratives (stories) to convey experiences in the world; conducting short research projects; using evidence from sources to produce logical and well-informed presentations; using a variety of sentence structures and effective organization; using grammar and punctuation with accuracy; using technology to produce writing.



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 5th Grade Students:

- **Physical Science:** Recognize that matter is made of particles that are too small to be seen; describe how new substances can be formed when chemical reactions occur, explain how Earth's gravitational force exerts force on objects.
- **Life Science:** Understand that plants acquire their material from growth chiefly from air and water, and that matter flows in cycles between air, soil, plants, animals, and microbes as these organisms live and die.
- **Earth and Space Science:** Understand that the Earth and sun provide many renewable and nonrenewable resources; recognize that Earth's surface changes constantly; understand how the uneven heating of Earth's surface (by the sun) affects weather.

Throughout 5th Grade You May Find Students:

- Conducting an investigation to determine whether the mixing of two or more substances results in new substances.
- Developing a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- Developing models to describe the ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- Using data and graphs to describe the amounts and percentages of saltwater and freshwater in various reservoirs to provide evidence about the distribution of water on Earth.
- Obtaining information about ways individual communities use science ideas to protect the Earth's resources and environment.



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 5th Grade Students:

- **History:** Use timelines, artifacts, and documents to understand the different people, diverse (cultural) perspectives, and important events that shaped the early history of the United States (exploration through the American Revolution).
- **Geography:** Use different kinds of maps, globes, graphs, and diagrams to ask and answer questions about the geography of the 13 Colonies and the United States.
- **Economics:** Explain how trade shaped the development of early America; understand how government actions connect with the economy (interest rates) at the local, state, and national level. **Personal Financial Literacy:** Identify different financial institutions (banks, credit unions) and the services they provide.
- **Civics:** Explain the foundations and structure (the Executive, Judicial, and Legislative branches) of the United States government; describe the rights and responsibilities of U.S. citizenship.

Throughout 5th Grade You May Find Students:

- Analyzing primary and secondary sources such as artifacts, documents, photos, and newspaper articles to examine and explain U.S. historical events; identifying multiple perspectives and diverse cultural groups that were important to events in early United States history; exploring the events that led up to the American Revolution and the lives of the people involved.
- Using map keys, symbols, and legends to locate and identify the types of natural resources found in the United States; describing the role that resources played in the development of the 13 Colonies and the United States.
- Defining the basic parts of the United States' capitalist economy; examining why people need banks and other financial institutions; identifying the products and services provided by financial institutions (banks, credit unions), such as checking and savings accounts and loans.
- Identifying and explaining the principles of democracy and how founding documents (Declaration of Independence, the Constitution, Bill of Rights) reflect and preserve these principles; engaging in discussions about the rights and responsibilities of citizenship.



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 5th Grade Students:

- **Observe and Learn to Comprehend (Know/Comprehend):** Talk about how artists use art techniques (ideas, expression, composition) to give artwork meaning; explain why artists make art; consider and explain how artistic decisions are portrayed in works of art.
- **Envision and Critique to Reflect (Critique/Evaluate/Refine):** Use proper art terms to talk about art; create plans to document the use of personal ideas/experiences will be used to create an artwork.
- **Invent and Discover to Create (Create/Present):** Create art to show feelings and/or convey personal perceptions of the world; make artwork plans based on knowledge of materials and techniques.
- **Relate and Connect to Transfer (Connect/Apply/Transfer):** Help viewers understand ideas conveyed in personal artworks from diverse cultures.

Throughout 5th Grade You May Find Students:

- "Reading" an artwork through observing the use of color, texture, shading, symbols and discussing the artist's intentions; researching and explaining how a specific piece of artwork describes people's experiences or a particular event.
- Explaining how people judge a piece of artwork (personal likes, dislikes, preferences); describing how people respond differently to art from familiar and unfamiliar cultures.
- Using planning tools to research and develop ideas for personal artwork.
- Exploring ways to use art materials to convey a personal feeling or idea or to create an artwork that represents the ideas of others.
- Using available technology resources to create artwork.



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**.