



A Family's Guide to Standards and Report Cards

SIXTH GRADE



Working Together

To support families in realizing the goals of the Colorado Academic Standards, this document provides an overview of the learning expectations for sixth grade. This guide summarizes specific grade-level standards and indicators used for determining progress within each content area in Adams 12 Five Star Schools. The district provides this information as a tool to help families support each student's learning.

The Purpose of Standards

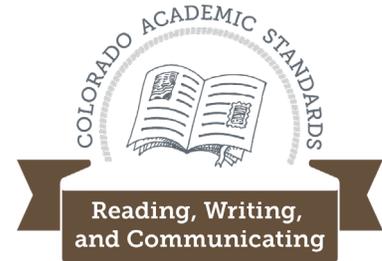
Created by Coloradans for Colorado students, the Colorado Academic Standards provide a grade-by-grade road map to help ensure that students are successful in college, careers, and life. The standards define what students will learn in multiple content areas – emphasizing critical-thinking, creativity, problem solving, collaboration, and communication as important life skills in the 21st century.

The Purpose of Report Cards

Adams 12 Five Star Schools' elementary report cards provide information about each student's progress toward meeting grade-level standards across seven content areas: English Language Arts/Literacy, Mathematics, Science and Social Studies. Additional comments from the student's teachers may also be included. A report card is sent home at the end of each semester, in January and May. Please know that the report card is designed to describe a student's overall progress toward grade-level standards and expectations. A report card should not serve as the only communication between the school and parents. The Five Star District believes in the importance of maintaining open, ongoing communication with all parents and guardians. Families are strongly encouraged to communicate with teachers throughout the school year to ensure that there is a strong bond and partnership between home and school.

Sixth Grade

English Language Arts



The bold headings below summarize broad areas of *English Language Arts* studied in sixth grade, but do not describe the details of the curriculum.

Reading

With grade-level text, the student demonstrates the ability to...

- comprehend and draw evidence from literary and informational texts.
- construct and support accurate analysis of text.
- use context to determine the meaning of words and phrases.
- analyze the impact of word choice on meaning and tone.
- cite textual evidence to support sound inferences drawn from the text.
- show full understanding of text when referring to explicit details and examples.
- compare and contrast texts in terms of presentation, form, genre, and medium.

Writing

While writing narrative, informational, and argumentative pieces, the student demonstrates the ability to...

- develop a claim, topic, and/or narrative elements in a manner appropriate to the task, purpose, and audience.
- use reasoning, details, text-based evidence, and/or description.
- produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.
- include precise language and vocabulary to convey experiences and clarify ideas.
- draw evidence from literary or informational texts to support analysis, reflection, and research.
- establish and maintain an effective style, while attending to the norms and conventions of the discipline.
- demonstrate command of the conventions of Standard English.

Speaking and Listening

When engaging in a range of discussions on grade-level topics and texts, the student demonstrates the ability to...

- engage effectively in a range of collaborative discussions.
- interpret information presented in diverse media and formats.
- delineate a speaker's argument and specific claims.
- use multimedia components to present claims and findings.
- adapt speech to a variety of contexts and tasks.

Language

When writing and speaking, the student demonstrates...

- command of grade-level conventions of Standard English.
- understanding of multiple-meaning words and phrases based on grade 6 reading and content, figurative language, word relationships, and nuances in word meanings.

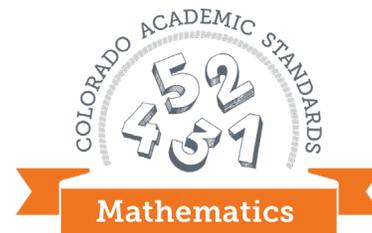
Middle School English Language Arts Rubric

The rubric below provides a general description of a student's literacy proficiency in terms of the skills specified in the grade-level standards as demonstrated through multiple assessments. NOTE: Students must be able to demonstrate literacy skills while comprehending and/or composing a variety of grade-level literary and nonfiction texts.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
<p>The student independently demonstrates the skills of the standards with above grade-level texts.</p> <p style="text-align: center;">OR</p> <p>The student demonstrates skills beyond grade-level standards with grade-level texts.</p>	<p>The student independently demonstrates the skills of the standards with grade-level texts.</p>	<p>The student independently demonstrates the skills of the standards with below grade-level texts.</p> <p style="text-align: center;">OR</p> <p>With support, the student demonstrates the skills of the standards with grade-level texts.</p>	<p>The student independently demonstrates limited understanding of the skills of the standards with below grade-level texts.</p> <p style="text-align: center;">OR</p> <p>With significant support, the student demonstrates limited understanding of the skills of the standards with grade-level texts.</p>

Sixth Grade Mathematics

The bold headings below summarize sixth grade math expectations but do not describe details of the curriculum. Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, and Statistics and Probability summarize the broad areas of *Mathematics Content Standards* studied in sixth grade Math. Mathematical Communication and Procedural Fluency represent areas of expertise to be developed in support of the *Standards for Mathematical Practice*.



Ratios and Proportional Relationships

The student will...

- understand ratio concepts and use ratio reasoning to solve problems.

The Number System

The student will...

- apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- multiply and divide multi-digit numbers and find common factors and multiples.
- apply and extend previous understandings of numbers to the system of rational numbers.

Expressions and Equations

The student will...

- apply and extend previous understandings of arithmetic to algebraic expressions.
- reason about and solve one-variable equations and inequalities.
- represent and analyze quantitative relationships between dependent and independent variables.

Geometry

The student will...

- solve real-world and mathematical problems involving area, surface area, and volume.

Statistics and Probability

The student will...

- develop understanding of statistical variability.
- summarize and describe data distributions.

Mathematical Communication

The student will...

- explain mathematical concepts, skills and applications using appropriate mathematical vocabulary.
- construct logical, complete, and concise mathematical arguments.

Procedural Fluency

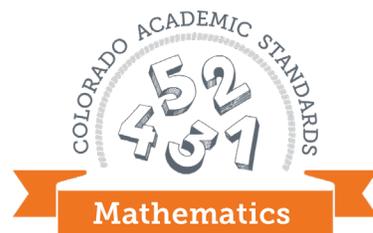
The student will...

- organize and carry out procedural, numeric and symbolic work accurately, efficiently and flexibly.
- select and apply appropriate and efficient strategies to make deductions and solve problems.

Mathematics rubrics on page 5.

Sixth Grade Honors Mathematics

The bold headings below summarize sixth grade honors math expectations but do not describe details of the curriculum. Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, and Statistics and Probability summarize the broad areas of *Mathematics Content Standards* studied in sixth grade honors math. Mathematical Communication and Procedural Fluency represent areas of expertise to be developed in support of the *Standards for Mathematical Practice*.



Ratios and Proportional Relationships

The student will...

- understand ratio concepts and use ratio reasoning to solve problems.
- analyze proportional relationships and use them to solve real-world and mathematical problems.

The Number System

The student will...

- apply and extend previous understandings of multiplication and division to divide fractions by fractions.
- multiply and divide multi-digit numbers and find common factors and multiples.
- apply and extend previous understandings of numbers to the system of rational numbers.
- apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Expressions and Equations

The student will...

- apply and extend previous understandings of arithmetic to algebraic expressions.
- use properties of operations to generate equivalent expressions.
- reason about and solve one-variable equations.
- represent and analyze quantitative relationships between dependent and independent variables.
- solve real-world and mathematical problems using numerical and algebraic expressions and equations.

Geometry

The student will...

- solve real-world and mathematical problems involving area, surface area, and volume.

Statistics and Probability

The student will...

- develop understanding of statistical variability.
- summarize and describe data distributions.

Mathematical Communication

The student will...

- explain mathematical concepts, skills and applications using appropriate mathematical vocabulary.
- construct logical, complete, and concise mathematical arguments.

Procedural Fluency

The student will...

- organize and carry out procedural, numeric and symbolic work accurately, efficiently and flexibly.
- select and apply appropriate and efficient strategies to make deductions and solve problems.

Mathematics rubrics on page 5.



Sixth Grade Mathematics Rubrics

Middle School Mathematics Content Rubric

The rubric below provides a general description of student proficiency with mathematics content standards.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
<p>The student uses appropriate mathematical concepts and skills to solve application problems in both familiar and unfamiliar situations with limited scaffolds & supports.</p> <p style="text-align: center;">AND/OR</p> <p>The student solves problems that require connections among multiple concepts without scaffolded prompts.</p>	<p>The student uses appropriate mathematical concepts and skills to solve application problems in familiar situations with scaffolds & support.</p> <p style="text-align: center;">AND/OR</p> <p>The student solves problems that require connections among multiple concepts with scaffolded prompts.</p>	<p>The student uses appropriate mathematical concepts and skills to solve routine problems but is unsuccessful with applications to real life contexts.</p> <p style="text-align: center;">AND/OR</p> <p>The student solves problems involving concepts in isolation.</p>	<p>The student demonstrates limited success in the use of appropriate mathematical concepts and skills to solve routine problems and applications to real life contexts.</p> <p style="text-align: center;">AND/OR</p> <p>The student has limited success solving problems with concepts in isolation.</p>

Middle School Mathematics Communication Rubric

Mathematics Communication at the middle school level addresses a student's ability to explain, construct, and critique mathematical reasoning using precise and accurate mathematical language.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
<p>The student demonstrates the ability to explain, construct and critique mathematical reasoning with concise, detailed, logical and complete arguments.</p> <p>The student demonstrates the ability to effectively communicate conceptual understanding and contextual interpretation of results.</p> <p>The student consistently uses accurate mathematical content language with sophistication appropriate to prompt.</p>	<p>Student explanations are complete and logical but may lack details, and/or coherent flow in presentation.</p> <p>Conceptual or contextual understanding is inferred but not explicit.</p> <p>The student is accurate but inconsistent in the use of mathematical content language appropriate to prompt.</p>	<p>Student explanations are fragmented with omissions in logic, details or coherent flow.</p> <p>Concept/context explanations are vague, incomplete or inconsistent.</p> <p>Basic mathematical language is present but not at levels appropriate to the prompt.</p>	<p>Student provides only superficial explanations or explanations that do not match solutions.</p> <p>Concept/context connections are absent or inappropriate to prompt.</p> <p>Mathematical language is missing or generally inappropriate to the task.</p>

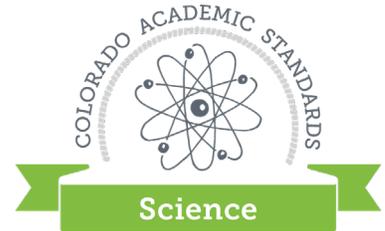
Middle School Mathematics Procedural Fluency Rubric

Procedural Fluency at the middle school level addresses a student's ability to select and execute appropriate procedural aspects of mathematics work in an organized and efficient manner.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
<p>The student demonstrates fluency in carrying out procedures flexibly, accurately, efficiently and with clarity in organization.</p> <p>The student consistently selects and applies appropriate and efficient strategies to make deductions and solve problems.</p>	<p>Student procedural work is appropriate to task but may contain minor errors in execution or organization.</p> <p>The student often selects and applies appropriate and efficient strategies to make deductions and solve problems.</p>	<p>Student procedural work lacks coherent organization, omits key steps or contains multiple errors in execution.</p> <p>The student selects and applies rote strategies to make deductions and solve problems.</p>	<p>Student procedural work is incoherent, missing or inappropriate to task.</p> <p>The student demonstrates limited success in applying rote strategies to make deductions and solve problems.</p>

Sixth Grade Science

The bold headings below summarize the three strands that comprise *Science Content Standards* in sixth grade and the *Science Practices* necessary for the advancement of science in our society. Skills critical to success in science include **observing, collecting, analyzing and interpreting evidence.**



Life

Using science skills, the student demonstrates the ability to...

- use data and information to develop, communicate and justify an evidence-based explanation of how ecosystems interact with, and impact, the global environment.
- model equilibrium in an ecosystem to predict how one change might impact organisms, populations and species within it.
- develop, communicate and justify an evidence-based explanation of the flow of energy and cycling of matter through the ecosystem.

Physical

Using science skills, the student demonstrates the ability to...

- develop an evidence based scientific explanation of the atomic model as the foundation for all chemistry.
- explain the difference between elements and compounds.
- use evidence to compare the difference in properties between individual atoms and molecules they form.
- develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

Earth

Using science skills, the student demonstrates the ability to...

- create a model to describe the cycling of water through Earth's systems.
- identify causes and effects of water pollution locally and worldwide and propose solutions.
- research types and availability of natural resources and their use.
- critically evaluate data about advantages and disadvantages of using fossil fuels and alternative energy sources.
- communicate an evidence based explanation for the complex interactions between Earth's constructive and destructive forces.
- interpret patterns to explain tectonic plate motion and resulting geologic events and surface changes.
- analyze data to predict and plan for future catastrophic events.
- describe the geologic time scale and justify its use.
- identify and describe major events in Earth's geologic history and their impact on life.
- justify a scientific explanation for past plate motion.

Science Practices

The student demonstrates the ability to...

- analyze and interpret data.
- create and evaluate models.
- ask questions to further their understanding and determine which questions are testable.
- plan and carry out scientific investigations.
- communicate their scientific thinking
 - cite specific textual evidence to support analysis of science texts.
 - analyze symbols, key terms, text structure and author's purpose when reading a text.
 - integrate quantitative and technical information using words and visual representations (graphs, diagrams, pictures).
 - write informational explanations and arguments focused on discipline specific content.

Middle School Science Rubric

The rubric below provides a general description of student work with science standards at four levels of proficiency. Note: Students must be able to demonstrate both skills and conceptual understanding.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
Student consistently and independently applies standards based skills and understanding of concepts to new or novel situations.	Student consistently and independently applies standards based skills and understanding of concepts in familiar situations.	Student inconsistently applies standards based skills and/or understanding of concepts in familiar situations	Student demonstrates limited ability to apply standards based skills and/or understanding of concepts.

Sixth Grade Social Studies

The bold headings below summarize sixth grade expectations, but do not describe the details of the curriculum. The content standards of history, geography, economics and civics are from the *Colorado Academic Standards*. The Connected Literacy Standards should be used and assessed in conjunction with Social Studies content standards.



History

The student demonstrates the ability to...

- identify ways different cultures record history.
- formulate historical questions from historical documents.
- describe how key people and eras are connected in the Western Hemisphere.
- identify examples of the social, political, cultural, and economic development in key areas of the Western Hemisphere.

Geography

The student demonstrates the ability to...

- use geographic tools to locate and compare places and regions.
- use geographic tools to explain potential solutions to problems.
- identify physical features and explain their effects on people in the Western Hemisphere.
- analyze positive and negative interactions of man made vs. natural environments.

Economics

The student demonstrates the ability to...

- describe the characteristics of traditional, command, market, and mixed economic systems.
- explain the roles of buyers and sellers in the market.
- analyze factors that influence consumer decisions.

Civics

The student demonstrates the ability to...

- describe how groups and individuals influence the government and other nations.
- analyze political issues from both a national and global perspective over time.
- compare various governments and the liberties of their citizens.
- compare the economic components of different forms of government.

Connected Literacy Standards

The student demonstrates the following skills in concert with the content standards above:

- cite key details to support analysis in primary and secondary sources.
- identify point of view in primary and secondary sources.
- integrate information from multiple texts on the same topic.
- write arguments focused on discipline specific content.
- conduct short content specific research projects.

Middle School Social Studies Rubric

The rubric below provides a general description of student proficiency with social studies content standards. Note: Students must be able to both demonstrate appropriate use of social studies concepts and skills and apply the tools of a historian, geographer, economist, and political scientist.

4 ADVANCED UNDERSTANDING	3 MEETS THE STANDARD	2 APPROACHING	1 DOES NOT MEET
The student is able to independently apply grade level standards to new or unfamiliar situations .	The student consistently and independently applies grade level standards in familiar contexts.	The student is inconsistent or requires support in applying grade level standards in familiar contexts.	The student is unable to apply grade level standards in familiar contexts.

