

# **Appendix D**

## **CMAS Mathematics, ELA, and CSLA Assessed Standards**

**Grade 3 ELA and CSLA  
Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
3.2.1.a.i 3.2.1.a.iii 3.2.1.a.v	Reading: Literature	Key Ideas & Details
3.2.1.b.i 3.2.1.b.iii 3.2.1.b.iv	Reading: Literature	Craft & Structure
3.2.1.c.i 3.2.1.c.iii	Reading: Literature	Integration of Knowledge & Ideas
3.2.2.a.i 3.2.2.a.ii 3.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
3.2.2.b.i 3.2.2.b.ii 3.2.2.b.iii	Reading: Informational Text	Craft & Structure
3.2.2.c.i 3.2.2.c.ii 3.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
3.2.3.c 3.2.3.c.i 3.2.3.c.ii 3.2.3.c.iv 3.2.3.c.v 3.2.3.d 3.2.3.d.i 3.2.3.d.ii 3.2.3.d.iii 3.2.3.3	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use

**Grade 4 ELA and CSLA  
Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
4.2.1.a.i 4.2.1.a.iii 4.2.1.a.iv	Reading: Literature	Key Ideas & Details
4.2.1.b.i 4.2.1.b.ii 4.2.1.b.iii	Reading: Literature	Craft & Structure
4.2.1.c.i 4.2.1.c.ii	Reading: Literature	Integration of Knowledge & Ideas
4.2.2.a.i 4.2.2.a.ii 4.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
4.2.2.b.i 4.2.2.b.ii 4.2.2.c.iii	Reading: Informational Text	Craft & Structure
4.2.2.c.i 4.2.2.c.ii 4.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
4.2.3.c 4.2.3.c.i 4.2.3.c.ii 4.2.3.c.vii 4.2.3.d 4.2.3.d.i 4.2.3.d.ii 4.2.3.d.iii 4.2.3.e	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use

**Grade 5 ELA**  
**Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
5.2.1.b.i 5.2.1.b.ii 5.2.1.b.iii	Reading: Literature	Key Ideas & Details
5.2.1.c.i 5.2.1.c.iii 5.2.1.c.iv	Reading: Literature	Craft & Structure
5.2.1.d.i 5.2.1.d.ii	Reading: Literature	Integration of Knowledge & Ideas
5.2.2.a.i 5.2.2.a.ii 5.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
5.2.2.b.i 5.2.2.b.ii 5.2.2.b.iii	Reading: Informational Text	Craft & Structure
5.2.2.c.i 5.2.2.c.ii 5.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
5.2.3.b 5.2.3.b.i 5.2.3.b.ii 5.2.3.b.iii 5.2.3.d 5.2.1.c.i 5.2.3.d.ii 5.2.1.c.ii 5.2.3.h	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use

**Grade 6 ELA**  
**Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
6.2.1.a.i 6.2.1.a.ii 6.2.1.a.iii	Reading: Literature	Key Ideas & Details
6.2.1.b.i 6.2.1.b.ii 6.2.1.b.iii	Reading: Literature	Craft & Structure
6.2.1.c.i 6.2.1.c.ii	Reading: Literature	Integration of Knowledge & Ideas
6.2.2.a.i 6.2.2.a.ii 6.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
6.2.2.b.i 6.2.2.b.ii 6.2.2.b.iii	Reading: Informational Text	Craft & Structure
6.2.2.c.i 6.2.2.c.ii 6.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
6.2.3.a 6.2.3.a.i 6.2.3.a.iii 6.2.3.a.v 6.2.3.a.vi 6.2.3.b 6.2.3.b.i 6.2.3.b.ii 6.2.3.b.iii 6.2.3.c	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use
6.2.1.N.5 6.2.2.N.3	Literacy in History/Social Studies	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity
6.2.1.N.4 6.2.2.N.2	Literacy in Science & Technical Subjects	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity

**Grade 7 ELA**  
**Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
7.2.1.a.i 7.2.1.a.ii 7.2.1.a.iii	Reading: Literature	Key Ideas & Details
7.2.1.b.i 7.2.1.b.ii 7.2.1.b.iii	Reading: Literature	Craft & Structure
7.2.1.c.i 7.2.1.c.ii	Reading: Literature	Integration of Knowledge & Ideas
7.2.2.a.i 7.2.2.a.ii 7.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
7.2.2.b.i 7.2.2.b.ii 7.2.2.b.iv	Reading: Informational Text	Craft & Structure
7.2.2.c.i 7.2.2.c.ii 7.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
7.2.3.a 7.2.3.a.i 7.2.3.a.iii 7.2.3.a.iv 7.2.3.a.v 7.2.3.b 7.2.3.b.i 7.2.3.b.iii 7.2.3.b.iv 7.2.3.c	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use
7.2.1.N.3 7.2.2.N.3	Literacy in History/Social Studies	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity
7.2.1.N.2 7.2.2.N.2	Literacy in Science & Technical Subjects	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity

**Grade 8 ELA**  
**Reading, Writing, and Communicating Standards**

Colorado Academic Standards	Domain	Standard Descriptor
8.2.1.a.i 8.2.1.a.ii 8.2.1.a.iii	Reading: Literature	Key Ideas & Details
8.2.1.b.i 8.2.1.b.ii 8.2.1.b.iii	Reading: Literature	Craft & Structure
8.2.1.c.i 8.2.1.c.iv	Reading: Literature	Integration of Knowledge & Ideas
8.2.2.a.i 8.2.2.a.ii 8.2.2.a.iii	Reading: Informational Text	Key Ideas & Details
8.2.2.b.i 8.2.2.b.ii 8.2.2.b.iii	Reading: Informational Text	Craft & Structure
8.2.2.c.i 8.2.2.c.ii 8.2.2.c.iii	Reading: Informational Text	Integration of Knowledge & Ideas
8.2.3.a 8.2.3.a.iv 8.2.3.a.v 8.2.3.a.vi 8.2.3.a.vii 8.2.3.b 8.2.3.b.i 8.2.3.b.ii 8.2.3.b.iii 8.2.3.c	Language	Conventions of Standard English Knowledge of Language Vocabulary Acquisition and Use
8.2.1.N.3 8.2.2.N.3	Literacy in History/Social Studies	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity
8.2.1.N.2 8.2.2.N.2	Literacy in Science & Technical Subjects	Key Ideas and Details Craft and Structure Integration of Knowledge and Ideas Range of Reading and Level of Text Complexity

**Grade 3  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
3.1.3.a.i 3.1.3.a.ii 3.1.3.a.iii 3.1.3.a.iv	Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division.
3.1.3.b.i 3.1.3.b.ii	Operations & Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.
3.1.3.c.i 3.1.3.c.ii	Operations & Algebraic Thinking	Multiply and divide within 100.
3.1.3.d.i 3.1.3.d.ii 3.1.3.d.iii 3.1.3.d.iv	Operations & Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
3.1.1.a.i 3.1.1.a.ii 3.1.1.a.iii	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic. <sup>1</sup>  <sup>1</sup> A range of algorithms may be used.
3.1.2.a.i 3.1.2.a.ii 3.1.2.a.iii 3.1.2.a.iii.1 3.1.2.a.iii.2 3.1.2.a.iii.3 3.1.2.a.iii.4 3.1.2.a.iii.5 3.1.2.a.iii.6	Number & Operations—Fractions <sup>1</sup>  <sup>1</sup> Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.	Develop understanding of fractions as numbers.
3.4.3.a.i 3.4.3.a.ii 3.4.3.a.iii 3.4.3.a.iv 3.4.3.a.v	Measurement & Data	Solve problems involving measurement and estimation.
3.3.1.a.i 3.3.1.a.ii 3.3.1.a.iii	Measurement & Data	Represent and interpret data.
3.4.2.a.i 3.4.2.a.ii 3.4.2.a.iii	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
3.4.2.c 3.4.2.c.i 3.4.2.c.ii 3.4.2.c.iii	Measurement & Data	Geometric measurement: recognize perimeter.
3.4.1.a.i 3.4.1.a.i.1 3.4.1.a.ii	Geometry	Reason with shapes and their attributes.



**Grade 4  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
4.1.3.b.i 4.1.3.b.ii 4.1.3.b.iii 4.1.3.b.iv 4.1.3.b.v 4.1.3.b.vi	Operations & Algebraic Thinking	Use the four operations with whole numbers to solve problems.
4.2.1.b.i 4.2.1.b.ii 4.2.1.b.iii 4.2.1.b.iv	Operations & Algebraic Thinking	Gain familiarity with factors and multiples.
4.2.1.a	Operations & Algebraic Thinking	Generate and analyze patterns.
4.1.1.a.i 4.1.1.a.ii 4.1.1.a.iii 4.1.1.a.iv	Number & Operations in Base Ten	Generalize place value understanding for multi-digit whole numbers.
4.1.3.a.i 4.1.3.a.ii 4.1.3.a.iii 4.1.3.a.iv	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.
4.1.2.a.ii 4.1.2.a.iii	Number & Operations - Fractions	Extend understanding of fraction equivalence and ordering.
4.1.2.b.i 4.1.2.b.i.2 4.1.2.b.i.3 4.1.2.b.ii 4.1.2.b.ii.1 4.1.2.b.ii.2 4.1.2.b.ii.3	Number & Operations - Fractions	Build fractions from unit fractions.
4.1.1.b.i 4.1.1.b.ii 4.1.1.b.iii	Number & Operations - Fractions	Understand decimal notation for fractions, and compare decimal fractions.
4.4.1.a.i 4.4.1.a.ii 4.4.1.a.iii 4.4.1.a.iv 4.4.1.a.v	Measurement & Data	Solve problems involving measurement and conversion of measurements.
4.3.1.a 4.3.1.b	Measurement & Data	Represent and interpret data.
4.4.1.b.i 4.4.1.b.ii 4.4.1.b.iii 4.4.1.b.iv	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles.
4.4.2.a 4.4.2.b 4.4.2.c 4.4.2.d	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

**Grade 5  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
5.1.2.d.i 5.1.2.d.ii	Operations & Algebraic Thinking	Write and interpret numerical expressions.
5.2.1.a 5.2.1.b 5.2.1.c 5.2.1.d	Operations & Algebraic Thinking	Analyze patterns and relationships.
5.1.1.a 5.1.1.a.i 5.1.1.a.ii 5.1.1.b 5.1.1.b.i 5.1.1.b.ii 5.1.1.c	Number & Operations in Base Ten	Understand the place value system.
5.1.2.a 5.1.2.b 5.1.2.b.i 5.1.2.b.ii 5.1.2.c	Number & Operations in Base Ten	Perform operations with multi-digit whole numbers and with decimals to hundredths.
5.1.3.a.i 5.1.3.a.ii 5.1.3.a.iii	Number & Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions.
5.1.4.a 5.1.4.b 5.1.4.c 5.1.4.d 5.1.4.e 5.1.4.e.i 5.1.4.e.ii 5.1.4.f 5.1.4.g 5.1.4.h 5.1.4.i	Number & Operations - Fractions	Apply and extend previous understandings of multiplication and division.
5.1.1.d.i 5.1.1.d.ii	Measurement & Data	Convert like measurement units within a given measurement system.
5.3.1.a.i 5.3.1.a.ii	Measurement & Data	Represent and interpret data.
5.4.1 5.4.1.a 5.4.1.b 5.4.1.b.i 5.4.1.b.ii 5.4.1.b.iii	Measurement & Data	Geometric measurement: understand concepts of volume.
5.4.2.a 5.4.2.b	Geometry	Geometric measurement: understand concepts of volume.
5.4.2.c.i 5.4.2.c.ii	Geometry	Classify two-dimensional figures into categories based on their properties.

**Grade 6  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
6.1.1.a 6.1.1.b 6.1.1.c 6.1.1.c.i 6.1.1.c.ii 6.1.1.c.iii 6.1.1.c.iv 6.1.1.c.viii	Ratios & Proportional Relationships	Understand ratio concepts and use ratio reasoning to solve problems.
6.1.2.f 6.1.2.g 6.1.2.h	The Number System	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
6.1.2.a 6.1.2.b 6.1.2.c 6.1.2.d 6.1.2.e 6.1.3.a 6.1.3.a.i	The Number System	Compute fluently with multi-digit numbers and find common factors and multiples.
6.1.3.b.i 6.1.3.b.ii 6.1.3.b.iii 6.1.3.b.iv 6.1.3.b.vi 6.1.3.c 6.1.3.c.i 6.1.3.c.ii 6.1.3.c.iii 6.1.3.c.iv 6.1.3.d	The Number System	Apply and extend previous understandings of numbers to the system of rational numbers.
6.2.1.a 6.2.1.b 6.2.1.b.i 6.2.1.b.ii 6.2.1.b.iii 6.2.1.b.iv 6.2.1.c 6.2.1.d	Expressions & Equations	Apply and extend previous understandings of arithmetic to algebraic expressions.
6.2.2.a 6.2.2.b 6.2.2.c 6.2.2.c.i 6.2.2.d 6.2.2.e 6.2.2.f 6.2.2.g.i 6.2.2.g.ii	Expressions & Equations	Reason about and solve one-variable equations and inequalities.

6.2.2.g.i 6.2.2.g.ii 6.2.2.g.iii	Expressions & Equations	Represent and analyze quantitative relationships between dependent and independent variables.
6.4.1.a.i 6.4.1.a.ii 6.4.1.b.i 6.4.1.b.ii 6.4.1.b.iii 6.4.1.c 6.4.1.c.ii 6.4.1.d.i 6.4.1.d.ii 6.4.1.d.iii	Geometry	Solve real-world and mathematical problems involving area, surface area, and volume.
6.3.1.a 6.3.1.b 6.3.1.c	Statistics & Probability	Develop understanding of statistical variability.
6.3.1.d.i 6.3.1.d.ii 6.3.1.d.ii.1 6.3.1.d.ii.2 6.3.1.d.ii.3 6.3.1.d.ii.4	Statistics & Probability	Summarize and describe distributions.

**Grade 7  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
7.1.1.b 7.1.1.c 7.1.1.c.i 7.1.1.c.ii 7.1.1.c.iii 7.1.1.c.iv 7.1.1.d	Ratios & Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems.
7.1.2.a 7.1.2.a.i 7.1.2.a.ii 7.1.2.a.iii 7.1.2.a.iv 7.1.2.a.v 7.1.2.a.vi 7.1.2.a.vii 7.1.2.a.viii 7.1.2.b 7.1.2.b.i 7.1.2.b.ii 7.1.2.b.iii 7.1.2.b.iv 7.1.2.b.v 7.1.2.b.vi 7.1.2.c	The Number System	Apply and extend previous understandings of operations with fractions.
7.2.1.a.i 7.2.1.a.ii	Expressions & Equations	Use properties of operations to generate equivalent expressions.
7.2.2.a 7.2.2.b 7.2.2.c 7.2.2.c.ii 7.2.2.c.iii 7.2.2.c.iv	Expressions & Equations	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
7.4.1.a.i 7.4.1.a.ii 7.4.1.a.iii 7.4.1.a.iv	Geometry	Draw construct, and describe geometrical figures and describe the relationships between them.
7.4.2.a 7.4.2.b 7.4.2.c 7.4.2.d	Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
7.3.1.a.i 7.3.1.a.iii 7.3.1.a.iv	Statistics & Probability	Use random sampling to draw inferences about a population.
7.3.1.b.i 7.3.1.b.ii	Statistics & Probability	Draw informal comparative inferences about two populations.

<p>7.3.2.a 7.3.2.b 7.3.2.c 7.3.2.c.i 7.3.2.c.ii 7.3.2.c.iii 7.3.2.d 7.3.2.d.i 7.3.2.d.ii 7.3.2.d.iii 7.3.2.d.iv</p>	<p>Statistics &amp; Probability</p>	<p>Investigate chance processes and develop, use, and evaluate probability models.</p>
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**Grade 8  
Mathematics Standards**

Colorado Academic Standards	Domain	Standard Descriptor
8.1.1.b.i 8.1.1.b.ii 8.1.1.c	The Number System	Know that there are numbers that are not rational, and approximate them by rational numbers.
8.1.1.d 8.1.1.g 8.1.1.h 8.1.1.h.i 8.1.1.h.ii	Expressions & Equations	Expressions and equations work with radicals and integer exponents.
8.2.1.b 8.2.1.c 8.2.1.d 8.2.1.e	Expressions & Equations	Understand the connections between proportional relationships, lines, and linear equations.
8.2.2.a 8.2.2.a.i 8.2.2.a.ii 8.2.2.b 8.2.2.b.i 8.2.2.b.ii 8.2.2.b.iii	Expressions & Equations	Analyze and solve linear equations and pairs of simultaneous linear equations.
8.2.3.a.i 8.2.3.a.ii 8.2.3.a.iii 8.2.3.a.iv	Functions	Define, evaluate, and compare functions.
8.2.3.b.i 8.2.3.b.ii 8.2.3.b.iii 8.2.3.b.iv 8.2.3.b.v	Functions	Use functions to model relationships between quantities.
8.4.1.a 8.4.1.b 8.4.1.c 8.4.1.d 8.4.1.e 8.4.1.f 8.4.1.g	Geometry	Understand congruence and similarity using physical models, transparencies, or geometry software.
8.4.2.a 8.4.2.b 8.4.2.c	Geometry	Understand and apply the Pythagorean Theorem.
8.4.2.d	Geometry	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.
8.3.1.a 8.3.1.b 8.3.1.c 8.3.1.d 8.3.1.e 8.3.1.e.i 8.3.1.e.ii	Statistics & Probability	Investigate patterns of association in bivariate data.