

Common Core State Standards (CCSSM)

Content Emphasis

Operations and Algebraic Thinking

- Use the four operations with whole numbers to solve problems.
- Gain familiarity with factors and multiples.
- Generate and analyze patterns.

Number and Operations in Base Ten

- Generalize place value understanding for multi-digit whole numbers.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Extend understanding of fraction equivalence and ordering.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
- Understand decimal notation for fractions, and compare decimal fractions.

Measurement and Data

- Solve problems involving measurement and conversion of measurements from larger unit to smaller unit.
- Represent and interpret data.
- Geometric measurement: understand concepts of angle and measure angles.

Geometry

- Draw and identify lines and angles, and classify shapes by properties

Semester One

- Topic 3: Place Value
- Topic 4: Addition and Subtraction of Whole Numbers
- Topic 1: Multiplication and Division: Meanings and Facts
- Topic 11: Fraction Equivalence and Ordering
- Topic 2: Generate and Analyze Patterns
- Topic 5: Number Sense: Multiplying by 1-Digit Numbers
- Topic 6: Developing Fluency: Multiplying by 1-Digit Numbers
- Topic 7: Number Sense: Multiplying by 2-Digit Numbers
- Topic 8: Developing Fluency: Multiplying by 2-Digit Numbers
- Topic 9: Number Sense: Dividing by 1-Digit Numbers

Semester Two

- Topic 10: Developing Fluency: Dividing by 1-Digit Divisors
- Topic 12: Adding and Subtracting Fractions and Mixed Numbers
- Topic 13: Extending Fraction Concepts
- Topic 14: Measurement Units and Conversions
- Topic 15: Solving Measurement Problems
- Topic 16: Lines, Angles, and Shapes

Student Attributes for Math Success

- Demonstrates intellectual engagement.
- Takes responsibility for own learning.
- Perseveres when faced with time-consuming or complex tasks.
- Pays attention to detail.

Standards for Mathematical Practice

With connections to Science and Engineering Practices (S&EP) and English Language Arts (ELA) Shifts:

- 1. Make sense of problems and persevere in solving them.**
S&EP 1: Ask questions and define problems;
S&EP 3: Plan and carry out investigations;
ELA Shift 2: Text Complexity
- 2. Reason abstractly and quantitatively.**
S&EP 2: Developing and using models;
S&EP 3: Planning and carrying out investigations;
S&EP 5: Using mathematics and computational thinking
- 3. Construct viable arguments and critique the reasoning of others.**
S&EP 5: Using mathematics and computational thinking;
S&EP 6: Constructing explanations and designing solutions
S&EP 7: Engaging in argument from evidence;
S&EP 8: Obtaining, evaluating and communicating information;
ELA Shift 4: Text-based Answers;
ELA Shift 5: Increase Writing from Sources
- 4. Model with mathematics.**
S&EP 2: Develop and use models;
S&EP 3: Planning and carrying out investigations
- 5. Use appropriate tools strategically.**
S&EP 2: Develop and use models;
S&EP 3: Planning and carrying out investigations;
and
S&EP 4: Analyzing and interpreting data;
ELA Shift 1: Increase Reading of Informational Text
- 6. Attend to precision.**
S&EP 3: Planning and carrying out investigations;
S&EP 8: Obtaining, evaluating and communicating information;
ELA Shift 3: Academic Vocabulary
- 7. Look for and make use of structure.**
S&EP 4: Analyzing and interpreting data
S&EP 6: Constructing explanations and designing solutions
S&EP 7: Engaging in argument from evidence
- 8. Look for and express regularity in repeated reasoning.**
S&EP 5: Using mathematics and computational thinking
S&EP 6: Constructing explanations and designing