

**THE FOLLOWING STATE CURRICULUM STANDARDS ARE ADDRESSED BY
THE QUARTER MILE MATH SOFTWARE
FOR THE STATE OF CONNECTICUT**

Grades PK - 4

Subject: MATH

Standard: Algebra And Functions

Strand: Students Will Use Algebraic Skills And Concepts, Including Functions, To Describe Real- World Phenomena Symbolically And Graphically, And To Model Quantitative Change

Substrand Titles that Address the Substrand

(Gr. PreK-4) write and solve number sentences that describe real-life situations

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH

Standard: Discrete Mathematics

Strand: Students Will Use The Concepts And Processes Of Discrete Mathematics To Analyze And Model A Variety Of Real-World Situations That Involve Recurring Relationships, Sequences, Netwo

Substrand Titles that Address the Substrand

(Gr. PreK-4) solve simple counting problems;

Quarter Mile Math Level 1

Subject: MATH

Standard: Estimation And Approximation

Strand: Students Will Make Estimates And Approximations, And Judge The Reasonableness Of Results

Substrand Titles that Address the Substrand

(Gr. PreK-4) explore, construct and use a variety of estimation strategies;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) use estimation to determine the reasonableness of an answer;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) apply estimation when working with quantities, measures and problems.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH

Standard: Number Sense

Strand: Students Will Use Numbers To Count, Measure, Compare, Order, Scale, Locate And Label, And Use A Variety Of Numerical Representations To Present, Interpret, Communicate And Connect

Substrand	Titles that Address the Substrand
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(Gr. PreK-4) use real- life experiences, physical materials and technology to construct meanings for whole numbers, commonly used fractions and decimals;

Quarter Mile Math Level 2

(Gr. PreK-4) understand our numeration system by modeling, counting, grouping and using place- value concepts;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) understand and use properties of numbers, including odd, even, ordinal and cardinal

Quarter Mile Math Level 1

(Gr. PreK-4) develop a sense of magnitude of numbers by ordering and comparing whole numbers, commonly used fractions, decimals and money amounts.

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Subject: MATH

Standard: Operations

Strand: Students Will Add, Subtract, Multiply And Divide With Whole Numbers, Fractions, Decimals And Integers And Develop Strategies For Selecting The Appropriate Computational And Operations

Substrand	Titles that Address the Substrand
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(Gr. PreK-4) develop proficiency with basic addition, subtraction, multiplication and division facts through the use of a variety of strategies and contexts;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) recognize that any one operation can be used to represent diverse problem situations, e. g., subtraction can be used in take away, as well as comparison, situations;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) construct, use and explain a variety of procedures for performing whole number calculations

Quarter Mile Math Level 1

Quarter Mile Math Level 2

(Gr. PreK-4) understand and use relationships among operations, e. g., multiplication is repetitive addition; multiplication is the opposite of division

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Grades 5 - 8

Subject: MATH

Standard: Algebra And Functions

Strand: Students Will Use Algebraic Skills And Concepts, Including Functions, To Describe Real-World Phenomena Symbolically And Graphically, And To Model Quantitative Change

Substrand	Titles that Address the Substrand
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(Gr. 5-8) use variables, expressions, equations and inequalities to describe and represent numerical situations;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Estimation And Approximation

Strand: Students Will Make Estimates And Approximations, And Judge The Reasonableness Of Results

Substrand Titles that Address the Substrand

(Gr. 5-8) use estimation to predict outcomes and determine reasonableness of results;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) recognize when estimation is appropriate and understand the usefulness of an estimate as distinct from an exact answer

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) determine whether a given estimate is an overestimate or underestimate

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Operations

Strand: Students Will Add, Subtract, Multiply And Divide With Whole Numbers, Fractions, Decimals And Integers And Develop Strategies For Selecting The Appropriate Computational And Operations

Substrand Titles that Address the Substrand

(Gr. 5-8) maintain proficiency with basic addition, subtraction, multiplication and division facts through the use of a variety of strategies and contexts;

Quarter Mile Math Level 1

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) develop, use and explain procedures for performing calculations with whole numbers, decimals, fractions and integers;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) select and use an appropriate method for computing from among mental math, estimation, paper-and-pencil and calculator methods

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Patterns

Strand: Students Will Discover, Analyze, Describe, Extend And Create Patterns And Use Patterns To Describe Mathematical And Other Real- World Phenomena

Substrand Titles that Address the Substrand

(Gr. 5-8) use patterns and relationships to represent and solve problems

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Ratios, Proportions And Percents

Strand: Students Will Use Ratios, Proportions And Percents To Represent Relationships Between Quantities And Measures And Solve Problems Involving Ratios, Proportions And Percents

Substrand Titles that Address the Substrand

(Gr. 5-8) understand and use ratios, proportions and percents in a wide variety of situations;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 5-8) develop, apply and explain methods for solving problems involving proportions and percents;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Grades 9 - 12

Subject: MATH

Standard: Algebra And Functions

Strand: Students Will Use Algebraic Skills And Concepts, Including Functions, To Describe Real- World Phenomena Symbolically And Graphically, And To Model Quantitative Change

Substrand Titles that Address the Substrand

(Gr. 9-12) solve equations and inequalities using graphing calculators and computers as well as appropriate paper- and-pencil techniques

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Estimation And Approximation

Strand: Students Will Make Estimates And Approximations, And Judge The Reasonableness Of Results

Substrand Titles that Address the Substrand

(Gr. 9-12) assess the reasonableness of answers to problems arrived at using pencil- and- paper techniques, mental math, formulas, calculators or computers;

Quarter Mile Math Level 3

(Gr. 9-12) develop, use and apply a variety of estimation strategies in problem situations;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

Subject: MATH

Standard: Operations

Strand: Students Will Add, Subtract, Multiply And Divide With Whole Numbers, Fractions, Decimals And Integers And Develop Strategies For Selecting The Appropriate Computational And Operations

Substrand Titles that Address the Substrand

(Gr. 9-12) use arithmetic operations to solve problems encountered in everyday consumer situations;

Quarter Mile Math Level 2

(Gr. 9-12) apply and explain procedures for performing calculations with whole numbers, decimals, fractions and integers;

Quarter Mile Math Level 2

Quarter Mile Math Level 3

(Gr. 9-12) use appropriate methods for computing, including mental math, estimation, paper- and- pencil and calculator methods;

Quarter Mile Math Level 2

Quarter Mile Math Level 3