

Attainment Company's *Teaching to Standards: Math* Alignment to Georgia Mathematics Standards

Grades 3-12

Note: Alignment is indicated in yellow highlighted text

Grades 3-5

Numbers and Operations

	3rd	4th	5 th
	Place value tenths to then-thousandths Application of addition, subtraction Algebra unit Multiplication concepts 2-3 digit by 1-digit Challenge lessons (Measurement) Concepts of Division 2-3 digit by 1-digit whole numbers Basic concepts of Decimal Fractions and Common Fractions	Place Value hundredths to one million Rounding to nearest 10,000 or 1,000 Multiplication concepts 2-3 digits by 1-2 digits Challenge lessons (Measurement) Multi-Digit Division by 2-digit whole number Compute with 2-digit decimal fractions Add./Subtract common fractions with common denominators Order of Operations Algebra Unit Properties	Multiples, Factors, Divisibility Place Value Measurement Unit Compute (+, -, ,) with and apply decimal fractions less than one and greater than one Algebra Unit Compute and estimate Fractions with unlike denominators Meaning of Percentage

Measurement
Measurement Unit

Elapsed Time (full, half, quarter hour)
Length to nearest $\frac{1}{2}$, $\frac{1}{4}$ inch and mm
Area and Perimeter of squares and rectangles
Challenge Lesson-

Weight and Mass
Angle Concepts and Measurement

Concepts / **Computation**
/ Estimation of Area
Capacity
Concepts and Measurement of Volume of Cube and Rectangular Prism

Geometry
Geometry Unit

Application of Geometric Figures
Angle relationships
Concepts of Circles

Classification of Geometric Figures
Models of 3-D Figures
Coordinate System

Meaning of Congruence
Circumference

Algebra
Algebra Unit
Data Analysis and Probability
Data Analysis Unit

Using Mathematical Expressions to Represent Relationships

Creating and Interpreting Tables and Graphs

Interpret Mathematical Relationships in Quantitative Expressions
Collecting, Organizing, and Displaying Data

Algebraic Representation using variables
Organize, Display, and Analyze Data, Choose Appropriate Graphs

Process Skills

Problem Solving,
Arguments, Language
of Mathematics,
Interconnectivity,
Communication

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Middle School

Numbers and Operations

6th
Factors and
multiples
• Fundamental Theorem
of Arithmetic
• GCF and LCM
• Compute with fractions
and mixed numbers
(unlike denominators)
• Equivalent fractions,
decimals, and percents

7th
• Absolute value
• Compare & order
rational numbers
• Compute & solve
problems with positive and
negative rational numbers

8th
• Square roots of perfect
squares
• Rational vs Irrational
numbers
• Simplify expressions
with integer exponents
• Scientific Notation

Measurement

• Convert units using proportions
• Volume of right rectangular prisms,
right circular cylinders, pyramids
and cones
• Surface area of right rectangular
prisms, right circular cylinders

Geometry

- Line & rotational symmetry
- Ratio, proportion and scale factor with similar plane figures
- Scale drawings
- Compare/contrast right prisms/pyramids and cylinders/cones
- Views of solid figures
- Nets (prisms, cylinders, pyramids, and cones)
- Basic constructions
- Transformations
- Properties of similarity
- 3-D figures formed by translations & rotations in space
- Cross sections of cones, cylinders, pyramids and prisms
- Properties of parallel and perpendicular lines
- Meaning of congruence
- Pythagorean Theorem

Algebra

- Ratio for quantitative relationship
- Write & solve proportions
- Write & solve simple one-step equations
- Algebraic expressions
- Linear equations in one variable
- Relationships between two variables
- Represent, analyze, and solve problems
- Inequalities in one variable
- Graphs of linear equations and inequalities
- Systems of linear equations and inequalities

Data Analysis and Probability

- Question, Collect Data, Make Graphs
- Experimental/Theoretical Probability
- Predictions from investigations
- Question, Collect Data, Make Graphs, Interpret results
- Set theory
- Tree Diagrams/Counting Principles
- Basic laws of probability
- Organize, interpret, make inferences from data

Process Skills

Problem Solving,
Arguments, Communicate,
Connections, Multiple
Representations

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