

7th Grade MATH Curriculum Map

Quarter 1

1	Identify & Analyze Proportional Relationships
<i>Level 4</i>	Find slope (unit rate) (constant of proportionality) from a table, graph or equation
<i>Level 3</i>	Identify & Analyze Proportional Graphs Identify & Analyze Proportional Tables Identify & Analyze Proportional Equations
2	Represent Proportional Relationships with Graphs, Tables & Equations
<i>Level 4</i>	Write inequalities involving proportional relationships Write a proportional equation from a table, graph or description.
<i>Level 3</i>	Write equations involving proportional relationships Graph a proportional relationship.
3	Solve Probability Problems
<i>Level 4</i>	Calculate Multi-State Probabilities Calculate 2 Stage probabilities involving dice, spinners and coins.
<i>Level 3</i>	Calculate Probabilities in Various Scenarios Understand probability in fractions, decimals and percents
4	Make Predictions based on Probability
<i>Level 4</i>	Understand the Law of Large Numbers Calculate predictions based on theoretical probabilities
<i>Level 3</i>	Calculate predictions based on experimental probabilities Analyze the reasonableness of predictions from probabilities

Quarter 2

5	Identify & Compare Rational and Non-Rational Numbers
<i>Level 4</i>	Identify Irrational Numbers & Locate on a Number Line Identify & Compare Terminating & Repeating Decimals, convert between forms
<i>Level 3</i>	Identify & Compare Rational Numbers, convert between forms Identify Integers, Absolute Value & Opposite Numbers
6	Add & Multiply Rational Numbers
<i>Level 4</i>	Solve order of operation problems involving rational numbers Solve exponent problems involving rational numbers
<i>Level 3</i>	Add & Multiply Fractions Add & Multiply Integers
7	Subtract & Divide Rational Numbers
<i>Level 4</i>	Solve 1 step equations involving rational numbers Solve order of operation problems involving rational numbers
<i>Level 3</i>	Subtract & Divide Fractions Subtract & Divide Integers
8	Solve Percent Problems
<i>Level 4</i>	Solve Compound Interest Problems Solve Simple Interest Problems
<i>Level 3</i>	Solve Tax, Discount, and Mark-Up Problems Solve Percent Increase & Decrease Problems

Quarter 3

9	Create & Interpret Data Displays
<i>Level 4</i>	Describe a Distribution of a Histogram and Dot Plot Create & Interpret Histograms
<i>Level 3</i>	Create & Interpret Dot Plots Identify Numerical & Categorical Data
10	Solve Measures of Center & Variability Problems
<i>Level 4</i>	Determine Best Measure Center for given data sets Analyze the change in mean or median from change in data set
<i>Level 3</i>	Find Missing Number for given mean or median Calculate Mean, Median, Mode, Range & IQR from data sets and data displays
11	Design & Analyze Simulations to represent Real Life Situations
<i>Level 4</i>	Design a simulation involving percents and a random number generator Design a simulation using dice, coins or spinners
<i>Level 3</i>	Design a simulation using a random integer generator Display and analyze simulation results using graphs and statistics.
12	Solve Problems with Transformations
<i>Level 4</i>	Describe & Perform reflections and translations with algebraic rules Describe reflections and translations
<i>Level 3</i>	Perform Translations & Reflections from descriptions Identify Reflections & Translations
13	Solve Problems with Similar Shapes
<i>Level 4</i>	Calculate Areas of Similar 2D shapes using scale factor Solve problems involving scale drawings
<i>Level 3</i>	Calculate Missing Lengths of Similar 2D Shapes Identify Similar Shapes and Scale Factor

Quarter 4

14	Solve Problems involving Circumference of a Circle
<i>Level 4</i>	Solve problems involving arc length of a sector of a circle. Calculate diameter or radius, given the circumference
<i>Level 3</i>	Calculate Circumference given the diameter or radius Know where the number Pi comes from
15	Solve Problems involving Area of a Circle
<i>Level 4</i>	Solve problems involving area of a sector of a circle. Solve Problems involving area of a circle.
<i>Level 3</i>	Calculate Radius or Diameter from Area of a Circle Calculate Area of a Circle
16	Solve Problems involving Surface Area & Volume of a Cylinder
<i>Level 4</i>	Justify formulas for volume and surface area of a cylinder Calculate height or radius of a cylinder, given the volume
<i>Level 3</i>	Calculate Volume and Surface Area of Cylinders Describe the difference between Volume and Surface Area
17	Simplify Algebraic Expressions
<i>Level 4</i>	Apply the distributive property to polynomials Apply the distributive property and simplify
<i>Level 3</i>	Combine Like Terms Apply the associative, commutative & distributive properties to algebraic expressions
18	Evaluate Algebraic Expressions
<i>Level 4</i>	evaluate multi-step algebraic expressions involving fractions and radicals evaluate multi-step algebraic expressions involving exponent and square roots
<i>Level 3</i>	evaluate 2 step algebraic expressions evaluate 1 step algebraic expressions