

SEVENTH GRADE
MATH
CORRELATION GUIDE (SPIs)

FIRST NINE WEEKS
Number and Operations

7.1spi. 1	Identify prime and composite numbers up to 50.
7.1spi. 2	Compute efficiently and accurately with whole numbers, fractions, and decimals.
7.1spi. 3	Represent numbers using a variety of equivalent forms (i.e., mixed numbers, fractions, decimals, percents, and integers).
7.1spi. 4	Compare rational numbers (fractions and decimals) using the appropriate symbol ($<$, $>$, $=$).
7.1spi. 7	Apply order of operations when computing with whole numbers (no more than two parentheses and no exponents).
7.1spi. 11	Connect rational numbers (fractions and decimals) to locations on the number line.
7.1spi. 12	Use ratios to represent quantitative relationships.

Algebraic Thinking

7.2spi. 5	Represent mathematical statements and real-world situations using symbols.
7.2spi. 6	Evaluate algebraic expressions for a given value of up to two variables.

Real World Problem Solving

7.1spi. 8	Solve one- and two-step real-world problems involving whole numbers, fractions, and decimals.
7.2spi. 3	Extend rate charts to solve real-world problems.
7.4spi. 8	Solve problems involving scale factors using ratios and proportions.

Data Analysis and Probability

7.5spi. 6	Use a tree diagram or organized list to determine all possible outcomes of a simple compound event.
7.5spi. 9	Connect the symbolic representation of a probability to an experiment.

SECOND NINE WEEKS

Number and Operations

7.1spi. 4	Compare rational numbers (percents and integers) using the appropriate symbol ($<$, $>$, $=$).
7.1spi. 5	Identify the opposite and the reciprocal of a rational number.
7.1spi. 6	Connect percents greater than 100 and percents less than one to real-world situations.
7.1spi. 11	Connect rational numbers (percents and integers) to locations on the number line.

Algebraic Thinking

7.2spi. 2	Apply function rules.
7.2spi. 7	Solve one-step linear equations.
7.2spi. 9	Identify whole numbers that satisfy a given one-variable linear inequality.

Graphs and Graphing

7.3spi. 5	Use ordered pairs to describe given points in a coordinate system.
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Real World Problem Solving

7.2spi. 8	Solve real-world problems involving one-step linear equations.
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THIRD NINE WEEKS

Algebraic Thinking

7.2spi. 1	Extend geometric and numerical patterns.
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Measurement

7.4spi. 1	Apply formulas to determine the areas of rectangles and triangles.
7.4spi. 2	Determine the distance between two points on the x- or the y-axis in Quadrant 1.
7.4spi. 3	Convert from one unit to another within the same system.
7.4spi. 4	Select units of appropriate size and type to measure angles, perimeter, area, surface area, and volume.
7.4spi. 5	Apply formulas to determine the area of parallelograms, trapezoids, and circles.
7.4spi. 6	Estimate length, perimeter, circumference, area, and volume using a variety of strategies.
7.4spi. 7	Find or estimate the area of irregular and complex shapes.

Geometry

7.3spi. 1	Identify the results of transformations of two-dimensional figures (i.e., turns/rotations, flips/reflections, slides/translations).
7.3spi. 2	Classify triangles by angle, size, and length of sides.
7.3spi. 3	Determine congruence of line segments, angles, and polygons.
7.3spi. 4	Classify polygons by properties.
7.3spi. 6	Determine the measure of an angle of a triangle given the measures of the other two angles.
7.3spi. 7	Apply spatial reasoning and visualization to solve real-world problems.

FOURTH NINE WEEKS

Number and Operations

7.1spi. 9	Use estimation strategies to select a reasonable solution to a computation involving rational numbers.
7.1spi. 10	Select a reasonable solution to a real-world division problem in which the remainder must be considered.

Algebraic Thinking

7.2spi. 4	Generalize patterns in data represented in tables and graphs.
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Graphs and Graphing

7.2spi. 10	Select the scatter plot that represents the data in tabular form.
7.2spi. 11	Interpret graphs which represent rates of change.

Data Analysis and Probability

7.5spi. 1	Interpret bar and line graphs to answer questions and solve real-world problems.
7.5spi. 2	Interpret circle graphs displaying real-world data.
7.5spi. 3	Determine the mean for a data set.
7.5spi. 4	Determine the median for a data set.
7.5spi. 5	Make predictions based on data.
7.5spi. 7	Connect data sets and their graphical representation (i.e., bar graphs, stem-and-leaf plots, box plots, and scatter plots).
7.5spi. 8	Use proportional thinking to make conjectures about results of experiments and simulations.