

A Curriculum for Summer School, Extended Time Programs, and Exploration Programs

LESSON	STRAND	MATHEMATICAL CONTENT
1	Data Analysis and Probability	· Bar graphs · Picture graphs
2	Number	· Comparing ratios · Writing equivalent ratios
3	Number	 Bar models for fractions Fractional parts Adding fractions with same denominator
4	Number	 Fractions, decimals, whole numbers on the number line Map reading
5	Number	Double line numberComparing measuresCoordinate grids
6	Algebra	 Organizing computations Decimal computations Money and making change
7	Algebra	 Multiplication and division with decimals Writing formulas
8	Data Analysis and Probability	· Pie charts · Bar charts · Fraction and percent equivalences
9	Number	· Comparing fractions
10	Number	 Benchmark fractions Decimal, fraction percent equivalences
11	Number	· Ratios, fractions, decimals, and percents
12	Geometry and Measurement	 Coordinate grids Direction Angle measure Perpendicular and parallel lines
13	Geometry and Measurement	· Navigational headings · Angle turns
14	Algebra	· Combination of prices · Underpinnings of slope
15	Geometry and Measurement	· Area of irregular figures · Counting areas on grids
16	Geometry and Measurement	 Area of quadrilaterals and triangles Counting area Deriving formulas for area
17	Number	 Finding prices using weight and measure on a scale Double number line Multiplying whole numbers by decimals
18	Number	· Percent: markups and discounts
19	Number	Percent barsDiscounts and profitsDecimal fraction equivalences
20	Data Analysis and Probability	· O and 1 probabilities · Finding chance of events







LESSON	STRAND	MATHEMATICAL CONTENT
1	Algebra	· Making change · Writing formulas
2	Algebra	· Interpret relationships using formulas · Tables and graphs
3	Data Analysis and Probability	Simple chanceRepeated trialsVisual models
4	Number	· Fractions, pie charts, bar charts
5	Number	 Compare fractions, decimals, and percents Add and subtract fractions
6	Number	Compare fractionsRelate fractions to decimals
7	Algebra	 Use pictures, words, and symbols to solve problems Informal algebra
8	Algebra	 Combination charts Visual patterns leading to formulas
9	Geometry and Measurement	 Area of irregular figures Strategies for finding area Linear measurement
10	Geometry and Measurement	 Perimeter and area of geometric figures Enlargement and reduction Relationships of linear and area measure
11	Geometry and Measurement	 Surface area and volume Geometric models Estimation and computation of area and volume
12	Number	Relationships of fractionsDecimals and percentsBenchmark fractions
13	Number	· Discount and sale prices · Benchmark percents
14	Number	 Percent increase and decrease Fraction decimal percent relationships
15	Number	· Place value · Powers of ten
16	Algebra	· Patterns · Order of operations
17	Number	· Factoring · Number theory
18	Number	· Number theory
19	Data Analysis and Probability	· Collect, organize, and display data · Sample strategies
20	Data Analysis and Probability	· Scatter plots









LESSON	STRAND	MATHEMATICAL CONTENT
1	Number	· Place value · Powers of ten
2	Number	· Number theory
3	Number	· Multiplying fractions, squares, and square roots
4	Data Analysis and Probability	Collecting and displaying dataScatter plotsSquares and square roots
5	Data Analysis and Probability	Displays of dataStem and leaf, dot plots, histogramsMode
6	Data Analysis and Probability	· Measures of center · Histograms
7	Data Analysis and Probability	· Box plots · Measures of center
8	Number	· Ratios · Unit rates
9	Number	Fraction, decimal, percent relationshipsComparing ratios
10	Geometry and Measurement	· Scale and ratio · Measurement
11	Algebra	 Recursive and direct formulas Patterns in words, symbols, and tables and graphs
12	Algebra	· Formulas · Problem solving using formulas
13	Number	Squares and square rootsMultiple representations
14	Geometry and Measurement	· Surface area and volume of cylinders and pyramids
15	Algebra	· Generating formulas · Problem solving using formulas
16	Number	Division of fractionsDecomposing numbers
17	Algebra	· Operations with integers · Properties of numbers
18	Geometry and Measurement	· Congruence · Congruent triangles
19	Geometry and Measurement	Angle relationshipsProperties of trianglesOther geometric figures
20	Geometry and Measurement	· Pythagorean theorem

