

Mathematics Topical Index by Grade Level (K – 5)

Kindergarten	First	Second	Third	Fourth	Fifth
<p>Whole Numbers <20</p> <p>2D and 3D shapes: identify, sort, resort, identify in real world</p> <p>Compare and order objects by length, weight, height</p> <p>Identify and duplicate simple and repeating patterns</p> <p>Time: use the identifiers morning, afternoon, day, week, month, year, before/after, and shorter/longer</p>	<p>Add/Subtract basic facts: multiple strategies</p> <p>Whole Numbers <100</p> <p>Compare shapes and compose/decompose plane and solid figures</p> <p>Extend and complete growing and repeating patterns</p> <p>Measure by counting units and grouping units</p> <p>Compare/order objects by descriptors</p> <p>Add/Sub two-digit problems</p>	<p>Whole Numbers through thousands, including PLACE VALUE</p> <p>Add/Sub/Estimate three-digit problems</p> <p>Estimate/measure/compare lengths – select and use appropriate standard units</p> <p>Extend and generalize patterns using words and tables</p> <p>Identify rules for functions</p> <p>Odd/Even</p> <p>Measure weight/mass, capacity/volume</p> <p>Relationship between whole and parts</p> <p>Tell time to nearest hour and half hour</p> <p>Money in cents up to \$1 and in dollars up to \$100</p> <p>Repeated addition</p>	<p>Multiply/Divide basic facts</p> <p>Identify/Model/Compare/ Order fractions and improper fractions</p> <p>Determine equivalent fractions</p> <p>Describe/analyze/compare/ classify shapes based on angles and sides</p> <p>Compose/Decompose/ Transform polygons to make other polygons</p> <p>Congruence/Symmetry</p> <p>Create/analyze/represent patterns using words, variables, tables, and graphs</p> <p>Perimeter</p> <p>Measure using fractional parts (1/2, 1/4, 1/10)</p> <p>Tell time to nearest minute, quarter and half hour</p> <p>Elapsed time</p> <p>Represent/compute/estimate/ solve problems with numbers through hundred thousands</p> <p>Make and analyze frequency tables, bar graphs, pictographs, and line plots</p>	<p>Multiply through 4 digits</p> <p>Recall Division facts</p> <p>Decimals through thousandths</p> <p>Decimal/fractional equivalents</p> <p>Compare/order/estimate fraction and decimal amounts</p> <p>Area in units covering a region and area formula for rectangle</p> <p>algebraic rules to describe patterns with all 4 operations</p> <p>Write expressions for functions with two operations</p> <p>Algebraic expressions and equations</p> <p>Identify angle measures using benchmarks</p> <p>Translations/reflections/ rotations of 45, 90, 180, 270, and 360 degrees</p> <p>Create 3D representations from 2D rep and vice versa</p> <p>Numbers through millions</p> <p>Equivalent fractions/simplify fractions</p> <p>Factors/multiples</p> <p>Relationship between fractions, decimals, and percents</p>	<p>Est. and solve multi-digit division problems with and without remainders</p> <p>Add/Sub/ fractions and decimals (est. with rounding)</p> <p>Prime Factorization</p> <p>Analyze/compare properties of 2D and 3D shapes/solids</p> <p>Surface area of prisms</p> <p>Volume of prisms</p> <p>Use properties of equality</p> <p>Construct/describe graphs with continuous data</p> <p>Plot ordered pairs on a coordinate plane in the first quadrant</p> <p>Compare/convert units of measure</p> <p>Area of parallelograms, triangles, trapezoids – from their relationship to rectangle</p> <p>Prime/composite</p> <p>Factors/multiples</p> <p>Order of operations</p> <p>Integers</p> <p>Make and analyze line graphs, and double bar graphs</p> <p>Continuous vs. discrete data and their appropriate representations</p>