

7th Grade Math Syllabus

CMP Units Covered	Math Concepts
Comparing and Scaling (Ratio, proportion, and percent)	<ul style="list-style-type: none"> • Calculate unit rates • Understanding of proportional reasoning • Solving proportions using cross multiplication
Moving Straight Ahead, Supplemented by Pre-Algebra (Linear relationships)	<ul style="list-style-type: none"> • Represent linear relationships in tables, graphs, and words • Describe the rate that a line increases in terms of slope • Write equations in slope-intercept form ($y=mx+b$) • Solve equations with one variable • Solve equations with two variables • Writing and solving inequalities • Representing inequalities on a graph
Filling and Wrapping, Supplements by Pre-Algebra (Three-dimensional measurement)	<ul style="list-style-type: none"> • Finding the volume of cylinders, cones, and spheres • Finding the surface area of prisms and cylinders
What do you Expect? Supplemented by Pre-Algebra (Probability and statistics)	<ul style="list-style-type: none"> • Define theoretical probability • Define experimental probability • Determine the theoretical probability of an event • Determine the theoretical probability of an event with two stages
Thinking with Mathematical Models (Linear and inverse models)	<ul style="list-style-type: none"> • Writing and simplifying expressions • Writing and solving equations • Writing linear equations from tables, graphs, ordered pairs • Slope of line • Graphing solutions of inequalities on a number line • Inverse variation
Samples and Populations (Data and statistics)	<ul style="list-style-type: none"> • Comparing sets of data using histograms and box and whisker plots • Understanding sample size • Selecting the proper sample size • Comparing data with two variables
Looking for Pythagoras (Only first half) (The Pythagorean Theorem)	<ul style="list-style-type: none"> • Characteristics of polygons • Area • Introduction to radical expressions • Distance between points • Pythagorean Theorem • Pythagorean Triples • Special Right Triangles • Irrational numbers