

Mathematics Curriculum Map Overview

| Topic | Skills | Approximate Weeks of Study |
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| Module 1: Ratios and Proportional Relationships | Students build on their Grade 6 experiences with ratios, unit rates, and fraction division to analyze proportional relationships. They decide whether two quantities are in a proportional relationship, identify constants of proportionality, and represent the relationship by equations. These skills are then applied to real-world problems including scale drawings. | 30 days |
| Module 2: Rational Numbers | Students continue to build an understanding of the number line from their work in Grade 6. They learn to add, subtract, multiply, and divide rational numbers in various/mixed forms (positive and negative integers, decimals, fractions). Students model and solve real world problems with rational number and explain the solution to a real-world problem in context. Module 2 includes rational numbers as they appear in expressions and equations - work that is continued in Module 3. | 30 days |
| Module 3: Expressions and Equations | Module 3 consolidates and expands students' previous work with generating equivalent expressions and solving equations. Students solve real-life and mathematical problems using numerical and algebraic expressions and equations. Their work with expressions and equations is applied to finding unknown angles and problems involving area, volume, and surface area. | 35 days |

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| Module 4: Percent and Proportional Relationships | Module 4 parallels Module 1's coverage of ratios and proportion, but this time with a concentration on percent. Problems in this module include simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error. Additionally, this module includes percent problems about populations, which prepare students for probability models about populations covered in the next module. | 25 days |
| Module 5: Statistics and Probability | Students learn to draw inferences about populations based on random samples. Through the study of chance process, students learn to develop, use and evaluate probability models. | 25 days |
| Module 6: Geometry | Students draw and construct geometrical figures. They also revisit unknown angle, area, volume, and surface area problems, which now include problems involving percentages of areas or volumes. | 35 days |