

Middle School Grade 6 Mathematics

Pre-Requisites: Recommended for 6th grade

Credits: 1.0

Estimated Completion Time: 2 segments/32-36 weeks

Description

The course is designed to engage students at every turn. Students have the opportunity to demonstrate their knowledge of number manipulation by applying it to real world scenarios. The course is packed with games that reinforce content and let students practice the skills they have learned throughout the course. Tidbits of trivia and activities throughout the course leave students with a smile.

Major Topics and Concepts

Segment One Concepts

Module 01: Decimals and Fractions

- Adding and Subtracting Decimals
- Multiplying Decimals
- Division
- Division of Fractions
- Unit Cubes and Volume

Module 02: Ratios and Rate Reasoning

- Understanding a Ratio
- The Unit Rate
- Equivalent Ratios
- Percentages
- Measurements
- Unit Conversions

Module 03: Rational Numbers

- Greatest Common Factor
- Least Common Multiple
- Positive and Negative Numbers
- The Number Line
- Ordering of Numbers
- The Absolute Value

Module 04: The Coordinate Plane

- Ordered Pairs
- Plotting on the Coordinate Plane
- Ratios and the Coordinate Plane
- Applications with Coordinates

Segment Two Concepts

Module 05: Area

- Area of Triangles
- Area of Quadrilaterals
- Area of Polygons
- Shapes on the Coordinate Plane
- Surface Area of Prisms
- Surface Area of Pyramids

Module 06: Expressions

- Numerical Expressions
- Algebraic Expressions

- Parts of Expressions
- Evaluating Algebraic Expressions
- Algebraic Properties
- Equivalent Expressions

Module 07: Equations

- Solutions to Equations and Inequalities
- Applications with Expressions
- Solving Equations
- Inequalities
- Dependent and Independent Variables

Module 08: Understanding Data

- Statistical Questioning
- Measurements of Data
- Dot Plots and Histograms
- Box Plots
- Summarizing Data
- Data with Outliers

Grading Policy

Besides engaging students in challenging curriculum, FLVS guides students to reflect on their learning and to evaluate their progress through a variety of assessments. Assessments can be in the form of self-checks, practice lessons, multiple choice questions, writing assignments, projects, research papers, essays, labs, oral assessments, and discussions. Instructors evaluate progress and provide interventions through the variety of assessments built into a course, as well as through contact with the student in other venues.