Grade 7 Applied Math Syllabus

Course Description/Goals:

This course modifies grade 6 mathematics content to meet the individual learning requirements of students as determined by the ARD committee. The primary focal areas in Grade 7 are number and operations; proportionality; expressions, equations, and relationships; and measurement and data. Students use concepts, algorithms, and properties of rational numbers to explore mathematical relationships and to describe increasingly complex situations; concepts of proportionality to explore, develop, and communicate mathematical relationships, including number, geometry and measurement, and statistics and probability; algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other; connect verbal, numeric, graphic, and symbolic representations of relationships, including equations and inequalities; geometric properties and relationships, as well as spatial reasoning, to model and analyze situations and solve problems; communicate information about geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems; and appropriate statistics, representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations.

Course TEKS/Objectives:

The 7th Grade TEKS (Texas Essential Knowledge and Skills) are organized into reporting categories, each focusing on a specific area of mathematics. These categories include: Probability and Numerical Representations; Computations and Algebraic Relationships; Geometry and Measurement; and Data Analysis and Personal Financial Literacy. Each category contains specific standards (TEKS) that students are expected to master.   https://tea.texas.gov/sites/default/files/ch111c.pdf

Course Outline:

Semester 1	Semester 2
-Operating with Rational Numbers -Fractional Rates -Proportionality -Proportional Relationships -Scale and Scale Drawings -Simple and Compound Probability -Circles -Algebraic Expressions, Two-Step Equations and Inequalities	-Algebraic Expressions, Two-Step Equations and Inequalities -Multiple Representations of Equations -Drawing Inferences -Area and Surface Area -Volume of Three Dimensional Figures -Financial Literacy