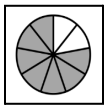
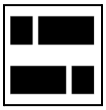
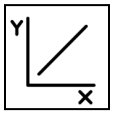
Math 7 Course Overview

Fall Semester

Number Systems - Fractions and Decimals	Number Systems - Integers and Sets	Expressions, Equations, & Inequalities	2D Geometry	3D Geometry
				
In this unit, students perform operations (addition, subtraction, multiplication, and division) with decimal and fraction numbers in order to solve authentic problems.	In this unit, students learn about and perform computations with integers in order to begin working algebraically with negative numbers.	In this unit, students will use multiple representations in order to describe algebraic relationships. Students will also represent situations mathematically and solve for unknown quantities.	In this unit, students analyze 2D figures and their properties in order to recognize and explain rules or formulas. Students are then given questions and authentic problems where they are asked to write equations or select formulas to use and develop a solution. For example, students will find missing measures and area of 2D figures.	In this unit, students analyze 3D figures and their properties in order to recognize and explain rules or formulas. Students are then given questions and authentic problems where they are asked to figure out which formula to use and develop a solution. For example, students will find surface area and volume of 3D figures.

Spring Semester

Ratio, Proportion and Linear Relationships	Percents	Personal Financial Literacy	Linear Relationships	Statistics	Probability
					
In this unit, students apply proportional reasoning in order to answer questions and solve authentic problems involving ratios, rates, similar shapes, and scale drawings.	In this unit, students use equations and proportions in order to answer questions and solve authentic problems involving percent. Students will encounter problems related to percent increase and percent decrease, with an emphasis on financial applications (sales tax, tips, discounts, etc.).	In this unit, students will apply what they have learned about percents to analyze aspects of personal finance (e.g. creating budgets, constructing net worth statements, calculating simple and compound interest, comparing monetary incentives like rebates and coupons) in order to be better consumers.	In this unit, students will identify rates of change and represent relationships in multiple forms (equations, tables, graphs).	In this unit, students interpret, compare, and make inferences from numeric data displayed in a variety of representations (bar graphs, dot plots, circle graphs, box plots) in order to draw conclusions and make decisions. Students will summarize data in order to describe the data distribution.	In this unit, students explore experimental and theoretical probability of simple and compound events in order to make predictions and decisions.