



Reavis High School

Connections Algebra Curriculum Snapshot



Unit 1: Solving Single- and Two-Step Equations

14
Days

Students will learn how to solve single- and two-step linear equations as well as proportions. Students will then learn to apply their knowledge of proportions to help them set up and solve word problems. This skill of setting up and solving proportions is useful in the second Connections project (Lego Skyline). They will then focus on distributing and combining like terms to prepare them for use in multi-step equations in the upcoming unit.



Unit 2: Solving Multi-Step Equations

17
Days

Students will build on knowledge from the previous unit. They will apply their knowledge of combining like terms and distributing to solve multi-step equations. Students will learn to solve more complex word problems involving two-step equations. Students will then be able to solve equations with variables on both sides as well as identifying the number of solutions.



Unit 3: Graphing Linear Equations

22
Days

Students will expand their knowledge of solving equations by solving two-variable equations. They will then apply this knowledge to graph linear equations in a coordinate plane. They will discover the importance of slope and intercepts. Students will use their knowledge of linear equations to compare to function notation.



Unit 4: Linear Inequalities

11
Days

Students will be able to solve and graph linear inequalities. Students will apply their knowledge of number lines and graphing in a coordinate plane to graph inequalities and linear inequalities.



Unit 5: Exponents

15
Days

Students will be able to determine patterns within the properties of exponents. Students will be able to simplify single- and multi-step expressions involving exponents.



Unit 6: Conversions/Word Problems

24
Days

Students will be able to convert from one unit of measurement to another unit of measurement. Students will be able to understand and solve word problems involving percent, time, proportions, and conversions. Students will learn about the five levels of Work Key problems and get exposure to a practice Work Key test.



Unit 7: Quadratics: FOIL/FACTOR

11
Days

Students will apply their knowledge of exponents and combining like terms to add and subtract polynomials. Students will apply their knowledge of the Distributive Property and exponents to multiply polynomials. Students will get exposure to factoring polynomials.



Connections Cross-Curricular Projects

The Connections Program incorporates four cross-curricular projects throughout the year (two per semester). While the focus for these projects is on math, science, and English, students also build skills in communication, team building, technology, and leadership. Within these projects, students learn and incorporate the following technological skills: creating Animoto videos, PowerPoint presentations, brochures (Publisher), and graphs (Excel).