Algebra 1

Essential Learnings Quarter View

Mt.Vernon Community School Corporation is committed to providing a guaranteed and viable curriculum for all students. A guaranteed curriculum ensures all students have the opportunity to learn the same essential learnings (EL's) or the curriculum that is determined to be essential for students to learn during the course. A viable curriculum ensures it is possible for all students to learn in the allotted time. The curriculum blueprint below lists the essential learnings students will be taught and assessed during each nine (9) week quarter as well as the resource themes that support the learning targets. The goal is for every student to become proficient in every essential learning by the end of the school year.

Algebra 1

1st Quarter
- EL #1 Expressions and Functions (Chapter 1)   - I can distinguish between a function versus a non-funciton given a graph or a relation.   - I can use function notation.   - I can evaluate functions given function notation.   - I can determine the domain and range of relations.   - I can determine several relationships of a given graph.
- EL #2 Linear Equations (Chapter 2)   - I can solve a variety of linear equations in one variable fluently.   - I can isolate a specific variable given an equation or formula.
- EL #3 Linear Inequalities (Chapter 5)   - I can solve a variety of linear inequalities in one variable fluently.   - I can solve, graph, and discuss the meaning of the solution set of a compound inequality.
- EL #4 Exponents and Exponential Functions (Chapter 7)   - I can use the properties of exponents to rewrite numeric expressions with positive rational exponents.   - I can evaluate numeric expressions with positive rational exponents.
- EL #5 Quadratic Expressions and Equations (Chapter 8)   - I can find the greatest common factor in polynomials.   - I can factor quadratic expressions.

2nd Quarter

● EL #5 Quadratic Expressions and Equations (Chapter 8)
    ○ I can find the greatest common factor in polynomials.
    ○ I can factor quadratic expressions.

● EL # 6 Graphing Linear Functions and Inequalities (Chapter 3)   ○ I can graph a linear equation given its equation.

● EL # 7 Writing Linear Functions (Chapter 4)
    ○ I can write the equation of a line given the graph, a table, slope and a point, or two points.
    ○ I can identify/interpret the slope and y-intercept of a real –world situation.
    ○ I can write the equation of a linear function to model a real-world situation.
    ○ I can manipulate a linear function written in any form to another form.

● EL # 8 Systems of Linear Equations and Inequalities (Chapter 6)
    ○ I can use the elimination or substitution method for solving a system of two linear equations.
    ○ I can write and solve a system of linear equations to represent a real-world problem, then interpret the solution.

● EL # 9 Graphing/Solving Quadratic Functions and Equations (Chapter 9)
    ○ I can simplify square roots of non-perfect square integers.
    ○ I can simplify square roots of algebraic monomials.
    ○ I can sketch a graph when given a real world problem.
    ○ I can identify and classify maximum or minimum values of the graph of function.
    ○ I can write a quadratic equation in standard form then solve using a variety of factoring techniques or using the quadratic formula.