Algebra 1 - Unit 2: Math - Graphing Linear Equations

Content Area: **Mathematics**
Course(s): **Math 6, Generic Course**
Time Period: **Generic Time Period**
Length: **#18 days**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

MA.A-SSE.A.1	Interpret expressions that represent a quantity in terms of its context.
MA.A-SSE.A.2	Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.
MA.A-CED.A.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
MA.A-REI.D.10	Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).

Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How can a lines slope help to graph a line?
- What is meant by slope?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- The slope of a line allows you to plot points to construct the line.
- The steepness of a line can be determined by computing rise over run.

Content

Students will be able to:

- Find the slope of a line
- Graph a line
- Find the intercepts of a line
- Use slope to determine if lines are parallel, perpendicular, or neither
- Write the equation of a line in a variety of forms
- Write the equation of a vertical or horizontal line

Vocabulary:

- Slope
- Rate of change
- Rise
- Run
- Veritcal/horizontal
- Intercept
- Slope-intercept
- Point-slope
- Standard form
- Parallel
- Perpendicular

Assessments

Resources

- Pearson textbook and online resources
- Teacher made flip-charts
- Web-based activities (mathplayground.com) (coolmath.com)
- Teacher made worksheets/assessments
- NJCTL.org (PMI math)
- Pizzazz series of worksheets