

## UNITS DESIGN FRAMEWORK

### PART I: UNIT OVERVIEW

<b>Content</b>	Math
<b>Grade Level</b>	8
<b>Power Standard/CCSS Power Standard</b>	A2A / 8.EE.6 8.EE.7.b 8.EE.8.c 8.SP.3
<b>Suggested Length of Unit</b>	Approximately 10 weeks

<b>Reference Deconstruction Document and Power Standard/CCSS Power Standard</b>	<a href="http://camdentonschools.schoolwires.net/cms/lib01/MO01001301/Centrality/Domain/39/Grade_8_Mathematics_DeconsStd.pdf">http://camdentonschools.schoolwires.net/cms/lib01/MO01001301/Centrality/Domain/39/Grade_8_Mathematics_DeconsStd.pdf</a>
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<b>Unwrapped Concept:</b> Pull “the what” from deconstruction documents, should represent what students need to know.	<b>Key Vocabulary:</b> Pull academic vocabulary from deconstruction documents, should represent what students need to be able to do.	<b>Depth of Knowledge (DOK)</b>
Symbolic Algebra Variables Numbers Problems Linear Relationships	Variables Numbers Constants Linear Relationships Coefficients Solve	3

<b>Supporting Standards (current and CCSS):</b> Standards that build to the power standard.	<b>Other Vocabulary Terms:</b> Terms worth learning in the unit.
A2A7, A1B8, A1C8, A1D8	Algebra, Rule

<b>Reference to Power Standard Assessment:</b> Paste the link to the appropriate power standard assessment in this box.	Use symbolic algebra to represent and solve problems that involve linear relationships
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## PART II: LEARNING PROGRESSIONS

### Directions:

1. Copy the unwrapped power standard concepts, vocabulary, and DOK into the frames provided below.
2. Brainstorm three to five possible performance tasks that incorporate these concepts, skills, and levels of rigor.
3. Write a synopsis for each selected task and list the tasks in a “learning progressions” sequence. Bold those concepts and skills that are directly represented in the tasks.

### Learning Progressions:

**Task 1:** In cooperative learning groups, students will construct tables, graphs, and rules (equations) to represent linear patterns of change

**Task 2:** Students will explore  $y$ -intercept in a table (as the value of  $y$  when  $x = 0$ ), graph (where the line crosses the  $y$ -axis), equation (represented as  $b$ , constant, in the slope-intercept form of an equation  $y = mx + b$ ), and in real life applications as the starting point or beginning value.

**Task 3:** Students will explore rate of change/slope in a table (exploring the relationship between the independent and dependent variables and how the variables change), graph (the steepness of the line – rise over run), equation (represented as  $m$ , coefficient, in the slope-intercept form of an equation  $y = mx + b$ ), and in real life applications (the constant increase or decrease between the variables).

**Task 4:** Students will analyze linear relationships presented numerically in tables, graphically on a coordinate plane, algebraically as an equation, and verbally in real life applications. For example a linear function represented by a table will be matched to a linear function represented graphically, algebraically, or verbally in real life applications.

## EXAMPLE: UNIT DESIGN FRAMEWORK

### PART I: UNIT OVERVIEW