# CAR Unit Template

## Unit Title: Mathematics – Linear Relationships and Functions – Unit 3 – Module B

**Grade level: Grade 8**

**Timeframe:**

## Essential Questions

## Standards

### Standards (Taught and Assessed):

 **8.EE.B.5** Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects* *has greater speed.*

 **8.EE.B.6** Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation *y* = *mx* for a line through the origin and the equation *y* = *mx* + *b* for a line intercepting the vertical axis at *b*.

 **8.F.B.4** Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (*x*, *y*) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

 **8.F.A.2** Compare properties (e.g. rate of change, intercepts, domain and range) of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.

**Key**: Major Cluster Supporting Cluster Additional Cluster

### Highlighted Career Ready Practices and 21st Century Themes/Skills

### Social-Emotional Learning Competencies

## Instructional Plan

Pre-Assessment and Reflection

| **Pre-Assessment** | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections** |
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Student Learning Objectives (SLO), Strategies, Formative Assessment, Activities and Resources (add rows as needed)

| **SLO – WALT****We are learning to/that** | **Student Strategies** | **Formative Assessment** | **Activities and Resources** | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections** |
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| **8.EE.B.5 – WALT** graph proportional relationships represented in different ways (i.e. ordered pairs, table, equation, phrases, etc.) |  |  |  |  |
| **8.EE.B.5 – WALT** recognize that for proportional relationships, the unit rate is the slope of the graph |  |  |  |  |
| **8.EE.B.5 – WALT** compare the unit rates of two proportional relationships represented in different ways |  |  |  |  |
| **8.EE.B.6 – WALT** explain why the slope is the same between any two distinct points on a non-vertical line by drawing similar right triangles and comparing the ratios of their sides |  |  |  |  |
| **8.EE.B.6 – WALT** derive the equation *y* = *mx* for a line through the origin |  |  |  |  |
| **8.EE.B.6 – WALT** derive the equation *y* = *mx* + *b* for a line intercepting the y-axis at *b* |  |  |  |  |
| **8.F.A.4 – WALT** construct a function to model a linear relationship between two quantities |  |  |  |  |
| **8.F.A.4 – WALT** determine the rate of change and initial value of a function from a description of a relationship or from two (*x*, *y*) values, including reading these from a table or from a graph |  |  |  |  |
| **8.F.A.4 – WALT** interpret the rate of change and initial value of a function in terms of the situation it models |  |  |  |  |
| **8.F.A.2 – WALT** compare properties such as rate of change, intercepts, domain and range of two functions each represented in a different way |  |  |  |  |

Benchmark Assessment 1

| **Benchmark Assessment** | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections**  |
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Benchmark Assessment 2

| **Benchmark Assessment**  | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections** |
| --- | --- |
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Summative Assessments (add rows as needed)

| **Summative Assessment**  | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections** |
| --- | --- |
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Interdisciplinary Connections

| **Interdisciplinary Connections** | **Modifications (ELL, Special Education, Gifted, At-risk of Failure, 504) and Reflections** |
| --- | --- |
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