# CAR Unit Template

## Unit Title: Mathematics – Quotients of Fractions Ratio and Rate Reasoning – Unit 1 – Module B

**Grade level: Grade 6**

**Timeframe:**

## Essential Questions

## Standards

### Standards (Taught and Assessed):

 **6.RP.A.1.** Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, “The* *ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received,*  *candidate C received nearly three votes.”*

 **6.RP.A.2** Understand the concept of a unit rate a/b associated with a ratio *a*:*b* with b ≠ 0, and use rate language in the context of a ratio relationship. *For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar.” “We* *paid $75 for 15 hamburgers, which is a rate of $5 per hamburger.*

 **6.RP.A.3** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

a. Make tables of equivalent ratios relating quantities with whole number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.

b. Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?*

c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

**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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| **6.RP.A.1 – WALT** explain the concept of a ratio through definition. |  |  |  |  |
| **6.RP.A.1 – WALT** use ratio language to describe a relationship between two quantities. |  |  |  |  |
| **6.RP.A.2 – WALT** construct a unit rate (*a*/*b*) from a given ratio (*a*:*b*) |  |  |  |  |
| **6.RP.A.2 – WALT** explain a unit rate (*a*/*b*) associated with a ratio (*a*:*b*) |  |  |  |  |
| **6.RP.A.2 – WALT** express a ratio relationship using rate language |  |  |  |  |
| **6.RP.A.3 – WALT** represent and solve rate and ratio real-world and mathematical problems by using tables, tape diagrams, double number line diagrams, and equations |  |  |  |  |
| **6.RP.A.3a. – WALT** create tables of equivalent ratios and find missing values with whole number measurements |  |  |  |  |
| **6.RP.A.3a. – WALT** plot pairs of values, in the coordinate plane, from a ratio table to compare ratios |  |  |  |  |
| **6.RP.A.3b. – WALT** solve unit rate problems, including unit pricing and constant speed |  |  |  |  |
| **6.RP.A.3c. – WALT** find the part, whole, and percent of a quantity in real-world problems |  |  |  |  |
| **6.RP.A.3d. – WALT** unit ratios can be used to manipulate and transform units accurately |  |  |  |  |
| **6.RP.A.3d. – WALT** convert measurement units utilizing ratio reasoning |  |  |  |  |

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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