Module 1: Ratios and Unit Rates
(Trimester 1: 35 Days)

Topic A	Representing and Reasoning About Ratios		6.RP.1 6.RP.3
ASSESSMENT	6.RP.1	Reporting Strand: Understands and uses ratios to solve problems	Report Card: 0-4
Topic B	Collections of Equivalent Ratios		6.RP.3
Topic C	Unit Rates		6.RP.2 6.RP.3
ASSESSMENT	6.RP.2	Reporting Strand: Understands and uses ratios to solve problems	Report Card: 0-4
Topic D	Percent		6.RP.3
ASSESSMENT	6.RP.3	Reporting Strand: Understands and uses ratios to solve problems	Report Card: 0-4

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."*5

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.

Reporting Strand: Understands and uses ratios to solve problems

CCSS	4 – Mastery	3- Proficient	2 – Basic	1 – Below Basic	0 – No Evidence
6.RP.1	Can extend thinking beyond the standard, including tasks that may involve one of the following: • Designing • Connecting • Synthesizing • Applying • Justifying • Critiquing • Analyzing • Creating • Proving	Write **and explain** ratios using correct language (ie. to, per, for every) in context of the situation.	Write ratios **in context of the situation**.	Write ratios **without context**	Little evidence of reasoning or application to solve the problem Does not meet the criteria in a level 1
6.RP.2		Determine the unit rate of a given ratio **and explain** the rate in context of a situation using correct language (ie. per, for every)	Determine the unit rate of a given ratio in **context of a situation**	Determine the unit rate of a given ratio in a **mathematical problem**	
6.RP.3 AB		Use tables to do **all of the following:** • Make equivalent ratios • Find missing values • Plot the pairs of values on the coordinate plane • Compare ratios Solve real world problems involving **both** of the following: • Unit rate pricing • Constant speed	Use tables to **do 2 or 3 of the following**: • Make equivalent ratios • Find missing values • Plot the pairs of values on the coordinate plane • Compare ratios Solve **real world** problems involving **one** of the following: • Unit rate pricing • Constant speed	Use tables to **do 1 of the following:** • Make equivalent ratios • Find missing values • Plot the pairs of values on the coordinate plane • Compare ratios Solve **mathematical** problems involving: • Unit rate pricing • Constant speed	
6.RP.3 CD		Solve real world problems involving **all of the following:** • Percent of a quantity as a rate of 100 • Finding the whole given a part and a percent • Convert units Using any of the following: tables of equivalent ratios, graphs, tape diagrams, double number lines, or equations.	Solve **real world** problems involving **at least 2** of the following: • Percent of a quantity as a rate of 100 • Finding the whole given a part and a percent • Convert units Using any of the following: tables of equivalent ratios, graphs, tape diagrams, double number lines, or equations.	Solve **mathematical** problems involving: • Percent of a quantity as a rate of 100 • Finding the whole given a part and a percent • Convert units Using any of the following: tables of equivalent ratios, graphs, tape diagrams, double number lines, or equations.	

Entiende y usa proporciones para resolver problemas

CCSS	4 – Dominio	3- Apto	2 – Básico	1 – Por debajo de lo Básico	0 – No hay Evidencia
6.RP.1		Escribe **y explica** razones usando la terminología correcta (ej. a, por, para cada) en el contexto de la situación.	Escribe razones **en el contexto de la situación.**	Escribe razones **sin un contexto**.	
6.RP.2		Determina la tasa por unidad de una razón dada **y explica** la tasa en el contexto de la situación usando la terminología correcta (ej. a, por, para cada).	Determina la tasa por unidad de una razón dada **en el contexto de la situación.**	Determina la tasa por unidad de una razón dada en un **problema matemático.**	
6.RP.3 AB	Puede pensar más allá del estándar, incluyendo tareas que puedan involucrar uno de los siguientes aspectos: • Diseñar • Conectar • Sintetizar • Aplicar • Justificar • Criticar • Analizar • Crear • Demostrar	Usa tablas para hacer **todo lo siguiente**: • Hacer razones equivalentes • Hallar los valores que faltan • Marcar pares de valores en el plano de coordenadas. • Comparar razones Resuelven problemas del mundo real con los **dos** siguientes: • Precio por tasa de unidad • Velocidad constante	Usa tablas para hacer **2 o 3 de lo siguiente**: • Hacer razones equivalentes • Hallar los valores que faltan • Marcar pares de valores en el plano de coordenadas. • Comparar razones Resuelven **problemas del mundo real** con **uno** de los siguientes: • Precio por tasa de unidad • Velocidad constante	Usa tablas para hacer **1 de lo siguiente**: • Hacer razones equivalentes • Hallar los valores que faltan • Marcar pares de valores en el plano de coordenadas. • Comparar razones Resuelven **problema matemático con**: • Precio por tasa de unidad • Velocidad constante	Hay poca evidencia de razonamiento o aplicación para resolver el problema No reúne los criterios del nivel 1
6.RP.3 CD		Resuelven problemas del mundo real **con todo lo siguiente**: • Porcentaje de cantidad como una tasa de 100 • Hallar un entero dada una parte y un porcentaje • Convertir unidades. Usando cualquiera de lo siguiente: tablas de razones equivalentes, gráficas, diagramas de Cintas, diagramas de rectas numéricas dobles o ecuaciones.	Resuelven **problemas del mundo real con al menos 2 de lo siguiente**: • Porcentaje de cantidad como una tasa de 100 • Hallar un entero dada una parte y un porcentaje • Convertir unidades. Usando cualquiera de lo siguiente: tablas de razones equivalentes, gráficas, diagramas de Cintas, diagramas de rectas numéricas dobles o ecuaciones.	Resuelven **problema matemático**: • Porcentaje de cantidad como una tasa de 100 • Hallar un entero dada una parte y un porcentaje • Convertir unidades. Usando cualquiera de lo siguiente: tablas de razones equivalentes, gráficas, diagramas de Cintas, diagramas de rectas numéricas dobles o ecuaciones.	