Plan for Grade 6 Unit 3: Unit Rates and Percentages

Relevant Unit(s) to review: Grade 4 Unit 5: Multiplicative Comparison and Measurement

Essential prior concepts to engage with this unit	• Converting units of the same scale • Ratio reasoning • Use of a double number line
Brief narrative of approach	This unit can be taught with fidelity with minor adjustments when practicing fluency with percentages. The broad goal of the unit is for students to engage with percentages in multiple representations. Students begin the unit connecting elementary unit conversion to rates and ratios. Before beginning this unit, use the Check Your Readiness assessment to determine student understanding of unit conversions. Additionally, if students need continued practice with double number lines or ratio reasoning from the previous unit, it may be worth reviewing these concepts further. As the unit progresses, and students move towards becoming fluent procedurally, students will gradually see different number choices and use different strategies to solve percentage problems. While these problems should not be skipped to highlight similarities in tasks, emphasizing specific ideas while accelerating the pace instructing the unit is recommended in this context.

Lessons to Add	Lessons to Remove or Modify
For this unit, we are not suggesting any additional lessons be added. Although it is not necessary to be completely familiar with measurement and estimation to complete the tasks from this unit, if time allows, it may be useful to review concepts from Grade 4 Unit 5 in which students become familiar with various units of measure and some conversion.	1. Lesson 2: This lesson is designed to anchor students' perception of standard units. 2. Lesson 15: This lesson presents a more efficient way for finding A% of B. 3. Lesson 17: This culminating lesson provides an application of the material learned in the unit. It could be moved to outside of class if the additional time is needed.
Lessons added: 0	Lessons removed: 3

Modified Plan for Grade 6 Unit 3

Day	IM lesson	Notes
	Check your Readiness Assessment	6.3 Check Your Readiness Assessment Note that the Check Your Readiness assessment includes item-by-item guidance to inform just-in-time adjustments to instruction within the lessons. Give this assessment a few days before the unit so you can analyze and plan adjustments accordingly.
1	6.3.1	
2	6.3.3	
3	6.3.4	
4	6.3.5	
5	6.3.6	

6	6.3.7	
7	6.3.8	
8	6.3.9	
9	6.3.10	
10	6.3.11	
11	6.3.12	
12	6.3.13	In Lessons 13-16, students may skip optional activities if necessary
13	6.3.14	
14	6.3.16	
15	6.3 End of Unit Assessment	

Priority and Category List for Lessons

High priority (+), Medium priority (0), Low priority (-)

E: Explore, Play, and Discuss, D: Deep Dive, A: Synthesize and Apply

Lesson	Priority (+, 0, -)	Category (E, D, A)	Notes
6.3.1	0	E	This lesson focuses on finding and making sense of a “rate per 1.” The cool-down asks students to find a rate per one and then multiply to find another quantity.
6.3.2	-	E	This lesson is considered optional. The lesson focuses on anchoring students’ perception of objects with the closest unit of measurement. The cool-down asks students to match units to standard measurements.

6.3.3	0	E	This lesson helps develop student familiarity with standard units. The cool-down asks students to match units of measurements with context.
6.3.4	+	D	In this lesson, students' progress to convert units in different systems of measurement using ratio reasoning The cool-down asks students to convert measurements into different units.
6.3.5	+	D	In this lesson, students will have two ratios associated with the same rate per 1, and use it to compare ideas such as speeds and price. The cool-down supports students using a rate per one to compare different ratios (cost of bottles of water) in context.
6.3.6	+	D	In this lesson, students are introduced to the idea of two unit rates associated with a ratio. It is moving students towards the concept of finding a unit rate by dividing two numbers. The cool-down asks students to complete a rate table to find numbers.
6.3.7	0	D	The purpose of this lesson is to make explicit to students that equivalent ratios have the same unit rate. The cool-down asks students to complete a rate table and explain their reasoning.
6.3.8	0	D	This lesson allows students to practice working with equivalent ratios, tables that represent them, and associated unit rates in the familiar context of speed, time, and distance to find given quantities. The cool-down asks students to find time given a rate. (10 ft and 6 seconds)
6.3.9	0	A	In this lesson, students work with unit rates without scaffolds as they choose what unit rate they want to use to solve a problem, divide to find the desired unit rate, and multiply or divide by the unit rate to answer questions. The cool-down asks students to compare two rates. Specifically, what a better deal between two price points.
6.3.10	+	E	This lesson is the first of two that introduce students to percentages as a rate per 100 – specifically use a double number line to find percentages. cool-down asks students to find a percentage with benchmark numbers.
6.3.11	+	D	In this lesson, they explore percentages of quantities other than 100 and 1 in a variety of contexts. The cool-down has students to find a quantity upon being given a percentage and a double number line.

6.3.12	0	D	In this lesson, students use tape diagrams to find percentages. The cool-down has students find percentages given quantities and a double number line. The cool-down ask students to find a percentage and draw a tape diagram to illustrate their answer
6.3.13	0	D	This lesson is to help students understand the connection between benchmark percentages and common fractions. The cool-down asks students to find a value given a benchmark percentage and a quantity.
6.3.14	0	A	In this lesson, students solve percentage problems with methods of their choice. The cool-down asks students to do just that.
6.3.15	0	A	In this lesson, students apply what they know about percentages to solve problems with more “difficult” (non benchmark) numbers. The cool-down has students apply percentages to numbers and order them from least to greatest.
6.3.16	0	A	In this lesson, students continue solving percentage problems with larger quantities. The cool-down asks students to find a percentage using quantities in the hundred thousands.
6.3.17	-	A	This lesson is optional. In this culminating lesson, students make material and cost estimates for a home improvement project, applying and integrating many concepts and skills from the past three units.