Grade 6 Unit 3: Unit Rates and Percentages
Lessons 1–9: Unit Conversions and Rates

Explore, Play, and Discuss

- I understand that if two ratios have the same rate per 1, they are equivalent ratios.
- When measurements are expressed in different units, I can decide who is traveling faster or which item is the better deal by comparing "how much for 1" of the same unit.

Activity Suggestions:

- ➢ Lesson 4, Activity 3: Explore different ways to think about division.
- ➢ Lesson 5: Students compare speeds and prices. In this context, recognize that finding a rate per 1 is an effective strategy to do so. If there is not sufficient time for the entire lesson, use Activity 2 and 3.

Assessment Suggestions:

- ➢ Check Your Readiness assessment: Administer all items at least a couple of days before beginning instruction to gather data. Use the guidance provided with each problem to adjust instruction so that students can access the math in the unit.
- ➢ Lesson 5 cool-down

Deep Dive

- I understand that if two ratios have the same rate per 1, they are equivalent ratios.

Activity Suggestions:

- ➢ Lesson 6 introduces unit rates and asks students to interpret two unit rates associated with a ratio. Focus on how students interpret the two unit rates in terms of a unit rate rather than a rate or ratio with quantities greater than 1.
- ➢ Lesson 7, Activity 2. Emphasizes that when two ratios are equivalent, they have the same unit rate.

Assessment Suggestions:

- ➢ Lesson 6 cool-down
- ➢ Lesson 7, Activity 3
- ➢ Lesson 7 cool-down

Synthesize and Apply

- I can convert measurements from one unit to another, using double number lines, tables, or by thinking about "how much for 1."

Activity Suggestions:

- ➢ Lesson 8, Activity 2. Answer questions in the context of speed.
- ➢ Lesson 9. Students are working with unit rates without scaffolds.

Assessment Suggestions:

- ➢ Lesson 8 cool-down
- ➢ Lesson 9 cool-down

Ongoing Practice

- Assign one or more of the distributed practice problem sets from Lessons 1–9 to be completed over the time period that the section is being worked on.
- These could also be lagging, so that students are working on practice problems from the previous section or unit during this section or unit.
- Specify which problems students should submit, or let them choose.
- Note: Several existing platforms already have IM's practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources

- Any of the warm-up activities from Lessons 1–9
- Lesson 1

Lessons 10–17: Rates and Percentages

Explore, Play, and Discuss

- I can use double number line diagrams to solve different problems like "What is 40% of 60?" or "60 is 40% of what number?"

Activity Suggestions:

- ➢ Lesson 10, Activity 3. Students are reasoning about the monetary value of different percentages of a dollar.
- ➢ Lesson 11. Finding percentages of quantities that are not 100 or 1.

Assessment Suggestions:

- ➢ Lesson 11 cool-down
- ➢ Tell students to find examples of percentages in their lives that they can share.

Deep Dive

- I can choose and create diagrams to help me solve problems about percentages.

Activity Suggestions:

- ➢ Lesson 12. Students use tape diagrams to find percentages. If there are time constraints when giving this lesson, Activity 4 is considered optional.
- ➢ Lesson 14, Activity 2. Solving percentage problems in the context of shopping.

Assessment Suggestions:

- ➢ Lesson 12 cool-down
- ➢ Lesson 13 cool-down

Synthesize and Apply

- I can choose how to use unit rates to solve problems.

Activity Suggestions:

- ➢ Lesson 15, Activity 3 finding percentages with the goal of using a standard procedure P/100 times a given number.
- ➢ Lesson 16 finding percentages in any context.

Assessment Suggestions:

- ➢ Lesson 15 cool-down
- ➢ Lesson 16 cool-down
- ➢ Revisions to previous assessment prompts.

Ongoing Practice

- Assign one or more of the distributed practice problem sets from Lessons 10–17 to be completed over the time period that the section is being worked on.
- These could also be lagging, so that students are working on practice problems from the previous section or unit during this section or unit.
- Specify which problems students should submit, or let them choose.
- Note: Several existing platforms already have IM's practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources

- Any warm up activities from Lessons 10–17
- Lesson 13: benchmark percentages such as 25%, 50%, and 75%.
- The family support materials from this unit provide high-level guidance on the content of this unit and sample problems with answers.