Unit 2 Lesson 14: Solving Equivalent Ratio Problems

1 What Do You Want to Know? (Warm up)

Student Task Statement

Consider the problem: A red car and a blue car enter the highway at the same time and travel at a constant speed. How far apart are they after 4 hours?

What information would you need to be able to solve the problem?

2 Info Gap: Hot Chocolate and Potatoes

Student Task Statement

Your teacher will give you either a *problem card* or a *data card*. Do not show or read your card to your partner.

If your teacher gives you the *problem card*:

- 1. Silently read your card and think about what information you need to be able to answer the question.
- 2. Ask your partner for the specific information that you need.
- 3. Explain how you are using the information to solve the problem.
 - Continue to ask questions until you have enough information to solve the problem.
- 4. Share the *problem card* and solve the problem independently.
- 5. Read the *data card* and discuss your reasoning.

If your teacher gives you the *data card*:

- 1. Silently read your card.
- 2. Ask your partner "What specific information do you need?" and wait for them to ask for information.

If your partner asks for information that is not on the card, do not do the calculations for them. Tell them you don't have that information.

- 3. Before sharing the information, ask "Why do you need that information?" Listen to your partner's reasoning and ask clarifying questions.
- 4. Read the *problem card* and solve the problem independently.
- 5. Share the *data card* and discuss your reasoning.

Pause here so your teacher can review your work. Ask your teacher for a new set of cards and repeat the activity, trading roles with your partner.

3 Comparing Reading Rates (Optional)

Student Task Statement

- Lin read the first 54 pages from a 270-page book in the last 3 days.
- Diego read the first 100 pages from a 325-page book in the last 4 days.
- Elena read the first 160 pages from a 480-page book in the last 5 days.

If they continue to read every day at these rates, who will finish first, second, and third? Explain or show your reasoning.