Fraction Multiplication and Division Situations

Let's solve problems involving multiplying and dividing fractions.

Warm-up

Number Talk: Multiply and Divide

Find the value of each expression mentally.

- $5 \div \frac{1}{6}$
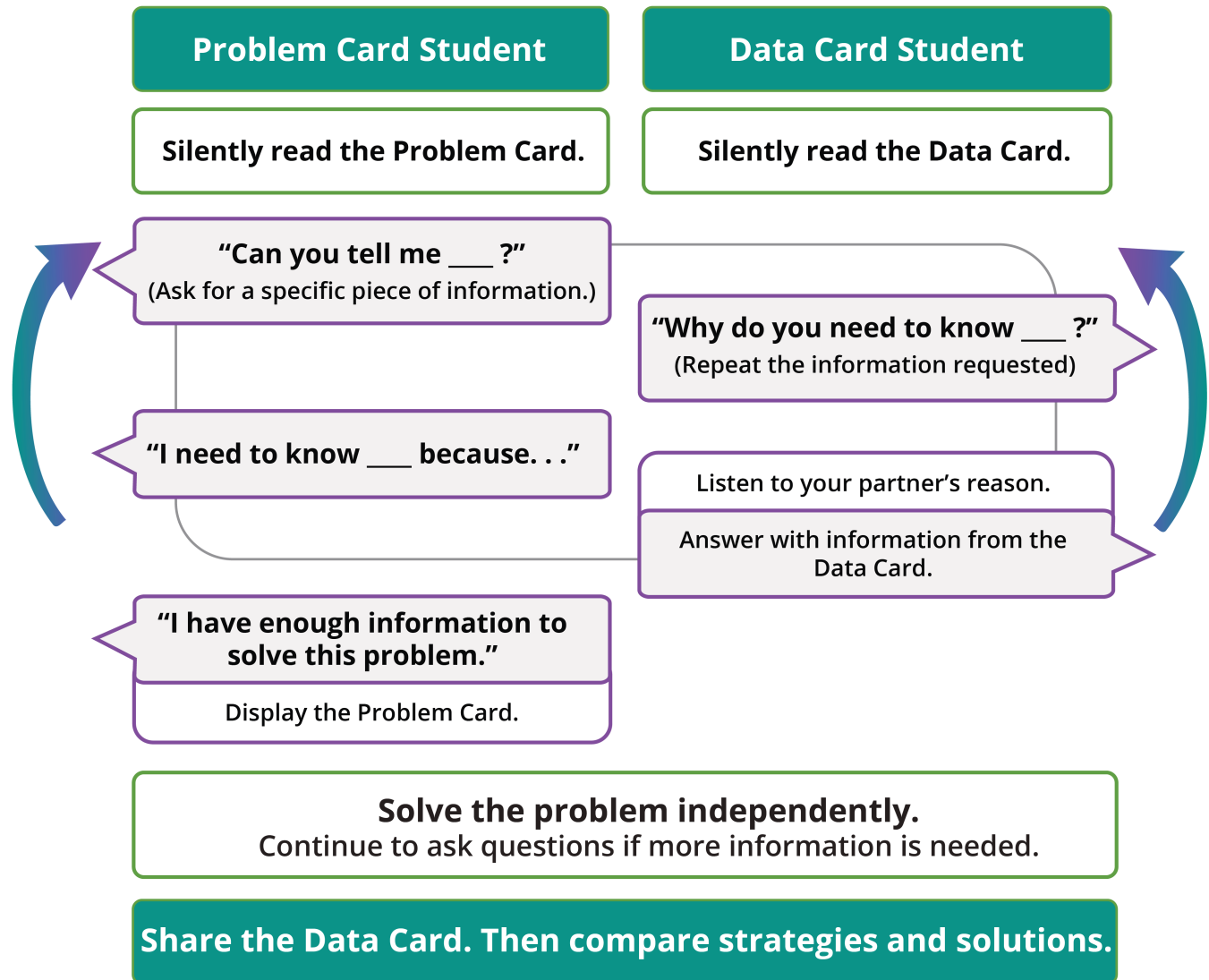
- $5 \times \frac{1}{6}$

- $\frac{1}{5} \div 6$

- $\frac{1}{5} \times \frac{1}{6}$

Info Gap: Tiles

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

Problem Card Student	**Data Card Student**
Silently read the Problem Card.	**Silently read the Data Card.**

"Can you tell me ____ ?"
(Ask for a specific piece of information.)

"Why do you need to know ____ ?"
(Repeat the information requested)

"I need to know ____ because. . ."

Listen to your partner's reason.

Answer with information from the Data Card.

"I have enough information to solve this problem."

Display the Problem Card.

Solve the problem independently.
Continue to ask questions if more information is needed.

Share the Data Card. Then compare strategies and solutions.

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.

Multiplication or Division

Solve each problem. Explain or show your reasoning.

1. If 11 grains of rice weigh $\frac{1}{3}$ gram, how much does each grain of rice weigh?

2. Mai's road is $\frac{9}{10}$ mile long. She ran $\frac{3}{4}$ of the length of her road. How far did she run?

3. If each tennis ball weighs $2\frac{1}{16}$ ounces, how much do 9 tennis balls weigh?