

TRY IT Rich tasks that provide multiple entry points and hands-on learning engage individual students' preconceptions and build on prior knowledge. Students use language routines to make sense of the problem before solving the problem on their own using the strategies and tools of their choice.

LESSON 16 | SESSION 4 ■■■■□

Develop Using Unit Rates to Convert Measurements

Read and try to solve the problem below.

A band marches in the African American Day Parade in New York City. The band marches 800 meters every 15 minutes. At this rate, how many kilometers does the band march in 1 hour?



TRY IT  **Math Toolkit** double number lines, grid paper, rulers

DISCUSS IT

Ask: How do you know your answer is reasonable?

Share: My answer makes sense because ...

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DISCUSS IT Students turn and talk to a partner and discuss strategies. Strategically selected student work is shared during a class discussion to build conceptual understanding.

CONNECT IT

► Use the problem from the previous page to help you understand how to convert between units of measure.

- 1 Look at the first **Model It**. How are the relationships 1,000 meters = 1 kilometer and 60 minutes = 1 hour similar to rates?
- 2 Look at the second **Model It**. The relationship 1 kilometer = 1,000 meters is used to write the rate $\frac{1}{1,000}$ kilometer per meter. How is this rate shown by a row of the table of meters and kilometers in the first **Model It**?
- 3 There are two rates that relate meters and kilometers. In the second **Model It**, why is $\frac{1}{1,000}$ the unit rate that is used to convert 3,200 meters to kilometers?
- 4 How many kilometers does the band march in 1 hour?
- 5 How is converting between measurements similar to finding equivalent ratios?
- 6 **Reflect** Think about all the models and strategies you have discussed today. Describe how one of them helped you better understand how to convert between units of measure.

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CONNECT IT Students make connections between the strategies discussed and those in the worktext to reinforce and extend their understanding.