Unit 5, Lesson 18

Using Water Efficiently

Let's investigate saving water.

18.1 Notice and Wonder: Water

What do you notice? What do you wonder?

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18.2 Comparing Baths and Showers

Some people say that it uses more water to take a bath than a shower. Others disagree.

1. What information would you need in order to answer the question?

2. Describe how you could get the information and how you would use the information to find the answer.

3. Find out values for the measurements you need to use the method you described. You may ask your teacher or research them yourself.
4. Under what conditions does a bath use more water? Under what conditions does a shower use more water? Explain or show your reasoning.

18.3 Representing Water Usage

1. Continue considering the problem from the previous activity. Name two quantities that are in a proportional relationship. Explain how you know they are in a proportional relationship.

2. What are two constants of proportionality for the proportional relationship? What do they tell us about the situation?

3. On graph paper, create a graph that shows how the two quantities are related. Make sure to label the axes.
4. Write two equations that relate the quantities in your graph. Make sure to record what each variable represents.

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