

Lesson 18: Using Water Efficiently

Let's investigate saving water.

18.1: Comparing Baths and Showers

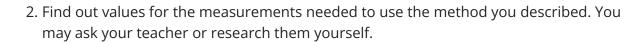
Some people say that it uses more water to take a bath than a shower. Others disagree.

1. What information would you collect in order to answer the quest	ion?

2. Estimate some reasonable values for the things you suggest.

18.2: Saving Water: Bath or Shower?

1. Describe a method for comparing the water usage for a bath and a shower.



3. Under what conditions does a bath use more water? Under what conditions does a shower use more water?



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.