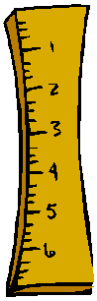
AgriLIFE EXTENSION
Texas A&M System

Splish, Splash, I Was Takin' a Bath, or Should It Be a Shower?

Objectives:
- Learn the amount of water used taking a bath.
- Learn the amount of water used taking a shower.
- Learn ways to conserve water when taking a shower or a bath.



Materials Needed: ruler, paper, pencil, and your bathtub

Research Project

Data Collection:

1. Fill your bathtub as if you were taking a bath. Using your ruler, measure the depth of the water (how deep is the water with your ruler measuring vertically) at four different locations in the bathtub. Record your measurements. The four depth measurements are:

   1. _____ inches 2. _____ inches 3. _____ inches 4. _____ inches

2. Add the four measurements together. Then divide the total by four, which equals the average depth of water in the tub. Record the average depth.

   The average depth is _____ inches.

3. Every inch of water in a bathtub represents about 4½ (4.5) gallons of water. Multiply the average depth of the water by 4.5 for an estimate of the amount of water you use to take a bath. Record that below.

   I use _____ gallons of water when I take a bath.

4. Now you are ready to take a bath in your tub full of water. Afterwards, drain the water from the tub.

Continue with your data collection the next day, only this time you will take a shower.

5. Close the drain in the bathtub and take a shower. Be sure that the drain is closed so the water stays in the tub.

6. After showering, use your ruler to measure the depth of the water (how deep is the water with your ruler measuring vertically) at four different locations in the bathtub. Record your depth measurements:

   1. _____ inches 2. _____ inches 3. _____ inches 4. _____ inches

7. Add the four measurements together. Then divide the total by four, which equals the average depth of the water in the tub. Record the average depth.

   The average depth is _____ inches.

   Every inch of water in a bathtub represents about 4½ (4.5) gallons of water. Multiply the average depth of the water by 4.5 for an estimate of the amount of water you use to take a bath. Record that below.

   I used _____ gallons of water when I took a shower.

8. Which used less water—the bath or the shower?

   The bath used _____ gallons. The shower took _____ gallons.

9. How can water be saved when taking a bath?

10. How can water be saved when taking a shower?

Saving Water When Bathing

- Turn the faucets off completely to avoid drips and slow leaks.
- Take short showers, not baths.
- Limit showers to 5 minutes or less.
- Take a NAVY shower. WHAT? Use enough water to wet your hair and body; turn the water off and lather thoroughly; then turn the water back on to rinse. You may use as little as 1–2 gallons of water.
- Plug up the tub before turning on the water for a bath. The initial burst of cold water can be warmed by adding hot water later.
- Go with the low flow! You can save water by replacing a standard showerhead with a low-flow version. Your family can purchase one for about $6, and they are easy to install. A new showerhead can save your family almost 30 gallons of water a day.
- As you wait for the shower water to heat up, collect the cold water in a bucket for watering plants.

Can you think of other ways to save water?

Check your water bill. Have you saved water and money by following the water-saving suggestions?

Citizenship Activity

- Purchase a low-flow showerhead for a needy family.
- Provide water saving flyers to give away.

Character Activity

Save water, save the environment, save money for your family, and develop water-saving habits. You will be glad you did!

References

Investigating Water, Texas AgriLife Extension Service, 2001
Conserving Ground Water in the Home