



How to save water at home

It's very easy to save water at home by making a few small changes in your habits. Simply by not leaving the tap running continuously while brushing teeth or shaving, a community can significantly reduce its water consumption. If you are sceptical about this claim, try completing the following assignments.



Assignment 1



How do you brush your teeth?

The population of your town is 100,000, and everyone brushes their teeth twice a day. Let's suppose that most people brush their teeth while leaving the tap running, and fewer people turn the tap on only to rinse their mouths and toothbrushes. The flow rate of water is 2 litres per minute, and on average it takes three minutes for most people to brush their teeth. The second approach (turning the water on only for rinsing) uses half the amount (approximately 1 litre) of water.

1

How much water would be used per year if everyone in the town ran the water continuously while brushing their teeth twice a day?

2

How much water would be used per year if everyone ran the water only to rinse their mouths and toothbrushes?

3

How much water would be saved per year if everyone followed the second approach?

ANSWERS: 1: 438 mln litres/438,000 m³ 2: 73 mln litres/73,000 m³ 3: 365 mln litres/365,000 m³



Assignment 2



How do you shave?

Let's suppose that the population of your town is 160,000. Assume that half are men, and half of the men shave every morning. Most of those who shave do so while running the tap continuously, while others turn the tap on only to rinse their faces and razors.

An average shave takes about 6 minutes. Tap water flows through a semi-open faucet at about 2 litres per minute. The average amount of water used for rinsing only is 1 litre.

1 How much water is used annually if, every morning, all shavers run the tap continuously while shaving?

2 How much water is used if these same shavers run the water only for rinsing?

3 How much water would be saved every year if all shavers followed the second approach?

ANSWERS: 1: 175.2 mln litres/175,200 m³ 2: 14.6 mln litres/14,600 m³ 3: 160.6 mln litres/160,600 m³