

Whitney Water Center Learning from Home

Episode 21: A Leaky Faucet

Introduction

It's not surprising to find a faucet that is leaking, what is surprising is the amount of water one leak can waste in a day. An easy experiment will help determine just how much water one small leak wastes over 24 hours. Leaks are frequently overlooked, but the dripping water is a waste of our natural resources and money! Fixing leaks helps the earth and saves money.

Experiment 1:

Materials

- Styrofoam cup
- Small empty plastic cup
- Water
- Timer or stopwatch
- Container that can measure milliliters or ounces

Link to video

Facebook: <https://www.facebook.com/scctrwa/videos/256783775735701/>

YouTube: <https://youtu.be/Uo8sZQWSuko>



How much water does a leaky faucet waste?

Use the following formula to calculate the amount of water that dripped from your faucet in one day.

How many milliliters of water dripped in one minute?

_____ mL

_____ mL x .375 = _____ gallons per day

If you are measuring in ounces, use this formula:

_____ ounces

_____ ounces x 11.25 = _____ gallons per day

Here's how the simplified formula above was determined:

$$\frac{? \text{ milliliters}}{1 \text{ minute}} \times \frac{1440 \text{ minutes}}{1 \text{ day}} \times \frac{1 \text{ ounce}}{30 \text{ mLs}} \times \frac{1 \text{ gallon}}{128 \text{ oz}} = \text{_____ gallons/day}$$