

Game: How much water can you save?



Water is one of the most important resources available on earth, and all living things on Earth need it in one form or another in order to survive. As the Sonoran Desert gets fewer than 15 inches of rain a year, the plants and animals that live here need to use their water very wisely in order to stay cool and hydrated. Jackrabbits only come out during the cooler hours of the day and use the blood vessels in their large, thin ears to stay cool. Most cacti have shallow root structures that spread wide to catch as much water as they can, while mesquite trees have tap roots that dig deep into the soil to get water. Kangaroo rats get all their water from the plants that they eat, and desert tortoises burrow in deeper, cooler soil in order to retain water.

Let's play a game to see how well you can conserve water!

Here's what you'll need:

- 2 containers – Tupperware or buckets work great!
- 1 sponge
- A ruler or a measuring cup
- A timer (optional)

How to play:

Fill one of the containers with the water (use the ruler or measuring cup) and write down how much water is inside. Bring everything outside and put the two containers about 20 feet apart, being very careful not to spill any water. Start at the water-filled container, start a 5-minute timer, and then use the sponge to move as much water you can to the empty container. Once the 5 minutes is up, measure the amount of water you moved to the empty container, the amount of water still in the first container and add them together. Then subtract that number from the amount of water you started with to see how much water was wasted!

Need help with the math? Here's an example:

Let's say I started with 48 ounces of water before playing. At the end of the game I moved 16 ounces of water into the empty container, and there was still 20 ounces of water in the original container, I would add 16 plus 20 to equal 36 ounces of water. Then I would take the 48 ounces I started with and subtract 36 to learn that I wasted 12 ounces of water.

OR

Starting Water Amount: 48 Ounces

Water Moved to the Empty Container: 16 Ounces

Water Remaining in Original Container: 20 Ounces

$16 + 20 = 36$ ounces left at the end of the game

$48 - 36 = 12$ ounces of water wasted during the game

Think you can do better? Play again and see if you can conserve more water, or you can try playing a different way!

Other ways to play:

- Instead of using a timer, count out 10 trips to the empty container walking at different speeds and try to conserve as much water as you can!
- To make this game more challenging you can move the containers farther apart or make an obstacle course with objects you have at home and try again (just make sure you use objects that can get wet)!

- If you have more people to join in, make it a relay race! If you have a larger group and extra containers and sponges, make it a competition to see which team can move and conserve the most water!

