

Water IQ Quiz

1. How much precipitation does Colorado Springs get in a year? 16 inches
2. Which precipitation type supplies the majority of our water source?
Circle one: **Snow** Hail Rain Sleet
3. How many acre feet of water flow off the western slope of the Rocky Mountains and travel to the Pacific Ocean?
8.7 million acre feet
Bonus question: What side of the Continental Divide do you live on? Circle one: **East** West
4. Which river basin supplies the most water for Colorado Springs? Colorado River
5. How far has some of your water traveled to get to town? 100 miles
6. Colorado Springs Utilities cleans your water so it's safe to drink at how many water treatment plants?
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7. How many gallons does a typical Colorado Springs resident use per day? 78 gallons
8. What is most residential water used for? Landscaping
9. Which room in the house uses the most water? Circle one: **Bathroom** Kitchen Laundry Room
10. Where does the water go after it's been used inside the home? The wastewater goes to the Water Resource Recovery Facility
11. How many other communities downstream does our reclaimed water flow past before it reaches the Gulf of Mexico? 200 communities
12. What percentage of reclaimed water is reused in town for non-drinking purposes? 10 %

Smith Family Water Record

(use amounts and assumptions above X 4 people X 7 days)

Activity	Typical Inefficient Use – WEEK 1	Water-wise Use - WEEK 2	Water Savings: WEEK 1 – WEEK 2 (gallons)
Showering	20 gallons x 4 people x 7 days = 560 gallons	7.5 gallons x 4 people x 7 days = 210 gallons	560 – 210 = 350 gallons saved
Washing Hands and Face	2.5 gallons x 4 times a day x 4 people x 7 days = 280 gallons	1 gallon x 4 times a day x 4 people x 7 days = 112 gallons	280 – 112 = 168 gallons saved
Brushing Teeth	2.5 gallons x 2 times a day x 4 people x 7 days = 140 gallons	1 gallon x 2 times a day x 4 people x 7 days = 56 gallons	140 – 56 gallons = 84 gallons saved
Flushing Toilet	3.5 gallons x 5 flushes a day x 4 people x 7 days = 490 gallons	1.3 gallons x 5 flushes x 4 people x 7 days = 182 gallons	490 – 182 = 308 gallons saved
Total:			910 gallons saved every week

Smith Family Yearly Water Savings (gallons) = 910 gallons a week x 52 weeks in a year = 47,320 gallons a year saved

Convert Yearly Water Savings from Gallons to Cubic Feet (cf) = 47,320 gallons divided by 7.48 gallons = 6,326.20 cubic feet

Colorado Springs Utilities' Cost Chart

Utility Type	Cost per cubic foot (cf)		Smith Family Yearly Water Savings (cf)		Cost Savings per Year (\$)
Water	\$0.05	X	6,326.20	=	\$316.31
Wastewater	\$0.02	X	6,326.20	=	\$126.52
Natural Gas	Only about half the bathroom water is heated. Divide the amount of water saved per year by 2 = 6,326.20 / 2 = 3,163.10				
	\$0.05	X	Answer from line above 3,163.10	=	\$158.16
Total Cost Savings:				=	\$600.99 saved a year

Total cost to upgrade bathroom using high-efficiency fixtures = \$120