

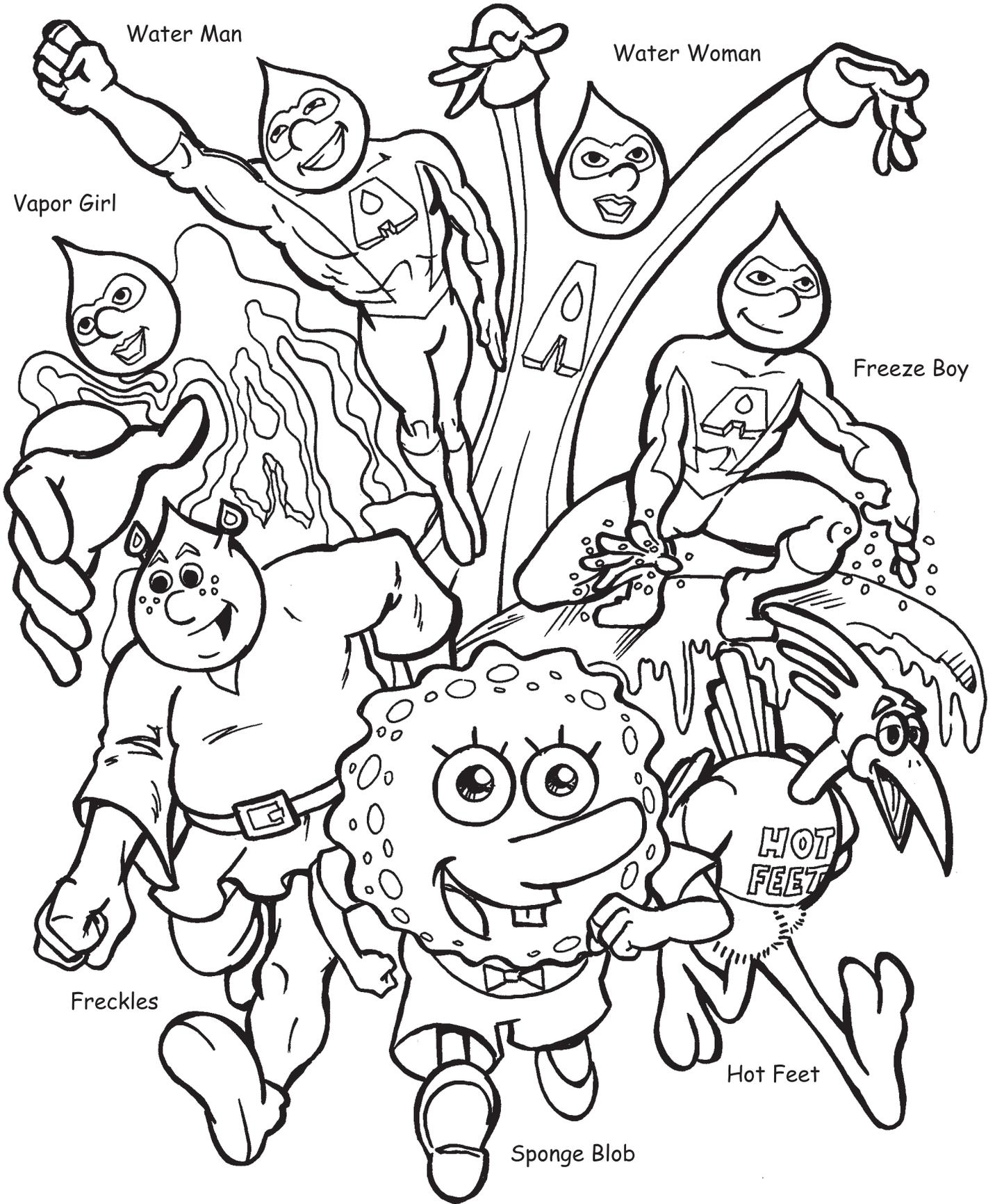
Who has what it takes to become Arizona's Water Saving Idol?

Arizona's Water Saving Idol



A water conservation education program sponsored by the cities of:





Water Man

Water Woman

Vapor Girl

Freeze Boy

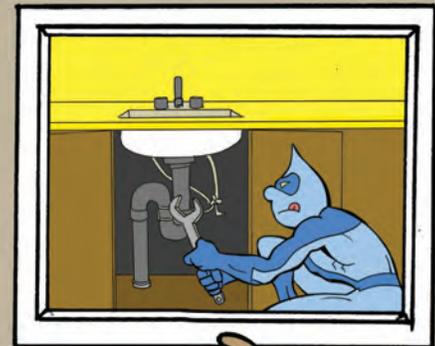
Freckles

Sponge Blob

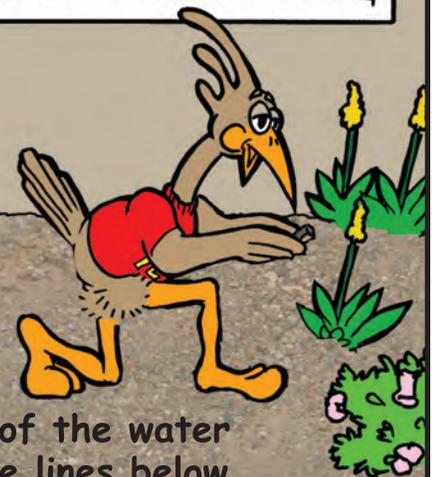
Hot Feet

Welcome to Arizona's Water Saving Idol competition.
Meet your water saving heroes.

Water conservation starts with you! Anything you can do will help.



SAVE H₂O



Write the correct name of the water saving hero on each of the lines below.

1. _____ is bathing in a half-filled tub. This can save 15 gallons per bath.
2. _____ is brushing her teeth with the faucet off. This can save 2.5 gallons per minute.
3. _____ is sweeping the sidewalk instead of using the hose. This can save 10 gallons per minute.
4. _____ is fixing a drippy faucet. This can save 13 gallons per day.
5. _____ is washing the car with a bucket and himself. This can save 10 gallons per minute.
6. _____ is using a hose with shut-off nozzle to rinse. This can save 10 gallons per minute.
7. _____ is aiming the automatic drip system carefully. This can save 13 gallons per day.

ANSWERS

1. Freeze Boy 2. Vapor Girl 3. Water Man 4. Water Woman 5. Sponge Man 6. Freckles 7. Hot Feet

The Water Cycle

A water molecule is made from two atoms of hydrogen gas and one molecule of oxygen gas. So, it is called "H₂O".

H₂O can be either a liquid, solid or gas, depending upon the temperature. By changing forms, the water is able to travel around the planet on a never ending journey called the water cycle. During the water cycle, the water is cleaned and recycled through evaporation, condensation and precipitation.

THE WATER CYCLE



When the cloud is full, the water drops will fall as rain or snow. This is called **precipitation**. The rain and melted snow will collect on the Earth's surface to create rivers and lakes. This is called surface water.

Some surface water will travel through canals to a water treatment plant to be cleaned and purified. The clean water is stored and distributed through underground pipes and used in many ways.

As the water vapor rises, it cools and changes back into tiny drops of water. This is called **condensation**. Many drops will gather together and form a cloud.

The heat from the sun causes the water molecules to expand and rise into the air as water vapor. This is called **evaporation**.

Whew! I'm thirsty!

Me Next!

Some surface water will seep slowly into the ground and become groundwater. This is called **percolation**.

The water is cleaned and purified as it passes through the underground layers of sand and gravel. It will stop in the rocky layer called the aquifer.

Some cities drill wells and pump this water up for drinking.

Water Cycle Word Jumble

Unscramble the **red** letters and write the correct words on the blank lines.

1. During evaporation, the _____ from the sun changes the water from a liquid to a _____, called water vapor.
(eaht) (sag)
2. During condensation, the water vapor _____, and changes back into tiny _____ of water and forms clouds.
(locos) (spord)
3. During precipitation, the water drops fall to earth as _____ and _____.
(anir) (wosn)
4. When the rain and melted snow collect on the earth's surface, they form _____ and _____.
(sirvers) (kales)
5. When water seeps slowly into the ground, it is called, _____.
(ierlapcotno)
6. Groundwater is cleaned naturally by filtering through layers of _____ and _____.
(nsad) (elargv)
7. The rocky layer called the _____, holds groundwater like a _____.
(rigeauf) (gespno)
8. Some cities drill _____ into the aquifer to pump up _____ water for drinking and other uses.
(lewsl) (nacel)
9. Other cities use a mixture of both _____ and _____ water for everything.
(rewagtuodnr) (fracesu)

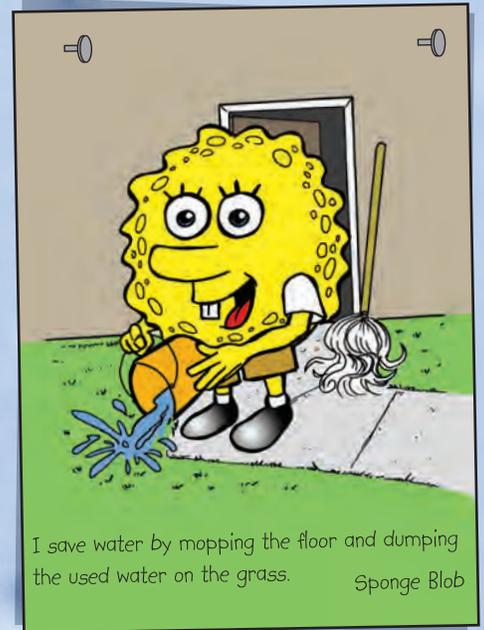
SEARCH & FIND

Circle these items in the water conservation posters.

1. mop
2. bucket
3. dog
4. tub
5. trash can
6. plug
7. low-flow showerhead
8. bug
9. cup
10. clock
11. water jug
12. low-flow toilet
13. waterdrop
14. hose
15. shut-off nozzle
16. faucet
17. sun
18. broom
19. bath towel
20. hummingbird



I save water by throwing my trash and dead bugs in the trash can instead of flushing them down the toilet. Freckles



I save water by mopping the floor and dumping the used water on the grass. Sponge Blob



I save water by taking short showers that are 10 minutes or less. Water Man



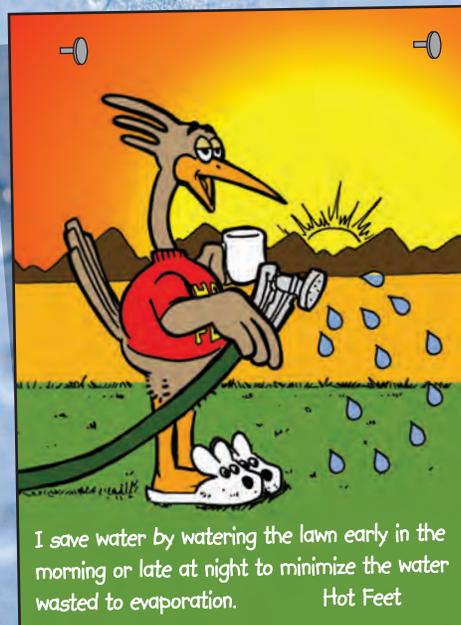
I save water by running the dishwasher only with full loads. Water Woman



I save water by hanging up my bath towel to dry and reuse. Less laundry means less water. Vapor Girl



I save water by turning off dripping faucets firmly. Freeze Boy



I save water by watering the lawn early in the morning or late at night to minimize the water wasted to evaporation. Hot Feet

Everyone is doing their part to save water. How about you?

Take the water audit on page 7 to see if you've got what it takes to be Arizona's Water Saving Idol.

Take this water audit home and do it with your family!

Who will be the Water Saving Idol in your home?



Sometimes, we all use a little more water than we really NEED.

Check the blue box next to the activity that you do.

Then, fill in the green blank under "Amount of time I do this activity."

Now, do the math to see how much water you use.

Things I do with water	Activity using water	Average water use	Amount of time I do this activity	Math equation to determine amount of water I used for this activity	ANSWERS
1. <input type="checkbox"/>	Showering	Most showerheads use about 2.5 gpm	I usually take a shower for about <u>10 minutes.</u>	$2.5^* \text{ gallons per minute} \times \underline{10 \text{ min.}}$	= <u>25</u> gallons per shower
2. <input type="checkbox"/>	Brushing Teeth	Most faucets use about 2.5 gpm	I usually brush my teeth for about _____ min.	$2.5^* \text{ gpm} \times \underline{\hspace{2cm} \text{min.}}$	= _____ gallons per brushing
3. <input type="checkbox"/>	Tub Bathing	Most bathtubs hold about 30 gallons	I usually fill my bathtub about _____ full.	$30 \text{ gallons per tub} \times \underline{\hspace{2cm} \text{full}}$	= _____ gallons per bath
4. <input type="checkbox"/>	Washing Dishes	Most faucets use about 2.5 gpm	I usually wash dishes for about _____ min.	$2.5^* \text{ gpm} \times \underline{\hspace{2cm} \text{min.}}$	= _____ gallons per washing
5. <input type="checkbox"/>	Washing Hands	Most faucets use about 2.5 gpm	I usually wash my hands for about _____ min.	$2.5^* \text{ gpm} \times \underline{\hspace{2cm} \text{min.}}$	= _____ gallons per washing
6. <input type="checkbox"/>	Toilet Flushing	Most toilets use about 1.6 gpf	I usually flush my toilet about _____ times.	$1.6^* \text{ gallons per flush} \times \underline{\hspace{2cm} \text{times}}$	= _____ gallons per day
7. <input type="checkbox"/>	Watering Plants	Most hoses use about 10 gpm	I usually water my plants for about _____ min.	$10^* \text{ gpm} \times \underline{\hspace{2cm} \text{min.}}$	= _____ gallons per watering
8. <input type="checkbox"/>	Washing Car	Most hoses use about 10 gpm	I usually wash the car for about _____ min.	$10^* \text{ gpm} \times \underline{\hspace{2cm} \text{min.}}$	= _____ gallons per washing

How many gallons do you use on an average day? _____

What can you do differently to conserve water? _____

Now, ask the members of your family to answer these same questions.

Who uses the least amount of water? _____

What other things can your family do to conserve water at your home? _____

CONGRATULATIONS!

Now, you are an Arizona Water Saving Idol.

Thank you for taking this water audit.

Please complete the certificate on page 8, and hang it where everyone can see.



CERTIFICATE OF CONSERVATION

This certificate is awarded to _____

Having Successfully Completed The Arizona Water Saving Idol Activity Booklet

AND IS A WATER SAVER IN GOOD STANDING

Waterman

Freckles

Waterwoman

Sponge Blob

Vapor Girl

Hot Feet

Freeze Boy

