## Water Warriors: Day 5

This week your young scientist has a chance to get to know water better. Your scientist will consider the question, "How much water do I use in a day?" S/he will also consider ways to keep water clean and how people and animals use water, including having fun in it. The Tennessee Aquarium works to make sure that humans and animals have clean water. This week, your scientist will have that same opportunity.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the Introduction to Weekday Wonders.

Question of the Day
What are some ways you have fun with water?


## Daily Nature Journal

Have your young scientist complete a daily nature journal entry for the day. The Guide to
Nature Journaling will help you guide them on how to nature journal. This practice will help your scientist better understand and connect to nature.

## Nature Journal

In the hot, humid days of summer, playing in water can be a lot of fun! Have your young scientists list or draw all the ways s/he may enjoy playing with or in water. Then, have your young scientist write or draw a story about the most fun he or she has ever had with water.

## Getting Wet

Help your young scientist gather the following materials.

- a large container that s/he can pick up when it is full of water
- access to a water source, such as a hose or sink
- An area in which your scientist can stand and collect water, such as a kids' pool, a large washtub, or a bathtub.

You may also wish to have your young scientist dress in a swimsuit for this activity.
Have your young scientist fill up the container. Ask your scientist to predict how many containers of water it would take to fill the collector to a certain level. Then ask him or her to stand in the water collector. Have your scientist dump the water on him or herself, trying to not spill any outside the collector.

Your young scientist should continue filling the container from the water source and dumping it over his/ her head and body until there is enough water in the tub to reach the level you decided on together. Be sure to have him or her count each container so s/he can see how close the prediction was!
If you have more than one scientist, you can have them dump water on each other, but remind them of the challenge to only get water into the collector, not the area around it.

Challenge your scientist to come up with other fun water activities can help people to cool off without wasting water by letting it run continuously.


## Fun With Water

Tell your scientist that you do not always have to get wet to have fun with water. Find a tall, clear plastic container that you can get wet. Then find a source of water near you, such as a pond, creek, or spring. Visit the water with your young scientist, taking the container with you.

Note: Always be careful around water, particularly when it has rained or may rain soon. Do not take chances that may lead to slipping into the water or being caught in a flash flood.

Have your scientist observe the water, looking at it from the shore. Ask him or her to write or draw a description of the water, including what it looks like and what they see in it. Have your scientist label it "from the shore."

Next, help your scientist carefully place the bottom of the plastic container into the water, just breaking the surface. Have your scientist look down through the container into the water. Again, have your scientist write or draw what they see and label it "under the surface."

Have your scientist consider the differences between the two observations and note them on their descriptions or drawings.


## Water as a Tool

Sometimes, water can be used as a tool to help accomplish fun. Have your young scientist take a steel can, clean it well, and fill it almost to the top with water. Then, place the can in the freezer to allow the water to become ice.

While you for the can to fill with ice, help your young scientist gather a hammer and nail. Then, have your young scientist download a simple design outline or draw one on a piece of paper. S/he may want two copies or two designs, one for each side of the can. The design should be something very simple like the moon, a star, or diamond.

Once the ice has frozen solid, keep the ice in the can and tape one of the papers to the outside of the can. Using the hammer and nail, help your young scientist create holes in the can following the outline of the pattern. The holes should be spaced out along the outline. If your young scientist wants a design on both sides, tape the other paper to the opposite side of the can and hammer again. The ice helps to keep the can from caving in when the nails puncture it.

After the design is completed, empty the ice. Dry the can luminary well and put in a candle. Your young scientist may also light up the luminary by collecting fireflies, placing them inside, and covering the top. If fireflies are collected to light up the luminary, remember to only keep them for about 30 minutes and let them go. Your scientist can catch new fireflies to light it again. Let all the fireflies go before going to bed.


## Cooling Off

Water is fun, whether you are near it, using it as a tool, or getting wet. This activity may help the whole family cool off together. If you can, gather a small team of young scientist(s) and adults. Your scientist will also need a bucket or large container, a cup or jar with a wide opening, and a large sponge. Sunglasses or goggles may also be appreciated.

Have your scientist fill the bucket with water. Have one team member lay on the ground about 20 feet away from the bucket and hold the cup on his or her forehead. Other team members should line up next to the bucket. The first team member should dunk the sponge in the bucket, filling the sponge with water, run to the cup, and squeeze the water from the sponge into the cup. S/he should then run back to the line handing the sponge to the next team member. Continue taking turns until the cup is full or filled to a designated line. Empty the cup back into the bucket but no extra water, and let the next scientist hold the cup on his/ her forehead.

If you have only one young scientist playing the game, challenge him or her to see how fast s/he can fill the cup and time it. Another challenge would be to guess how many trips it will take to fill the cup and then see how close the guess is.

## Other variations:

Rather than one scientist holding the cup on his forehead the entire round, once the sponge has been squeezed, have the scientists trade cup and sponge. The scientist with the sponge runs and hands off the sponge to the next team member in line and goes to the back of the line.

If there are at least four team members, gather two buckets, two cups, and two sponges. Divide into two teams and race to see which cup gets filled first.

