

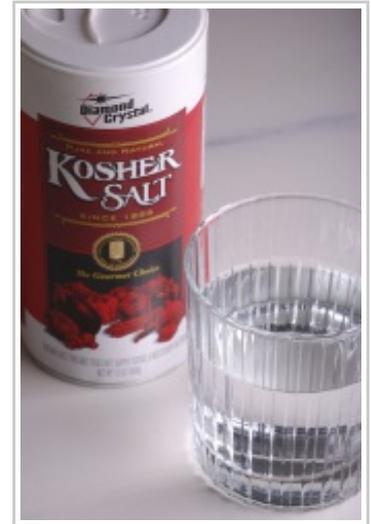
## Turn Salt Water into Drinking Water

There's an old saying, "You can always put more salt in the soup, but once it's in there, you can't get it out." But in many parts of the world today, fresh water is scarcer than ever, and people, land, and animals are becoming parched. Scientists are busy exploring ways to take the salt out of salt water in large quantities. And your child can help!

Here's an exciting small-scale experiment for socially conscious kids to try:

### What You Need:

- 1-1/2 tablespoons of regular table salt
- 3 cups of water
- Mixing bowl
- Coffee cup or small bowl
- Sturdy plastic wrap
- Small rock



### What You Do:

1. Start by helping your child mix the salt into the water in the mixing bowl and stir thoroughly until it is fully dissolved.
2. Place the cup or smaller bowl in the mixing bowl, taking care that you don't let any of the salty water into it.
3. Cover the bowl with sturdy plastic wrap and seal the edges tightly. Take a small rock (not too big or it will break the plastic), and place it right in the middle of the plastic wrap, so that all of the plastic slants slightly toward the middle of the bowl where the cup is.
4. Put the whole setup in full, hot sun, and wait. Within an hour, you should see water droplets begin to form on the underside of the plastic. They'll flow and drip into the center of the bowl, and into the cup.
5. Wait several hours, and then take the plastic off. A good amount of water should now be in the small cup.
6. Invite your first grader to taste with you. Guess what? No salt! The water vaporized in the heat of the sun, and then returned to its liquid state. Salt doesn't do that—it stayed behind. Presto! You really can take the salt out of salt water!

As it happens, this is also an excellent lesson in the way matter can change states—in this case, water can go from liquid to gas to liquid again, changing some of its chemical properties on the way. This experiment offers your child a fun, up-close way to see this in action, while also understanding some important conservation issues facing us today.