

Turn Salt Water into Drinking Water

Obtaining enough fresh water to drink can be a challenge in some places throughout the world. Scientists are working on ways to turn salt water from the ocean into fresh water. In this activity, you'll get to transform salt water into fresh water on your own!

What You Need:

- 3 cups of water
- 1½ tablespoons of salt
- Plastic wrap
- Cup or small bowl
- Mixing bowl
- Small rock

What You Do:

1. Pour the water into the mixing bowl, add in the salt, and stir until it has dissolved.
2. Put the cup or small bowl into the mixing bowl without letting any salt water get into the cup.
3. Place the plastic wrap over the bowl and seal the edges. Place the small rock on top of the plastic wrap in the middle of the surface. The plastic should slant slightly toward the cup in the middle of the large bowl.
4. Place the setup under a hot sunny area for one hour. Water drops should start to form underneath the plastic. The water drops will flow into the middle of the bowl and fall into the cup.
5. After a few hours, remove the plastic. The cup should now have a sizeable amount of water in it.
6. Invite your child to taste the water in the cup. There shouldn't be any salt! The water vaporized from the sun and then returned to its liquid state. The salt stayed behind instead of evaporating. You have taken the salt out of salt water!

This is a great way to demonstrate how matter can change states. In this project, water can go from liquid to gas and then back to liquid, while changing some of its chemical properties. This project allows your child to see and taste the effects.

