

WHAT GOES AROUND



STUDENT WORKBOOK

ACCELERATE



WATER FROM THE OCEAN

Have you ever been without access to drinking water, or had to bring your own freshwater with you to drink because it wouldn't be available? If you didn't have freshwater, could you drink salt water? Or is there a way you can get freshwater from salt water?

SOLAR STILL

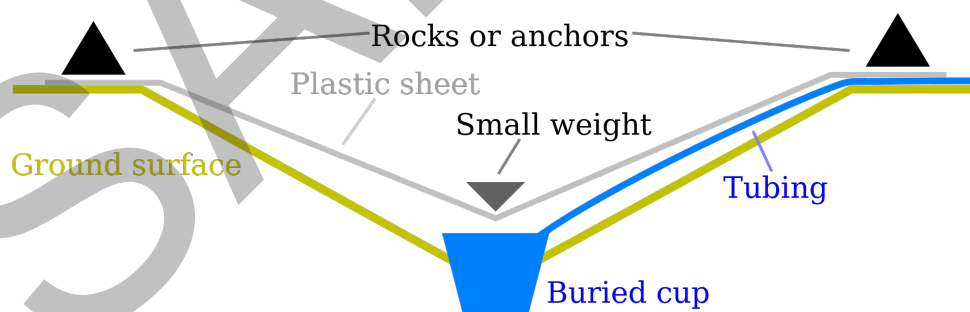
Have you ever been asked "if you were stranded on a desert island, what three things would you bring?"

What were your answers?

- 1.
- 2.
- 3.



If you were stranded on a desert island, before building a shelter or finding food, you should find a source of safe drinking water. To do this, you could build a **solar still**.



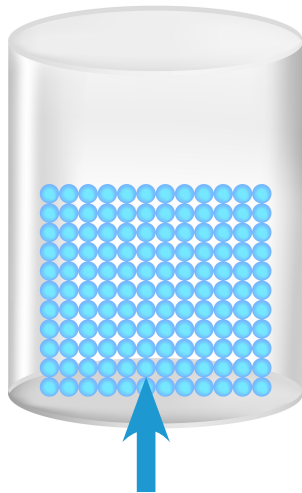
A solar still is a device used to purify water through a process of heating and cooling, known as **distillation**. This device uses the power of the Sun to purify the water. In this activity, you will build a solar still and observe the changes in salt water.

Note: Make sure you do this activity on a warm day.

In the two experiments you have completed so far, you have seen water go through different **states of matter**. A state of matter is the different forms matter is in, such as solid, liquid, or gas.

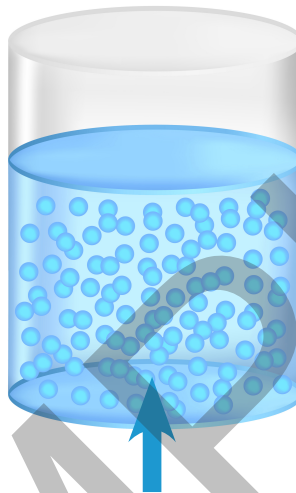
STATES OF MATTER

SOLID



The ice used in your solar still is an example of water as a solid. A **solid** is a state of matter that cannot change its shape or size. The particles have an orderly arrangement, are close together, and are vibrating.

LIQUID




Water that you can drink is water in a liquid state. A **liquid** is a state of matter in which particles are further apart and faster-moving than a solid. Liquids are a state of matter where the matter keeps its size, but can change its shape.

GAS



Water vapor is an example of water as a gas. A **gas** is a state of matter that can change its size and shape. This is because the particles are very far apart, move faster than those of a liquid, and are very disorderly.

The states of matter that water goes through are found in your solar still and coffee filter experiments. It's also found in nature through the **water cycle**, the movement of water between the atmosphere and Earth. The **atmosphere** is defined as the layer of gasses surrounding the earth.



Day 1	
Time of Day	Observations
Morning	
Mid-Day	
Night	



SCIENCE UNLOCKED

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Kit	SU-WHATGO
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