Build a Solar Still

A solar still is a contraption that allows you to collect fresh water when you may not have access to a clean source. Whether you’re camping or you get stranded on your own, this is a good emergency technique to get clean drinking water. It even works with salt water!

**MATERIALS**
- Clean glass jar
- Wide plastic bucket or bowl
- Plastic wrap
- Small rock or marble
- Rubber band or tape
- Water (from whatever source you have access to)

1. Find a sunny spot to place your solar still. It’s best if it’s a spot that gets sun all day.
2. Pour a couple inches of water into the bucket. To show how the solar still works, you can either use water from a pond or stream or add a bit of dirt to clean water.
3. Place the clean jar in the centre of the bucket. Make sure none of the dirty water touches the inside of the jar.
4. Cover the bucket with plastic wrap. If the wrap you used doesn’t seal properly around the bucket, you can seal it with a rubber band or tape!
5. Place the small rock on top of the plastic wrap, directly over the jar.
6. Finally, leave the solar still undisturbed for several hours. When you check on it, there should be some water in the jar that is clean to drink!

What causes the water to become pure? What steps does the water take on its way to the cup?

This cycle works like a **loop** function in computer programs. The cycle repeats until the water runs out. When that happens, you refill the bucket with more dirty water and the cycle starts all over again.