Experiment on condensation

You will see
After 15 minutes, steam will CONDENSE and water drops will go into the plastic glass.

After 1 or hours you can remove the bottle top and get the plastic glass:

The water inside the bottle is still coloured, but the water inside the glass is perfectly clear.

This is how desalination plants used to work in the past

You need
- Plastic bottle, scissors
- Plastic glasses, glue gun
- Warm coloured water (hibiscus tea)
- Ice cubes
- Aluminium foil

How to make
1. Cut the bottle in two parts
2. With the aluminium foil create a tip, as you can see in the picture
3. With the glue gun, stick one plastic glass to the bottom of the plastic bottle. (Put second glass inside the first)
4. Pour some coloured warm water in the bottle, but don’t fill the glass.
5. Put the bottle top upside down, as you can see in the picture.
6. Put the ice cubes in the upper part and place your “desalination plant” on a radiator.

Why?
The process you are observing is called condensation.

The water vapour rises, it cools down and forms tiny water droplets.

When they all combine together, they grow bigger and fall to the ground as rain, due to the force of gravity.