



# Cloud in a Jar

Goal: Learn about condensation while creating a miniature cloud inside of a jar!

## **What is condensation?**

Condensation is a change in the state of matter of a substance from gas form to liquid form as energy is released from the involved molecules.

**Ex.** A can of cold soda “sweats” on a hot day. This happens because water vapor hits the cold surface of the can and turns into liquid water. The water molecules of the vapor lost energy after touching the cold surface.

## **Materials:**

- Jar (with lid)
- Hairspray
- Ice
- $\frac{1}{3}$  cup hot water

## **Instructions:**

1. Get into groups of 3-4.
2. Pour water into a jar.
3. Put the lid upside down on the jar with ice on it.
4. Wait for 30 seconds.
5. Quickly remove the lid and spray the hair spray into the jar, and then place the lid back on.
6. Wait until a good amount of condensation forms inside the jar before releasing the cloud from the jar.