

MAKING A CLOUD IN A JAR

with Hairspray and Ice

Clouds form when water vapor cools, condenses on tiny particles, and becomes visible. In this experiment, you'll make a cloud in a jar!

MATERIALS

- 1 clear glass jar with lid (wide-mouth works best)
- Hairspray (aerosol)
- Ice
- Measuring cup (optional)
- Towel (optional)



SAFETY FIRST

- Use hairspray in a well-ventilated area.
- Do not spray near your face or eyes.
- Ask an adult for help if needed.



PROCEDURE

- 1 Make sure the inside of the jar is dry and clear.
- 2 Spray hairspray into the jar for 2–3 seconds. Swirl the jar gently to spread the spray particles around.
- 3 Place the lid on the jar.
- 4 Put several ice cubes on top of the lid.
- 5 Watch as a cloud forms inside the jar! It may take 10–30 seconds.

WHAT'S HAPPENING?

The hairspray adds tiny particles to the air inside the jar. The ice cools the air from above. Water vapor in the air cools and sticks to those particles, forming tiny droplets—a cloud!



OBSERVATIONS

Answer the questions below.

1. What did you see happen inside the jar? _____
2. How long did it take for the cloud to appear? _____
3. What do you think would happen if you used warm water instead of ice? _____



THINK LIKE A SCIENTIST!

Can you think of other ways to make a cloud in a jar? Try changing one thing and see what happens!

