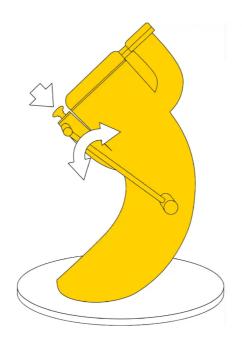
Cloud maker

How can you create clouds?



Use the lever to pump air into the chamber until the pressure meter needle won't go any further.

Hold the brass button strongly down to let the air out.

What do you see happening in the chamber?

Repeat the experiment, but this time watch what happens to the temperature reading.

When the air is released, fog forms in the chamber. The air heats up when it is pumped into the chamber, and cools when it is released.

Pumping increases the air pressure and temperature in the chamber. When the air is released, the compressed air expands and cools down. The water vapour in the air is cooled so much that it condenses into tiny droplets, forming fog.

Clouds form in the sky in the same way. When warm air rises, it expands and cools down. The water vapour in the air condenses, forming the millions of tiny droplets that make up clouds.