

What Makes it Rain?

Focus

How rain is formed can be poorly understood. The main idea is best explained by simple experiments to illustrate the change from water as a liquid to vapour (gas) and back to liquid (or solid if its hail or snow), through the processes of evaporation (+heat), condensation (-heat) which produces a cloud, and precipitation (rain, snow, ice falling). Visual examples are easier for students to grasp the concepts of evaporation and condensation

Materials

- Clear plastic bags
- Rubber bands or twisties
- Plastic teaspoons
- Water

Procedure

- Put two teaspoons full of water into a small plastic bag.
- Blow air into the bag and seal it with a heavy rubber band or twistie.
- Place the bag in a sunny window.
- Record your observations in the table below.

Results

Time	Observations (What changes did you see?)
1st morning	
Afternoon	
2nd morning	

Hypothesis

- Ask the students to explain what happened to the water when the plastic bag was placed in the sun.
- In the morning, ask the students to suggest how come the water reappeared. Remind them that the bag is sealed.
- Ask students to write a sentence to describe what they think happened in each case.
- Revisit these statements when the class has fully explored the elements that make up the water cycle.