

WORKSHEET 15

Activity - A PET Cloud

Print and copy this worksheet for use in the classroom.

Purpose

To make your own cloud in a bottle.

Equipment

- large clear plastic PET bottle with cap. The label should be removed
- water
- matches

Procedure

1. Pour a little cold water into the bottle.
2. Screw on the cap and shake the bottle.
3. Squeeze and release the bottle a few times. (Does anything happen inside the bottle?)
4. Open the bottle and drop a lit match into it. (The match will go out when it hits the water.)
5. Screw on the cap and shake the bottle.
6. Squeeze and release again
- 7.

Questions

Answer the following questions in the spaces provided.

1. Why does shaking the bottle help the experiment?

2. Why do you think the smoke from the match helps the cloud form?

Explanation

When water condenses, the droplets may form clouds. Particles of dust help droplets to form. Without tiny particles in the air, clouds would not form. Droplets in clouds are small enough to be supported by the air. When they join together to form larger droplets they can no longer be supported and rain falls. It takes about 1 million cloud droplets to make an average size rain drop.

Extension Activity

Repeat the activity using hot water. Does it work better?

Fact File

Cloud particles consist of tiny droplets of liquid water or ice. The size of these particles ranges from approximately 5 to 75 microns (0.005 to 0.075mm).

*This activity is courtesy of
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