

WORKSHEET 11

Activity - Bottled Pressure

Print and copy this worksheet for use in the classroom.

Purpose

To carry out an activity that shows the force of the air around us.

Equipment

- plastic soft drink bottle
- funnel
- hot water
- cold water
- large bowl
- ice

Safety

Take care with the hot water.

Procedure

1. Fill one-third of the bottle with very hot water.
2. Screw the top on the bottle, lie it down in the bowl and cover it with ice and very cold water.

Questions

Answer the following questions in the spaces provided.

1. What do you see when the bottle is covered with ice and cold water?

2. Try to explain your observation

Explanation

The bottle is filled with steam. Once it is sealed and cooled, a lot of the steam condenses, turning back into liquid water. The pressure of the air inside the bottle is now much less than the pressure exerted by the atmosphere. So the air pressure outside the bottle crushes it.

*This activity is courtesy of
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