

## What do you know about gases?

### Part 2

Each of the six experiments tells you something about gases.

- Follow the instructions on the cards with the experiments.
- Try each experiment and answer the questions.
- When you have done all six, go back to your group and work on your answers in more detail.
- Prepare to present your answers.

<p><b>Dissolving a tablet</b></p> <p>Where was the gas before the tablet was dropped in the water?</p>	<p><b>Squashing air in a syringe</b></p> <p>What happens when you let the plunger go? Explain why this happens.</p> <p>Why is it so difficult to squash the air?</p> <p>What would happen if you could keep on squashing the air?</p>
<p><b>Perfume diffusion</b></p> <p>Why does the perfume diffuse through the air?</p> <p>Why does it take time to diffuse?</p> <p>How could the time be reduced?</p>	<p><b>Cooling air in the freezer</b></p> <p>Why does the balloon shrink?</p> <p>Why does the balloon expand again in the warm room?</p> <p>What would happen to the air in the balloon if you cooled it down as far as possible (to <math>-273\text{ }^{\circ}\text{C}</math>)?</p>
<p><b>Putting out a lighted candle</b></p> <p>Why did the lighted candle go out?</p> <p>Where did the gas come from to make this happen?</p> <p>Why can this gas be 'poured' like a liquid, but others can't?</p>	<p><b>Inflating a balloon</b></p> <p>Where was the gas before the reaction started?</p> <p>What happens to the mass reading on the balance? Explain why.</p> <p>What would happen to the mass if the balloon was removed? Explain why.</p>