

What do you know about gases?

Part 1

Here are some student comments about what would happen if some air particles were taken out of an empty bottle.

The bottle would collapse as the pressure inside is lower.

The bottle would feel softer as the pressure inside is lower.

The remaining air particles inside would move around faster as they have more space.

The remaining air particles would spread out to fill the bottle.

The stuff between the air particles would spread out to fill the bottle.

1. In your groups, decide if you agree or disagree with each of these statements.

Make sure that you:

- discuss the statements until you reach an agreement
 - support your decisions with good scientific reasons.
2. Next, in your groups, agree what would happen to the air particles if the same bottle (with the amount of air present at the start) was cooled to liquefy the air.
3. Make a drawing showing how air particles in the bottle would look when liquefied.