

- 33** What is the difference between boiling and evaporation?
- 34** A student says the reason their clothes dried on a washing line was because the water 'boiled off'. Explain why they are wrong.

C1.4 Gas pressure

- 35** What causes gas pressure?
- 36** In terms of their properties, what is the difference between the three states of matter?
- 37** Suggest what would happen if a person put an inflated balloon into a freezer.
- 38** Give a reason for your answer to Question 37.
- 39** Draw a particle diagram of:
 - a** a solid
 - b** a liquid
 - c** a gas
- 40** I put an ice cube into a balloon and knot it.
 - a** Why doesn't the balloon inflate?
 - b** If I heat up that balloon so that the ice cube melts, why doesn't the balloon inflate?
 - c** I continue to heat the balloon. At what temperature could it begin to inflate?
- 41** Copy and complete the sentences below:
 - a** If a gas is heated up, the particles ... because ...
 - b** If a gas is heated up, the particles ... but ...
 - c** If a gas is heated up, the particles ... so ...
 - d** If a gas is heated up, the pressure ... because ...
 - e** If a gas is heated up, the pressure ... but ...
 - f** If a gas is heated up, the pressure ... so ...
 - g** If a gas is cooled down, ...
- 42** What are all substances made from?
- 43** A student uses a pump to inflate the tyres on their bicycle.
 - a** The pressure in the tyre increases as the pump pushes more air into the tyre. Explain why this causes the pressure to increase.
 - b** The student checks the tyre pressure before going on a winter ride and notices that the pressure is lower than it was in the summer. Explain why.
- 44** Explain, with reference to particles and gas pressure, why it is dangerous to throw sealed deodorant cans into a fire.