

## **SOLIDS, LIQUIDS, GASES**

### **KEY IDEAS**

- Materials can be in solid, liquid or gas states
- Materials can change state at certain temperatures

### **EXAMPLE QUESTIONS**

- What different 'solid' materials can you think of?
- What different liquid materials do you know?
- Air is a mixture of gases.
- What other gases do you know?

## **MATERIALS CAN BE SOLID, LIQUID OR GASES**

- Solid, liquid and gas are the three states in which matter can exist.
- Many kinds of matter can exist in all three states. Water, for example, can be solid when frozen into ice, liquid when it is in its usual form, and a gas when it is steam or water vapour.
- Matter can change from one state to another when heated or cooled.
- Most solids melt into a liquid when heated and then change into gas when heated to their boiling points.
- These changes of state also can be reversed.
- Gas can cool into a liquid, and a liquid can cool into a solid.

## **ALL MATERIALS HAVE MASS**

- Solids, liquids and gases can all be weighed.
- Weight is a measure of the pull of gravity on a mass.

