

# Uses of everyday materials



## Expected prior learning

- The names of common materials, such as wood, metal, plastic.
- Some of the uses of common materials, such as wooden chairs, metal cutlery and so on.
- To be able to recognise materials in everyday situations, such as school and home.
- To be able to recognise that some objects, such as a table, have been made – they have been manufactured from common materials.



## Overview of progression

After completing this chapter they should know:

- how to identify a variety of everyday materials
- how to compare everyday materials in the home and at school
- that some common objects can be made of different materials
- that metals and wood are used to make lots of different objects
- that some materials are natural and some are manufactured.



## Creative context

- This chapter provides opportunities to look closely at and draw a range of objects, such as a bicycle and various toys, and to use different visual images to illustrate their findings. They will need to use their skills in design and food technology to make cakes and ice lollies.



## Background knowledge

### Materials in common objects

- Different materials are often used to make the same things, for example, spoons. Many common objects are made from a variety of materials, each of which is used because of its specific properties. For example, school chairs are made of plastic and metal because the plastic is light and durable and easy to clean. The legs are made of metal to add strength.

### Using materials

- Certain materials are useful. There are differences between natural materials and those that are manufactured. When we mix, heat or freeze certain materials they can change state.



## Speaking scientifically

- The children should know the names of a wide range of materials, including wood, metal, plastic, rubber, water, rock, soil and so on.
- They should also understand what mixing, heating and freezing mean.



## Preparation

**You will need to provide:** samples and pictures of objects made of wood, glass, metal, plastic, stone, rubber, wool, cotton, paper, polythene; the following objects, each made from a variety of materials – floor coverings, chairs, tables, chopping boards, plates, spoons, toys, threads, clothes (with manufacturers' labels); coins from different countries; pieces of bark; sections of logs; photos of a cotton plant, flax plant and sheep; an adult's bicycle; hats, gloves, boots and scarves; photos of clothing for extreme cold and hot weather; magnifying lenses; clear plastic bottles; stirring rods; pictures of wasp, bumble bee, hamster, mouse and birds' nests; real examples of a disused wasp or birds' nest; small glass jars with lids; insulating materials; thermometers; warm water; coal; sand; silk; natural sponge; cake-making equipment and ingredients (see recipe on CD-ROM); access to an oven; ice-cube trays; ice-lolly moulds; fruit juices; pictures of complex common objects such as vehicles or a vacuum cleaner; adult volunteers

**On the CD-ROM you will find:** photocopiable pages 'Cake recipe', 'Comparing materials', 'The life cycle of a bird'; interactive activities 'What's it made from?', 'Clothes'