

# KEEPING WARM



## Content and skills

This chapter links to Unit 4C 'Keeping warm' of the QCA Scheme of Work for science at Key Stage 2. The Keeping Warm Resource Gallery on the CD-ROM, together with the teacher's notes and photocopiable pages in this chapter, can be used when teaching this unit.

As with Unit 4C of the QCA Scheme of Work, children are helped to understand the concepts of heat and cold. The activities will help them to identify materials that are good thermal insulators and to think about the ways in which these materials are used in everyday life. The children are asked to measure temperature, and will learn that things cool down or warm up to the temperature of their surroundings. For example, hot water and iced water left in the classroom will cool down or warm up to room temperature.

The accompanying teacher's notes in this book include ways of using the resources with the whole class, for group work or with individual children. Some of the activities suggested will link with other areas of the curriculum such as maths, art, English or history. Wherever possible the activities encourage the children to ask questions and develop an enquiring approach to their learning.

## Resources on the CD-ROM

The CD-ROM contains pictures of ways of keeping things hot or cold, such as a thermos flask, a fridge-freezer, an electric fan, a fishing boat with ice, a saucepan with food cooking, a child in full winter gear, baby chicks under a warming lamp and a hot water tank with an insulating jacket.

Looking at these images leads to discussions and activities on insulation as a means of keeping things hot or cold, and looking at everyday uses of insulation. Ways of devising fair tests and investigating further are also suggested.

## Photocopiable pages

The photocopiable pages in the book are also provided in PDF format on the CD-ROM and can be printed out from there. They include:

- ▶ word cards containing essential vocabulary
- ▶ information sheets
- ▶ activity sheets.

## Science and literacy skills

Skills such as observing, questioning, finding out, describing, sorting, sequencing, listening, speaking, reading, writing and drawing are needed for the activities suggested in the teacher's notes. For example, the children will: discuss ways of keeping things hot or cold and the reasons why we might need to do so; find out (by means of their own fair test) which material is best for keeping liquids hot or cold; write to a loft and cavity wall insulation firm to find out about the benefits of insulation and how effective it is.

