

# Activities for Chapter 6

## Activity 6.1

### Use a microscope to observe the cells that cover a leaf

#### Skills

A03.3 Observing, measuring and recording

#### Using a piece of epidermis

- 1 Using forceps, carefully peel a small piece of epidermis from the underside of a leaf
- 2 Put the piece of epidermis into a drop of water on a microscope slide.
- 3 Spread it out carefully, trying not to let any part of it fold over. Cover it with a coverslip.
- 4 Look at your slide under the microscope, and make a labelled drawing of a few cells.

#### Making a nail varnish impression

- 1 Paint the underside of a leaf with transparent nail varnish. Leave to dry thoroughly.
- 2 Peel off part of the nail varnish, and mount it in a drop of water on a microscope slide.
- 3 Spread it out carefully, and cover it with a coverslip.
- 4 Look at your slide under the microscope, and make a labelled drawing of the impressions made by a few cells.
- 5 Repeat with the upper surface of a leaf.

#### ? Questions

- A1 On which surface of the leaf did you find most stomata?
- A2 Which of these two techniques for examining the epidermis of a leaf do you consider a is easier, b gives you better results?
- A3 There are two kinds of cell in the lower epidermis of a leaf. What are they, and what are their functions?