

Activity for Chapter 8

Activity 8.1

Identifying the positions of xylem vessels in roots, stems and leaves

Skills

A03.3 Observing, measuring and recording

Your teacher will provide you with micrographs (photographs taken using a microscope) of transverse sections of a root, a stem and a leaf. You may also be able to search the internet to find more micrographs.

- 1 On the first micrograph, identify the xylem vessels. These are cells with angular sides and thick walls. They are completely empty inside. If you have coloured pictures to look at, the walls of the xylem vessels are often stained red.
- 2 Make a simple drawing of the micrograph. You need only show:
 - ◆ an outline of the whole section (which is likely to be a circle for the stem and the root)
 - ◆ a line to show the outline of each area where you can see xylem.

You will find Figures 6.2, 6.3, 8.6 and 8.7 in your Coursebook helpful.

- 3 Label your drawing to show the positions of the xylem.
- 4 Repeat for the micrographs of the other two organs.