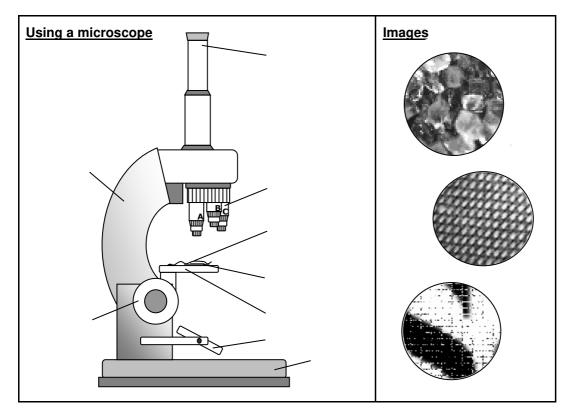


Using a Microscope



A class was using a microscope for the first time. They had to be very careful because microscopes are fragile and cost a lot of money. The pictures show salt, cloth and newsprint as they appeared *under the microscope*.



Fact File

The microscope is fragile. Carry it by the base and handle.

The longer objective lenses have larger magnifications.

A lamp can be used to provide light to the slide via the mirror.

The objective lenses have magnification values such as '4x', meaning 'four times bigger'. View using the shortest objective lens first as this has the lowest magnification.

Tasks

1. Label the microscope using the words below.

Slide Stage Clip Mirror Base

Eyepiece lens Objective lens Focussing knob Handle

- 2. Which two parts of the microscope should you hold when carrying it?
- 3. When looking at a new slide, which objective lens is it better to use first (A, B or C)? Label the three objective lenses 4x, 10x and 40x.
- **4.** The mirror provides light to the slide. The light passes up through a hole in the stage and passes through the slide. Why do you think it is necessary to prepare very thin samples of materials for viewing?
- **5.** The three pictures in circles show the view under the microscope of cloth, newspaper print and salt. Label each picture.
- 6. Choose three objects and draw pictures showing how you think they would appear under a microscope.

<u>Objectives</u>	☑ Checklist for this activity	
Use a microscope safely and effectively.	☐ Work on the sheet☐ Write full answers☐ Copy the diagram	□1 □2 □3 □4 □5 □6□ Copy the <i>Fact File</i>□ Add your own research