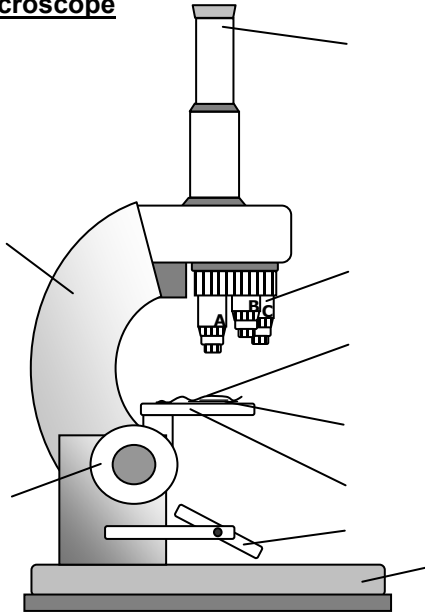
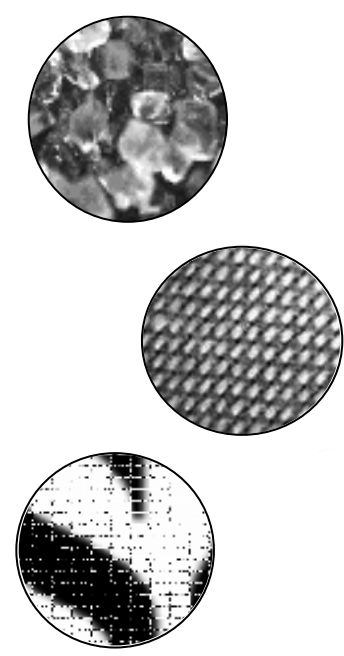


A class was using a microscope for the first time. They had to be very careful because microscopes are fragile and cost a lot of money. The pictures show salt, cloth and newsprint as they appeared *under the microscope*.

<p><b>Using a microscope</b></p> 	<p><b>Images</b></p> 	<p><b>Fact File</b></p> <p>The microscope is fragile. Carry it by the base and handle.</p> <p>The longer objective lenses have larger magnifications.</p> <p>A lamp can be used to provide light to the slide via the mirror.</p> <p>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.</p>
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**Tasks**

1. Label the microscope using the words below.

Slide	Stage	Clip	Mirror	Base
Eyepiece lens	Objective lens	Focusing knob	Handle	

- Which two parts of the microscope should you hold when carrying it?
- 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.
- 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?
- The three pictures above show the view under the microscope of cloth, newspaper print and salt. Label each picture.
- Choose three objects and draw pictures showing how you think they would appear under a microscope.

**Objectives**

Use a microscope safely and effectively.

**Checklist for this activity**

- |   |  |                            |                            |                            |                            |                            |
|---|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> Work on the sheet  | <input type="checkbox"/> 1                         | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| <input type="checkbox"/> Write full answers | <input type="checkbox"/> Copy the <i>Fact File</i> |                            |                            |                            |                            |                            |
| <input type="checkbox"/> Copy the diagram   | <input type="checkbox"/> Add your own research     |                            |                            |                            |                            |                            |