

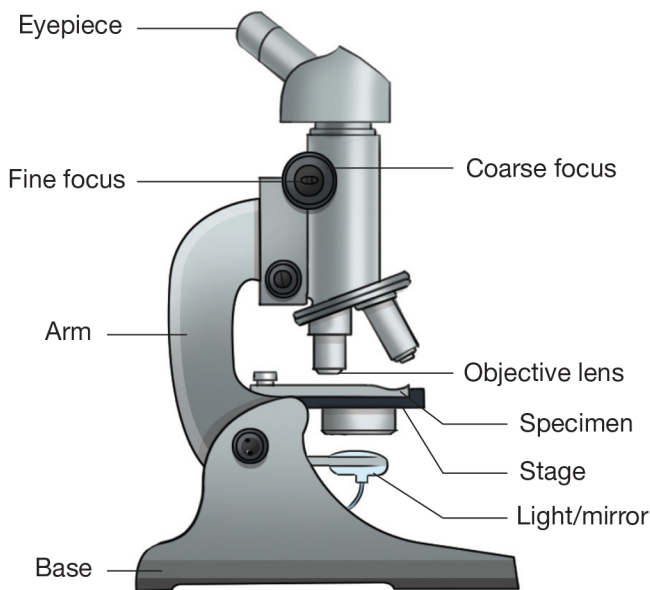
Using a light microscope

For this particular practical you need to produce labelled scientific drawings using a light microscope. A magnification scale must be used. Make sure you know how to calculate the magnification of a specimen observed through a light microscope.

Observing plant and animal cells

How to set up a light microscope

- 1 Place the specimen on the stage.
- 2 Switch on the microscope so that the light passes through the specimen.
- 3 Make sure that the $\times 4$ objective lens is clicked into place above the specimen.
- 4 Bring the specimen into focus by looking down the eyepiece lens and moving the coarse focus.
- 5 When the specimen is in focus, move the objective lenses so that the $\times 10$ objective lens is clicked into place above the specimen.
- 6 If the specimen is out of focus, bring it into focus using small movements of the fine focus.
- 7 Repeat steps 5 and 6 with the $\times 40$ objective lens.
- 8 You should now be able to observe your specimen.



A light microscope

Practical Skills

The magnification of the specimen will be the eyepiece lens multiplied by the objective lens.

In this case, it will be $\times 4$ multiplied by $\times 10 = \times 40$ magnification.

Practical Skills

- Always use a sharp pencil.
- Draw a smooth line (no shading or sketching).
- Make drawings as big as the space allows.
- Label lines should be drawn with a ruler.
- Include a magnification scale.

MATHS SKILLS

Learn the magnification triangle below by heart.

You may be asked to rearrange the formula in the exam.

