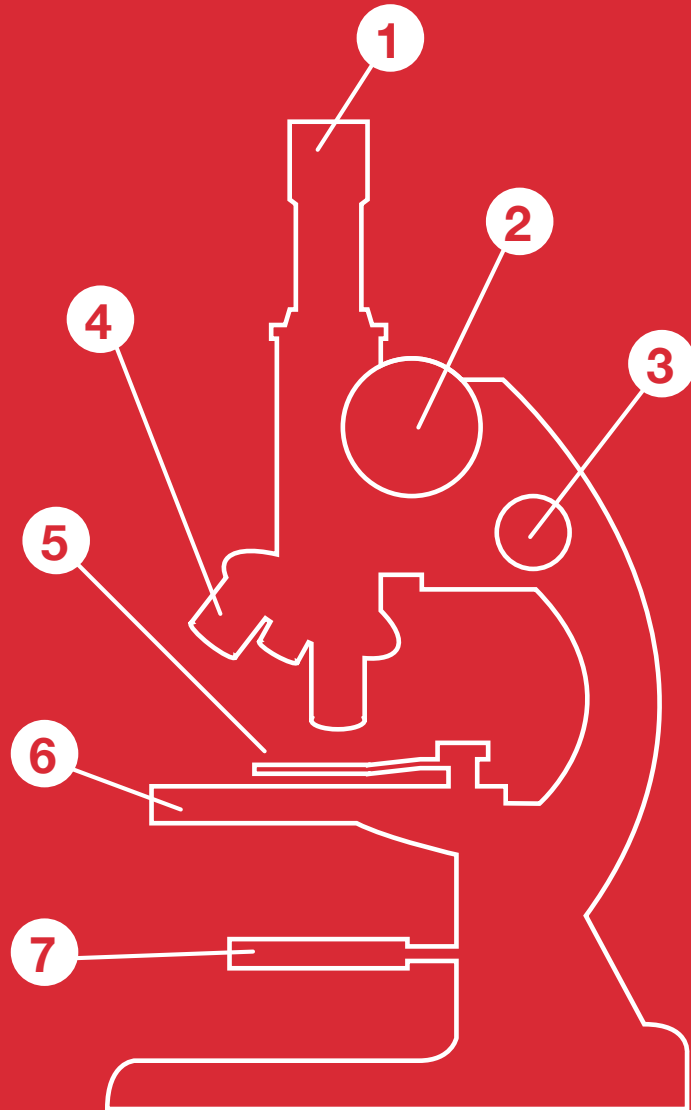


MICROSCOPES

Microscopes make very small things look bigger so that you can see more detail with just your eyes. The amount that things look bigger is called magnification and usually referred to as 'times ten' (x10), 'times twenty' (x20), etc.

Microscopes magnify by using two lenses – one in the eyepiece and one close to the specimen. The lens closest to the specimen is called the objective lens. Some microscopes allow you to choose different objective lenses so that you can change the amount of magnification depending on what you want to look at. The total magnification of a microscope is the eyepiece lens multiplied by the magnification of the objective lens, e.g. a x10 eyepiece lens with a x20 objective lens gives a total magnification of x200.



Parts of a microscope

1. Eyepiece lens

Focuses the image from the objective lens into your eye.

2. Coarse focussing control knob

This moves the lenses up and down to give a clear, focussed image of the specimen.

3. Fine focussing control knob

Used after 'rough' focussing with the coarse focussing knob. Gives much smaller amount of movement for fine adjustment.

4. Objective lens

Some microscopes have 2 or 3 objective lenses with different magnifications mounted on a turret that can be rotated to select the one required.

5. Stage clips

Springy clips that hold glass slides containing specimens.

6. Stage

This is where specimens to be examined are placed.

7. Mirror

Reflects light through the specimen then through the objective lens so you can see it in the eyepiece. The light can be from a lamp or from a window.