

WJEC Wales Biology

A-level

SP Unit 1 02 - Microscopy

Flashcards



What is the function of a stage micrometer?



What is the function of a stage micrometer?

To calibrate an eyepiece graticule so that it can be used to make measurements.



How is an eyepiece graticule calibrated?



How is an eyepiece graticule calibrated?

Select the desired magnification and objective. Place the stage micrometer on the stage.

Line up the scales of the micrometer and the eyepiece graticule.

Count the number of divisions on the eyepiece graticule equivalent to each division on the stage micrometre.

Calculate the length of one division of the eyepiece graticule.



Outline the procedure to preparing an onion slide.



Outline the procedure to preparing an onion slide.

1. Use forceps to peel the epidermal layer off the onion.
2. Mount onto the slide using a drop of water.
3. Add a drop of iodine solution on the slide.
4. Lower the cover slip onto the microscope slide using a mounted needle, slowly to prevent air bubbles from forming.



What is the formula for magnification?



What is the formula for magnification?

Magnification =

Size of image / Actual size



What are the requirements for label lines
in biological drawings?



What are the requirements for label lines in biological drawings?

Lines must be horizontal, straight (drawn with a ruler), and must not cross over other lines



Outline the procedure of focusing with a light microscope.



Outline the procedure of focusing with a light microscope.

- Rotate the revolving nosepiece to line up the lowest power objective lens.
- Look through the eyepiece and use the coarse adjustment knob to lower the stage to focus the image.
- Use the fine adjustment knob in order to focus the image further.

