

# WJEC Wales Biology

## A-level

SP Unit 1 06b - Meiosis in Anther

Flashcards



Which cells in an anther undergo meiosis?



Which cells in an anther undergo meiosis?

Pollen sacs contain pollen mother sacs that divide by meiosis.



State the stages of meiosis.



State the stages of meiosis.

Prophase, Metaphase, Anaphase,  
Telophase I and II



How is the magnification of a drawing calculated?



## How is the magnification of a drawing calculated?

Calibrate the eyepiece graticule using a stage micrometer. Use the eyepiece graticule to measure the actual size of the cell. Use a ruler to measure the size of the cell drawing.

Calculate magnification using  $\text{magnification} = \frac{\text{size of image}}{\text{size of object}}$ .



What can be observed in a cell  
undergoing prophase I/II?





What can be observed in a cell undergoing prophase I/II?

Individual chromosomes visible, nuclear envelope absent.



What can be observed in a cell  
undergoing metaphase I?



What can be observed in a cell undergoing metaphase I?

Pairs of chromosomes line up along the the cell equator.



What can be observed in a cell  
undergoing metaphase II?



What can be observed in a cell undergoing metaphase II?

Individual chromosomes line up along the equator of the cell.



# What can be observed in anaphase I?



What can be observed in anaphase I?

Chromosomes (consisting of 2 chromatids each) separated to opposite poles of the cell.



What can be observed in a cell  
undergoing anaphase II?





What can be observed in a cell undergoing anaphase II?

Chromosomes (consisting of 1 chromatid each) are separated to opposite poles of the cell.



What is observed in a cell undergoing telophase I/II?



What is observed in a cell undergoing telophase I/II?

2 groups of chromosomes at opposite poles of the cell, individual chromosomes no longer visible.

