

Biology Revision Pack

In GCSE Biology you will need to revise for the following exams:

GCSE Examinations

Paper	Date	Marks	Duration	Weighting	Topics on this paper
Biology paper 1	14 May 2019 (pm exam)	100	90 mins	50%	Cell Biology, Organisation, Infection and Response, Bioenergetics
Biology paper 2	07 June 2019 (pm exam)	100	90 mins	50%	Homoeostasis and Response, Inheritance, Variation and Evolution, Ecology

Link to the syllabus:

<https://www.aqa.org.uk/subjects/science/gcse/biology-8461>

HOW TO REVISE SCIENCE

Revision is an activity that works best if you do it in short chunks but often, like keeping a fire burning brightly.

In science, revision is largely about improving your memory and understanding of key ideas. The following methods are all very effective ways of doing this.

1. Using your revision guide to make notes, revision cards, and mind maps. Simply reading the revision guide will not be enough to engage your long term memory.
2. Using Seneca to improve your recall of topics that you covered in class a long time ago.
3. Using the quizzes and exam questions from the P drive to test your knowledge and practice answering questions.

Q1.

A student carried out an investigation using leaf epidermis.

This is the method used.

1. Peel the lower epidermis from the underside of a leaf.
2. Cut the epidermis into six equal sized pieces.
3. Place each piece of lower epidermis into a different Petri dish.
4. Add 5 cm³ of salt solution to the six Petri dishes. Each Petri dish should have a different concentration of salt solution.
5. After 1 hour, view each piece of epidermis under a microscope at $\times 400$ magnification.
6. Count and record the total number of stomata present and the number of open stomata that can be seen in one field of view.

The student's results are shown in the table.

Concentration of salt solution in mol / dm ³	Number of stomata in field of view	Number of open stomata in field of view	Percentage (%) of open stomata in field of view
0.0	7	7	100
0.1	8	8	100
0.2	7	6	X
0.3	9	6	67
0.4	10	4	40
0.5	9	2	22

- (a) Calculate value X in the table above.

X = _____ %

(1)

- (b) Give **one** conclusion from the results in the table above.

(1)

- (c) How could the student find out what concentration of salt solution would result in half of the stomata being open?

(1)