

National 5 Family Learning

National 5 Biology Assessments

Final Exam	Assignment
Worth 80% of final grade with a combination of knowledge and understanding and problem-solving questions.	Worth 20% final grade. Pupils will complete an experiment in class and write a scientific report under exam conditions. Pupils will complete a practice assignment on a different Biology topic to prepare them for the official assignment. The official assignment is sent to the QS for marking, teachers are not allowed to mark the official assignments or give feedback to pupils during the official write up. Teachers can only give a limited amount of support.

Terminology

- The QS are very particular about the phrasing that is used in answers.
- Pupils should stick as closely as possible to the phrasing that is used in the course support notes.
- Unfortunately, even if the examiner sees that the pupil has an understanding of the topic, marks can only be awarded for particular phrases.

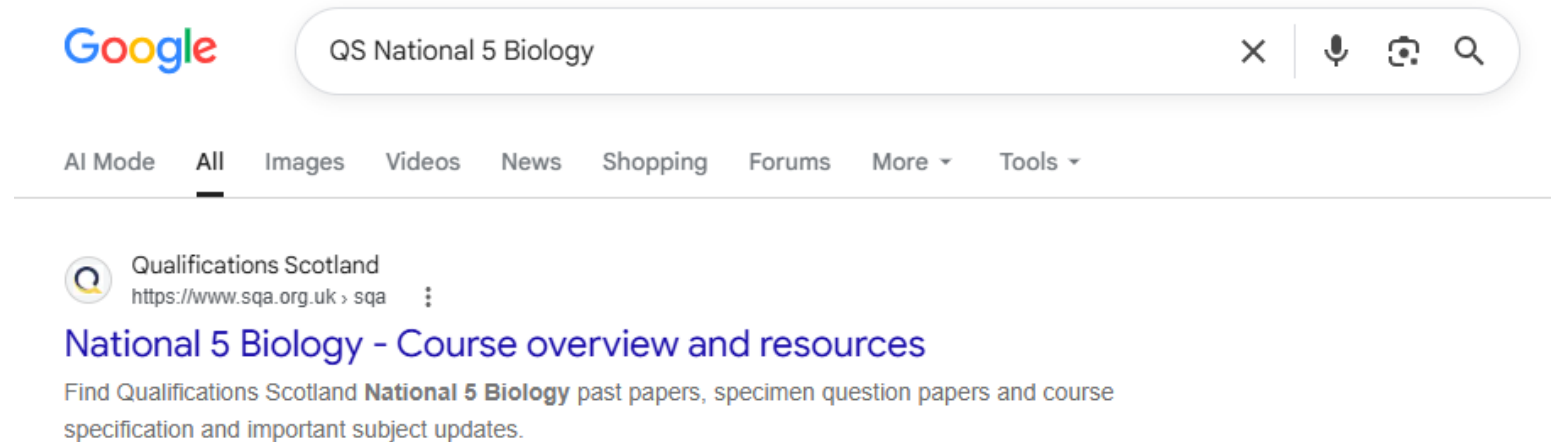
Course Support Notes

- Pupils have all been issued with a copy of the QS Course Support notes.
- The course support notes can be found in the course specification document on the QS website.

Course Support Notes

Google “QS National 5 Biology”

You will find the top result should be “National 5 Biology – Course Overview and Resources”



Select subject



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National 5 Biology

Biology

National 3

National 4

National 5

Higher

Adv Higher

Changes to the course assessment from session 2026-27 (03/06/26) +

Content may reference SQA but remains valid (02/02/26) +

Common Questions (16/01/25) +

Course Specification (03/06/2026) -

Explains the structure of the course, including its purpose and aims and information on the skills, knowledge and understanding that will be developed.

Session 2026-27 onwards

- [National 5 Biology course specification](#)  June 2026

Session 2025-26

- [National 5 Biology course specification](#)  August 2022

When you open the document, it will look like this.

You need to keep scrolling down until you find a table with three columns as shown on the next slide.

National 5 Biology, SCQF Level 5 Course Specification

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National 5
course
specification



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National 5 Biology, SCQF Level 5 Course Specification

Course code:	C807 75
Course assessment code:	X807 75
SCQF:	level 5 (24 SCQF credit points)
Valid from:	session 2026–27

The course specification provides detailed information about the course and course



26

27

28

29

The key areas are from the course specification. The depth of knowledge required provides further detail of the key areas and an outline of the level of demand.

Note: The key areas **and** the depth of knowledge required **can be assessed in the question paper**.

Suggested learning activities are also provided. It is not compulsory that all are covered. The contexts for each key area are open to personalisation and choice, so centres may also devise their own learning activities. However, candidates must be given the opportunity to experience the use of the apparatus and the techniques listed below **as these can be assessed in the question paper**.

Cell biology		
Key areas	Depth of knowledge required	Suggested learning activities
1 Cell structure a Cell ultrastructure and functions — cell wall, mitochondrion, chloroplast, cell membrane, cytoplasm, vacuole, nucleus, ribosome and plasmid using examples from typical plant, animal, fungal and bacterial cells. b Cell wall is made of cellulose in plant cells but of different materials in fungal and bacterial cells.	Fungal structure in terms of similarity to plant and animal cells but with a different cell wall structure. Structure of bacteria — absence of organelles and a different cell wall structure to plant and fungal cells. Chemical composition of cell walls for fungi and bacteria not required.	♦ Examine slides of a range of plant, animal and microbial cells using a light microscope/bioviewer, eg onion/rhubarb epidermis, cheek epithelium, yeast and prepared slides of bacterial cells. ♦ Numeracy activities on cell size to investigate cell length and breadth.

Course Support Notes

- Pupils **must** know all information that is contained in the column on the left and also the middle column.
- The column on the right has suggested activities – ways that teachers can bulk out the course if they have time.
- The QS use this document to make their marking schemes – hence we tell pupils to stick to the phrasing in this document.

Task!

- There are past paper questions and sample answers!
- We would like you to try to identify which answers would be accepted and which would not – you can use the copy of the course support notes to help you!
- There may be more than one accepted answer! For two mark questions, the answer may gain 0, 1 or 2 marks.

1. New cells are produced by mitosis throughout life. State a reason, other than growth, why cells continue to be produced throughout life.

1 Mark	0 Marks
Repair	Repair cells
Repair tissues	Repair damaged cells
Replace damaged cells	

Repair (tissues/organs) OR Replace (dead/damaged) cells	1	Not acceptable: Repair (dead/damaged) cells
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Course Support Notes

Mitosis provides new cells for growth, repair of damaged tissues and replacement of dead or damaged cells. It also maintains the diploid chromosome complement.

2. Lymphocytes and phagocytes are specialised white blood cells. Describe the different ways in which these two types of cell destroy pathogens.

Phagocytes engulf/digest pathogens
(1)

Lymphocytes produce/release
antibodies
(1)

2

Not acceptable:
Phagocytes destroy/surround
pathogens/carry out phagocytosis
(not negating otherwise correct
answer)

Phagocytes eat (negates an
otherwise correct answer)

Answer 1: Phagocytes engulf pathogens and lymphocytes produce antibodies

- 2 marks awarded

Answer 2: Phagocytes surround pathogens and lymphocytes release antibodies

- 1 mark awarded – lymphocytes release antibodies
- The word "surround" is incorrect

Answer 3: Phagocytes destroy pathogens and lymphocytes produce antibodies

- 1 mark – lymphocytes produce antibodies
- The word "destroy" is incorrect

Course Support Notes

White blood cells are part of the immune system and are involved in destroying pathogens. There are two main types of cells involved. Phagocytes carry out phagocytosis by engulfing pathogens. Some lymphocytes produce antibodies which destroy pathogens. Each antibody is specific to a particular pathogen.

Pathogens are disease-causing micro-organisms (bacteria, viruses, fungi).

Process of phagocytosis — engulfing and digestion. Detail of lysis/lysosomes not required.

Detail of antibody structure not required.

3. Soil moisture and temperature are examples of abiotic factors. Name one other abiotic factor that can affect plant growth.

1 Mark	0 Marks
Light intensity	Light

pH/light intensity/wind speed/ humidity/mineral concentration/ nitrate concentration	1	Not acceptable: Light
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Course Support Notes

Competition for resources, disease, food availability, grazing and predation are biotic factors. Light intensity, moisture, pH and temperature are abiotic factors.

4. Name one resource, other than water, for which plants may be in competition.

1 Mark	0 Marks
Light	Light intensity
Sunlight	Food
Nutrients	

Light/sunlight/nutrients/minerals/ space.	1	Not acceptable: - light intensity - food.
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Course Support Notes

Competition in ecosystems occurs when resources are in short supply. Interspecific competition occurs amongst individuals of different species for one or a few of the resources they require. Intraspecific competition occurs amongst individuals of the same species and is for all resources required. Intraspecific competition is therefore more intense than interspecific competition.

Other Examples....

Q. What is the function of the nucleus

Acceptable: "controls cell activities or controls cell functions"

Not acceptable: "controls the cell"

Other examples....

Q: How do you make an experiment more reliable

Accepted: "repeat the experiment"

Not accepted: "do it again, do it more times"

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