

AS and A level **Biology**

❄ **Biology A (Salters-Nuffield)**

👉 **Biology B**

Your guide to our qualifications



Hello and welcome

Our **AS and A level Biology qualifications** will engage and inspire the scientists of the future. We've worked with all parts of the science education community and used the opportunity of curriculum change to design courses that will encourage students to develop as scientists, and give them the skills to succeed in their chosen pathway.












To ensure you can cover a range of topics with teaching approaches that will suit you and your students, we've created **two sets of courses**:

 **AS and A level Biology A (Salters-Nuffield)**

 **AS and A level Biology B.**

This guide gives you an **overview** of our **AS and A level Biology** courses. You can also learn more about the comprehensive help and support we are planning for you.





Take a look through our specification guide to find out more about:

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We're here to help you understand the changes to AS and A level Biology, so you're ready to teach the specifications. Whether it is on the phone, by email, or in person at a training event, we'll support you as you plan and teach the new qualifications.

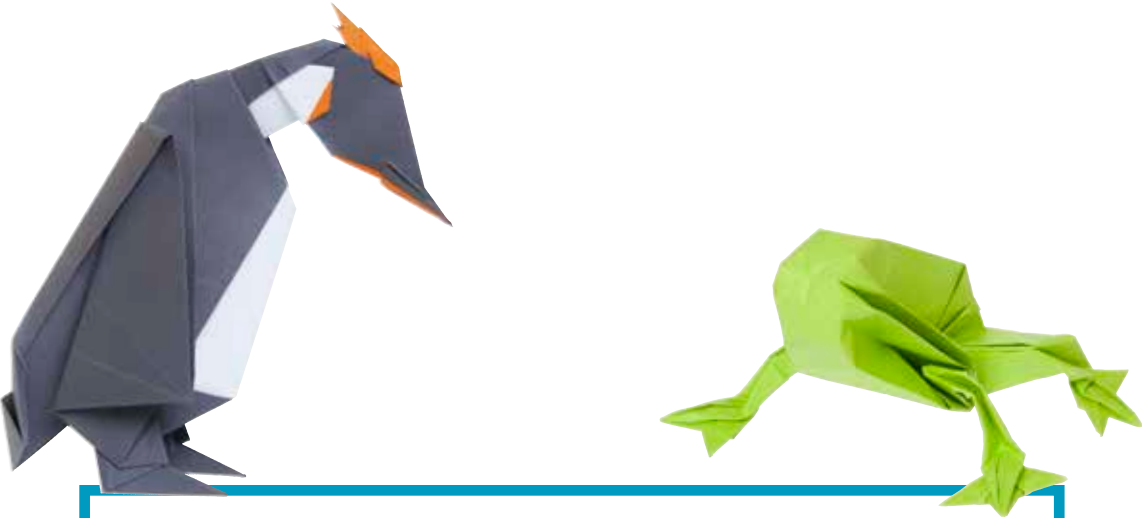
We look forward to meeting you at our New to Edexcel events and answering any questions you might have about our new specifications.

AS and A level Biology

-  AS and A level Biology are **linear** qualifications; assessments for each qualification will take place at the end of each course.
-  AS is a **stand-alone qualification**, meaning it will not form part of students' A level grades. However, the content of the AS is included in the A level content, to allow the two qualifications to be **co-taught**.
-  Questions assessing students' **use of mathematical skills** will make up **10%** of the exam papers.
-  There are **no coursework** elements in our AS and A level Biology courses. Instead, students will be required to complete a number of **core practicals** which cover specific skills and techniques.

Practical skills are assessed in **two** ways:

-  investigative skills, and knowledge and understanding of some core practicals are assessed in **AS and A level exams** and contribute to students' overall grades.
-  **teacher assessment** of students' competency when completing practical work will count towards the separate **Practical Endorsement** at A level (*see page 7 for more details*).
-  Some of your students will be hoping to study biology or a related subject at university. Wishing to encourage this, we've worked with **Higher Education** institutions to ensure that our qualifications provide the right preparation for further study.



You can learn more at:
<http://quals.pearson.com/edexcelasandalevel/biologya>
and
<http://quals.pearson.com/edexcelasandalevel/biologyb>.

Our Edexcel AS and A level Biology qualifications

Straightforward and balanced specifications

- The AS and A level specifications are **fully co-teachable**, to give you flexibility with your teaching arrangements.
- You can teach all our biology specifications using a **concept-led approach** or a **context-led approach**, as best suits your students (see pages 8 and 9 for more details).
- Specification content is arranged into **distinct topics** and linked to clear descriptive statements, so you and your students know the depth of understanding that's expected.
- Topics cover **fundamental areas of biology**, such as cells, biological molecules, transport and classification. Later topics build on what has come before to give students a broad knowledge base for assessment and progression to further study and the workplace.
- Support** is available for each key aspect of the specifications, from transition units helping students make the move from GCSE to AS and A level study, to guidance on integrating mathematical and investigative skills into lessons.



Inspiring students to *think* as scientists

Practical work is at the heart of the qualifications

- Core practicals have been designed to meet **assessment requirements** and link directly to the specifications, so your students can develop their practical skills in a context they're familiar with.
- Our **choices** of core practicals are based on what you've told us **works well** in classroom and fieldwork situations and are the experiments you and your students **enjoy**.
- The **range** of core practicals enables students to build their confidence by giving them more than one opportunity to master techniques. It also means if your students miss a lesson, they'll have a chance to try the technique again.
- You know your students best, so we've added extra **flexibility** around practical work, so you can substitute a core practical with one of your own, or do more, if you think they develop the same skills and techniques.
- We've created **tools** and **resources** to help you and your students with each aspect of practical work – from planning the experiments and selecting apparatus to honing investigative skills.

Enabling students to *work* as scientists

Assessment you and your students can have confidence in

- Our exam questions include **clear command words** to ensure students understand the knowledge and skills they're being asked to demonstrate.
- There are a **range of question styles** to test students' breadth of knowledge and depth of understanding, and reward the different strengths students have.
- Our question papers are **ramped**, with the level of challenge increasing throughout the exam. Every question, where possible, will begin with a more **accessible** question part that all students can engage with.
- The assessment of students' **scientific investigative skills** in question papers is based on approaches we know work well already in our international exams and current specifications.
- There are plenty of **tools** and **support** available to help you and your students with exam preparation. In addition to student exemplars with examiner commentaries and extra assessment materials, there's a range of free online services to help you and your students test, track and understand their progress and performance.

Supporting students to *develop* as scientists

Support that's timely and tailored to your needs

- It's **specialist**: your Subject Advisor, Irine Muhiuddin, will be on-hand to answer any queries you may have; our Science Team also regularly send email updates so you know the latest news.
- It's **local**: training events and network events will be taking place near you.
- It's **driven by you**: we'll develop our support based on what you tell us you need.

Guiding you and your students through the AS and A level courses

The AS and A level 2015 Biology qualifications

Both our courses cover the key concepts in biology but differ in topic matter and teaching styles, so you can choose what will work best for you and your students.

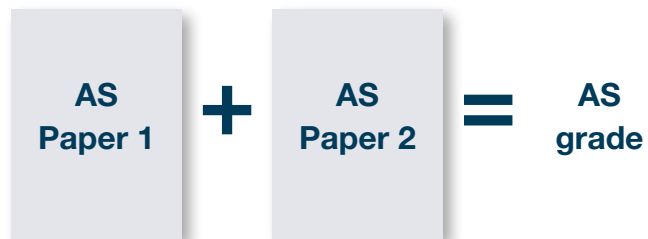
❄️ **AS and A level Biology A (Salters-Nuffield)** – the most widely-used context-led courses.
(See page 8 for more details.)

🌿 **AS and A level Biology B** – courses combining traditional and modern topics.
(See page 9 for more details.)

How assessment will work at AS and A level

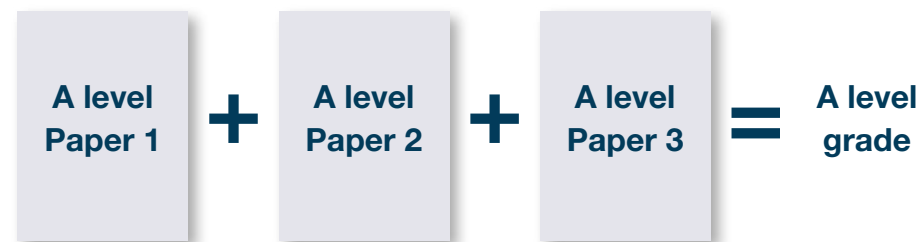
With AS being a stand-alone qualification, it will no longer form part of students' A level grades. As such, students could choose to take AS and A level exams to receive grades for both qualifications, or just A level papers at the end of Year 13 to gain an A level grade. The qualification structure is the same for all AS and A level Sciences, regardless of exam board.

To achieve an AS qualification, students need to take:



Note: AS exam papers will include questions on some of the **core practicals** in the AS specification.

To achieve an A level qualification, students need to take:



Note: A level exam papers will include questions on some of the **core practicals** in the specification.
All content in the AS specification is included in the A level specification.

The Practical Endorsement (at A level only)

Teacher
assessment of
students' practical
competency

=

Practical
Endorsement
(reported on A level
certificate)

Practical Endorsement

AS and A level Biology is 100% externally assessed; this means there are **no coursework elements** in the new courses. Instead, students are required to complete a number of **core practicals** throughout the courses that cover specific skills and techniques. Students' investigative skills and knowledge and understanding of core practicals will be tested in **exam papers** and will contribute to their final grades.

In addition, students' skills and technical competency when completing practical work will be assessed by teachers. This will form the basis for the award of a **Practical Endorsement** at A level. This is separate to the A level grade and, if awarded, will be reported as a 'Pass' on A level certificates for students who achieve it.



Turn to pages 10 and 11 for details on the assessment model for AS and A level Biology A (Salters-Nuffield).



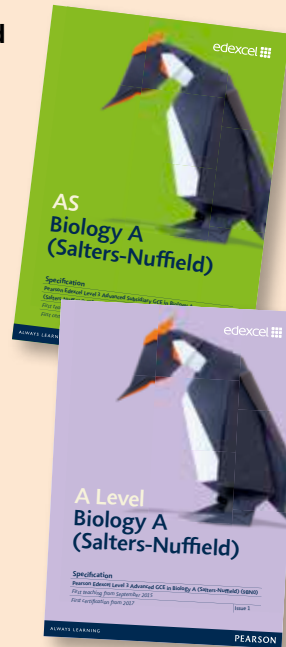
Turn to pages 12 and 13 for details on the assessment model for AS and A level Biology B.

Edexcel AS and A level Biology – offering you choice

There are many ways to teach a subject as diverse as biology. That's why we're offering **two** sets of AS and A level Biology qualifications. Both Biology A (Salters-Nuffield) and Biology B cover the core subject criteria and are an excellent basis for progression to further study, but they differ in topic matter and teaching styles. This way, you can choose the course that will work best for you and your students.

Biology A (Salters-Nuffield)

- ❄ The **established and most widely-used context-led courses**. They have been created in partnership with the University of York Science Education Group.
- ❄ The course uses **storylines** and **real-life contexts** to introduce biological principles.
- ❄ **AS exams**: two equally-weighted papers covering specification topics and investigative skills.
- ❄ **A level assessment**: all three papers assess investigative skills and theoretical knowledge and understanding of specification topics. Paper 3 also includes questions based on a pre-release article, enabling students to apply their knowledge to a new context.
- ❄ **Topics** covered alongside the core subject criteria include developmental biology, the musculoskeletal system, and learning and habituation.
- ❄ A range of **specific core practicals** link directly to AS and A level Biology A (Salters-Nuffield) specification topics, giving students opportunities to develop their investigative skills and consolidate their learning. *(See Appendix 5 of the specifications for more details.)*



Turn to pages 10–17 for more information on AS and A level Biology A (Salters-Nuffield).



Did you know?

The thematic presentation of topics means you can also teach the courses using a **concept-based route**, if you wish.

Biology B

- ✔ Courses are built around a combination of **traditional** and **modern topics**.
- ✔ **AS exams**: two equally-weighted papers covering specification topics and investigative skills.
- ✔ **A level exams**: all three papers assess theoretical knowledge and understanding of specification topics; Paper 3 also focuses on investigative skills.
- ✔ **Topics** covered alongside the core subject criteria include microbiology; there's also a focus on physiology, such as osmoregulation and the kidney.
- ✔ A range of **specific core practicals** link directly to AS and A level Biology B specification topics, giving students opportunities to develop their investigative skills and consolidate their learning. *(See Appendix 5 of the specifications for more details.)*



Turn to pages 18–23 for more information on AS and A level Biology B.

Did you know?

The nature of the topics means you can also teach the courses using a **context-based route**, if you wish.



AS and A level assessment at a glance

AS

- Exam questions will test students' knowledge and understanding of the relevant specification topics.
- Each paper assess students' knowledge and understanding of experimental methods, based on the core practicals in the specification.
- Question types: multiple choice, short and long answer questions (up to 9 marks), and calculations.
- Questions assessing students' use of mathematical skills will make up 10% of the exam papers.

Paper 1 – Lifestyle, Transport, Genes and Health

✓ 80 marks ⚖️ 50% weighting ⌚ 1 hour 30 minutes

- Topic 1: Lifestyle, Health and Risk
- Topic 2: Genes and Health

Paper 2 – Development, Plants and the Environment

✓ 80 marks ⚖️ 50% weighting ⌚ 1 hour 30 minutes

- Topic 3: Voice of the Genome
- Topic 4: Biodiversity and Natural Resources

Note: All AS exams must be taken in the same examination series. Results from AS examinations will count towards the AS grade but will not form part of the A level grade.



Looking for more information about AS and A level exams?
Visit <http://quals.pearson.com/edexcelasandalevel/biologya/exammaterials>.

A level

- Exam questions will test students' knowledge and understanding of the relevant specification topics and experimental methods based on the core practicals in the specification.
- Paper 3 also includes questions based on a pre-release article.
- Question types: multiple choice, short and long answer questions (up to 9 marks), and calculations.
- Questions assessing students' use of mathematical skills will make up 10% of the exam papers.

Paper 1 – The Natural Environment and Species Survival

✓ 100 marks ⚖️ 33.3% weighting ⌚ 2 hours

- Topic 1: Lifestyle, Health and Risk
- Topic 2: Genes and Health
- Topic 3: Voice of the Genome
- Topic 4: Biodiversity and Natural Resources
- Topic 5: On the Wild Side
- Topic 6: Immunity, Infection and Forensics

Paper 2 – Energy, Exercise and Co-ordination

✓ 100 marks ⚖️ 33.3% weighting ⌚ 2 hours

- Topic 1: Lifestyle, Health and Risk
- Topic 2: Genes and Health
- Topic 3: Voice of the Genome
- Topic 4: Biodiversity and Natural Resources
- Topic 7: Run for your Life
- Topic 8: Grey Matter

Paper 3 – General and Practical Applications in Biology

✓ 100 marks ⚖️ 33.3% weighting ⌚ 2 hours

- All topics across the full A level specification.
- A section of the paper will include questions based on a pre-release article.

Assessing practical work at AS and A level

AS and A level Biology is 100% externally assessed; this means there are **no coursework elements** in the new courses. Instead, students are required to complete a number of core practicals throughout the courses that cover specific skills and techniques.

Practical skills will now be assessed in **two** ways:

❄️ investigative skills, and knowledge and understanding of core practicals will be tested **in AS and A level exams** and contribute to students' overall grades.

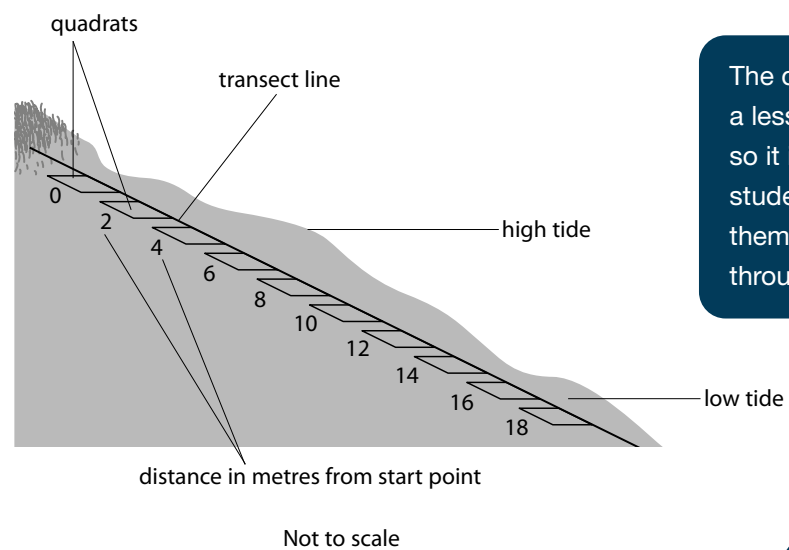
❄️ **teacher assessment** of students' skills, techniques and competency when completing practical work will count towards the **Practical Endorsement** at A level. This is separate to the A level grade and, if awarded, will be reported as a 'Pass' on A level certificates.

Sample Assessment Materials

This question comes from **A level Biology A (Salters-Nuffield) Paper 1 – The Natural Environment and Species Survival**.

- 11** The distribution and abundance of species on a rocky shore were investigated using a systematic sampling technique.

(a) The diagram shows the placing of the transect and quadrats on a rocky shore.



- (i) Give a reason why systematic sampling, rather than random sampling, was used in this investigation.

(1)

Our questions increase in **demand** throughout the paper; this one is placed near the end of the paper, highlighting its more challenging nature.

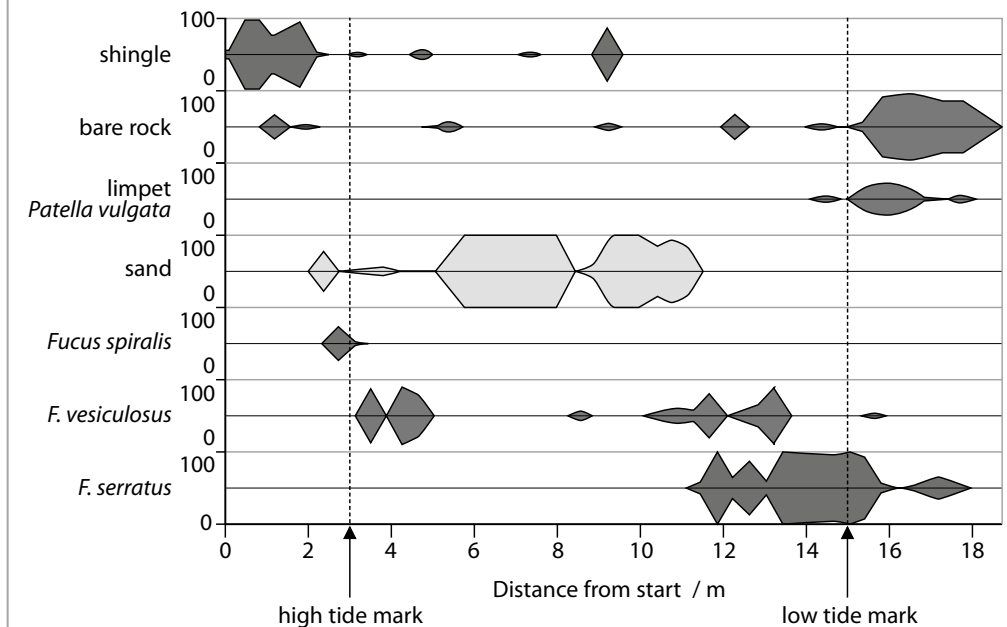
The question begins with a less demanding part, so it is **accessible** to students and encourages them to progress throughout the paper.

Knowledge of sampling techniques, related to one of the **core practicals**, is tested in this question part.

30

The asterisk shows that this is a question testing the **logical presentation of information and ideas** in students' answers.

- * (ii)** The diagram shows the distribution of some of the abiotic and biotic components of a sea shore. There are three species of seaweed (*Fucus*) and one species of limpet (*Patella vulgata*). Limpets feed on seaweed.



Analyse the data to explain how the distribution patterns of *Fucus spiralis*, *Fucus vesiculosus* and *Fucus serratus* are affected by abiotic and biotic factors.

(6)

This question tests **AO3** by requiring students to analyse data and form a conclusion.

Asterisked questions will also usually be worth **6 or 9 marks**. They will test students' abilities to construct a **sustained line of reasoning**.

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Learn more at <http://quals.pearson.com/edexcelasandalevel/biologya/SAMs>.

- (b) (i) Another study compared the diversity of species at different places on the shore. On the upper shore the following data were obtained.

Species	Number of individuals found
<i>Pelvetia canaliculata</i>	10
<i>Enteromorpha</i> sp.	3
<i>Patella vulgata</i>	3
<i>Littorina littorea</i>	15
<i>Gibbula</i> sp.	14
Lichens	15

Calculate an index of diversity (D) for this site using the formula below.

$$D = \frac{N(N-1)}{\sum n(n-1)}$$

n = total number of organisms of a particular species

N = total number of organisms of all species

Any **formulae** are provided for students.

This question requires use of **mathematical manipulation**, in this instance Simpson's diversity index. This is part of the requirement for **10%** of marks in exam papers to assess mathematics.

Answer.....

- (ii) On the middle shore the index was found to be 7.74 with a total individual count of 37.

Comment on the relationship between diversity and the total number of individuals on these two parts of the shore.

(2)

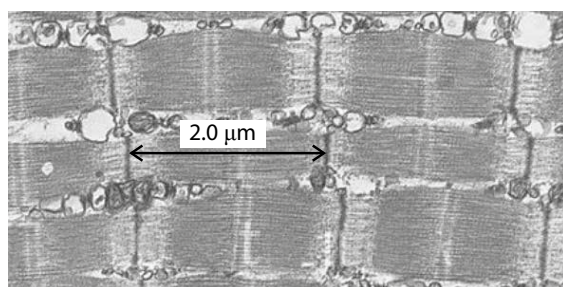
(Total for Question 11 = 12 marks)

This question requires students to **interpret** the information they have calculated in the earlier question to compare with another area of the shore (errors carried forward will be allowed for).

Sample Assessment Materials

This question comes from **A level Biology A (Salters-Nuffield) Paper 2 – Energy, Exercise and Co-ordination**.

- (b) The electron micrograph shows the arrangement of protein filaments in the contractile units of muscle myofibrils.



© P154/0217 Skeletal muscle, Biology Media/Science Photo Library

- (i) Calculate the magnification of this electron micrograph.

(2)

10% of marks within the paper will be used to assess **mathematical skills**, such as this magnification calculation.

Answer

- (ii) The number of myofibrils in this electron micrograph is

(1)

- ☐ A one
☐ B three
☐ C six
☐ D nine

The question is **ramped** towards a more demanding final part. Ramping of the whole paper, as well as within each question, encourages students to complete papers whilst still stretching the most able.

- (iii) The electron micrograph shows the myofibrils in a relaxed muscle.

Explain how the appearance of this myofibril changes when a muscle contracts.

(2)

- (c) Muscle tissue contains fast twitch and slow twitch fibres.

The table below shows the percentage of these fibres in two different people.

Person	Percentage of muscle fibre	
	Fast twitch	Slow twitch
A	80	20
B	50	50

Explain which person has muscles that are more resistant to fatigue.

(4)

This **4-mark** question requires students to analyse the data and form a conclusion using their biological knowledge – this tests **AO3**.

(Total for Question 6 = 10 marks)

Learn more at <http://quals.pearson.com/edexcelasandalevel/biology/SAMs>.

AS and A level assessment at a glance

AS

- Exam questions will test students' knowledge and understanding of the relevant specification topics.
- Each paper assess students' knowledge and understanding of experimental methods, based on the core practicals in the specification.
- Question types: multiple choice, short and long answer questions (up to 9 marks), and calculations.
- Questions assessing students' use of mathematical skills will make up 10% of the exam papers.

Paper 1 – Core Cellular Biology and Microbiology

- ✓ 80 marks ⚖️ 50% weighting ⌚ 1 hour 30 minutes
- Topic 1: Biological Molecules
 - Topic 2: Cells, Viruses and Reproduction of Living Things

Paper 2 – Core Physiology and Ecology

- ✓ 80 marks ⚖️ 50% weighting ⌚ 1 hour 30 minutes
- Topic 3: Classification and Biodiversity
 - Topic 4: Exchange and Transport

Note: All AS exams must be taken in the same examination series. Results from AS examinations will count towards the AS grade but will not form part of the A level grade.



Looking for more information about AS and A level exams?
Visit <http://quals.pearson.com/edexcelasandalevel/biologyb/exammaterials>.

A level

- Exam questions will test students' knowledge and understanding of the relevant specification topics.
- Paper 3 will test students' investigative skills, based on core practicals in the specification.
- Question types: multiple choice, short and long answer questions (up to 9 marks), and calculations.
- Questions assessing students' use of mathematical skills will make up 10% of the exam papers.

Paper 1 – Advanced Biochemistry, Microbiology and Genetics

- ✓ 90 marks ⚖️ 30% weighting ⌚ 1 hour 45 minutes
- Topic 1: Biological Molecules
 - Topic 2: Cells, Viruses and Reproduction of Living Things
 - Topic 3: Classification and Biodiversity
 - Topic 4: Exchange and Transport
 - Topic 5: Energy for Biological Processes
 - Topic 6: Microbiology and Pathogens
 - Topic 7: Modern Genetics

Paper 2 – Advanced Physiology, Evolution and Ecology

- ✓ 90 marks ⚖️ 30% weighting ⌚ 1 hour 45 minutes
- Topic 1: Biological Molecules
 - Topic 2: Cells, Viruses and Reproduction of Living Things
 - Topic 3: Classification and Biodiversity
 - Topic 4: Exchange and Transport
 - Topic 8: Origins of Genetic Variation
 - Topic 9: Control Systems
 - Topic 10: Ecosystems

Paper 3 – General and Practical Principles in Biology

- ✓ 120 marks ⚖️ 40% weighting ⌚ 2 hours 30 minutes
- All topics across the full A level specification.
 - Half of the paper will focus on testing students' knowledge and understanding of practical skills and techniques.

Assessing practical work at AS and A level

AS and A level Biology is 100% externally assessed; this means there are **no coursework elements** in the new courses. Instead, students will be required to complete a number of core practicals throughout the courses that cover specific skills and techniques.

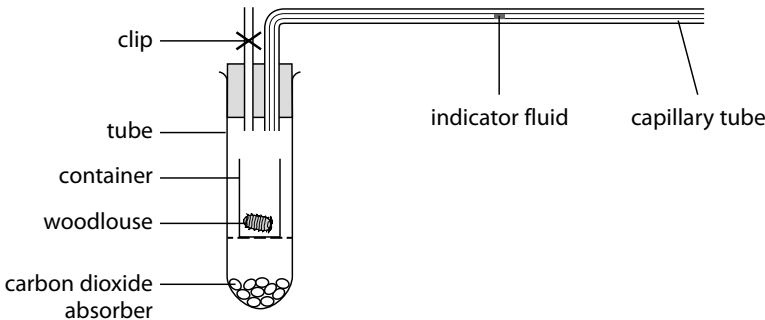
Practical skills will be assessed in **two** ways:

- **investigative skills**, and knowledge and understanding of core practicals will be tested **in AS and A level exams** and contribute to students' overall grades.
- **teacher assessment** of students' skills, techniques and competency when completing practical work will count towards the **Practical Endorsement** at A level. This is separate to the A level grade and, if awarded, will be reported as a 'Pass' on A level certificates.

Sample Assessment Materials

This question comes from **A level Biology B Paper 3 – General and Practical Principles in Biology**.

- 3** The diagram below shows a simple respirometer used by a student to measure the rate of respiration of a small invertebrate called a woodlouse.
- The rate was measured by observing the distance the indicator fluid moved in a known time.



- (a) Give one way in which the student could modify the procedure to obtain a better measurement of the rate of respiration.

(1)

- (b) Explain what would happen to the indicator fluid after five hours if a culture of green algae was added to the container and the tube was completely covered in light-proof paper.

(4)

Students will be asked about their understanding of the **core practicals** they have carried out.

Our specification gives guidance on the **command words** used in our question papers. For **'explain'**, the question will always require students to give a justification.

- (c) (i) The student wanted to compare the rate of respiration of a mouse with that of a woodlouse.

Explain how you could modify the procedure used to measure the rate of respiration of the woodlouse so that it could be used to compare with the rate of respiration of a mouse.

Your answer should explain the reasons for the modifications and include reference to the ethical treatment of the animal, and show how you could produce valid results.

(5)

Students need to be able to **develop** and **refine** practical design and procedures, so some questions will assess these skills.

- (ii) Comment on how the results you would expect to obtain for a mouse would differ from the results for a woodlouse.

(2)

(Total for Question 3 = 12 marks)

Learn more at <http://quals.pearson.com/edexcelasandalevel/biologyb/SAMs>.

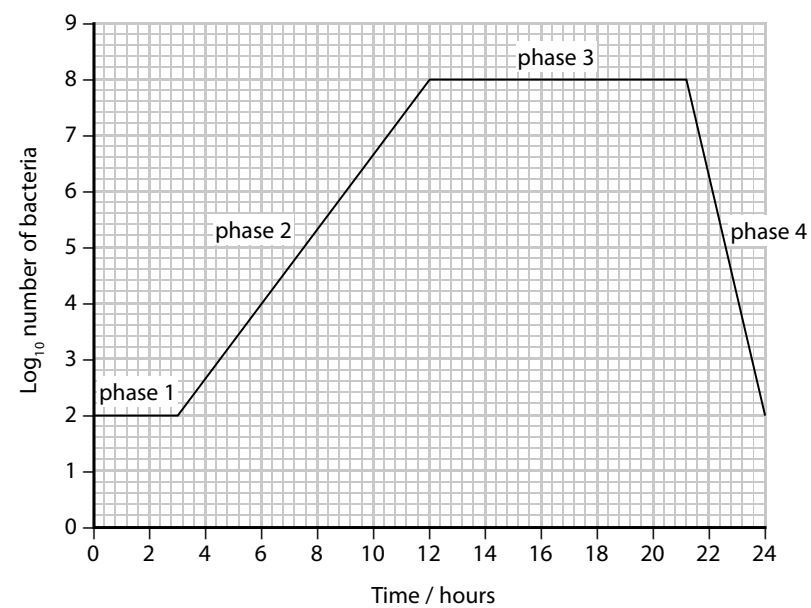
Sample Assessment Materials

This question comes from **A level Biology B Paper 1 – Advanced Biochemistry, Microbiology and Genetics**.

8 A broth culture for growing bacteria was set up.

Dilution plating was used to determine the number of live bacteria in the culture over a period of 24 hours.

The graph below shows the number of live bacteria in the culture during this 24-hour period.



(a) Which is the correct order of the phases 1 to 4 shown on the graph?

- ☐ **A** lag, log, death, stationary
- ☐ **B** lag, log, stationary, death
- ☐ **C** log, lag, death, stationary
- ☐ **D** log, lag, stationary, death

Typically, about **10%** of questions on question papers (except A level Paper 3) will be multiple-choice questions in this format.

*** (b)** Evaluate the use of dilution plating and optical methods for determining the number of bacterial cells in a culture.

(6)

Asterisked questions will usually be worth 6 or 9 marks. They will test students' abilities to **present information and ideas logically** and construct a **sustained line of reasoning**.

(c) Calculate the growth rate constant (k) for phase 2 of this culture, using the formula:

$$k = \frac{\log_{10} N_t - \log_{10} N_0}{0.301 \times t}$$

(4)

10% of marks in the papers will require candidates to use **mathematical skills**. This question requires students to read from the graph and use their calculator to process the data.

Answer

(Total for Question 8 = 11 marks)

Learn more at <http://quals.pearson.com/edexcelasandalevel/biologyb/SAMs>.

How we're supporting you

Based on what you've told us, we've looked in depth at how we can give you the support you need to **plan** and **implement** the Edexcel AS and A level Biology A (Salters-Nuffield) and Biology B specifications successfully. We've also explored how we can help you and your students overcome those critical barriers to progress in science.

Whether it's getting started with the qualifications, helping students to master fundamental mathematical and practical skills, or getting an answer to a query, we'll be there to help with a wide range of **free** support.

Designing your curriculum

- **Getting Started Guides** – summarising the AS and A level Biology, our assessment models and specification content.
- **Mapping documents** showing changes to the AS and A level specifications, so you know the content that's been removed, added, or changed in emphasis – all at a glance.
- Editable **schemes of work** and **course planners** for teaching AS and A level courses separately or together, to account for the different teaching approaches your centre may choose.

Preparing for practical work

- A handy **list of core practicals** enabling you to get the information you need from the specifications quickly and easily.
- **Mapping documents** matching the core practicals to the essential skills appendix in our specifications.
- **Teacher, technician and student worksheets** which detail the procedure, apparatus and safety instructions for each core practical.
- **Teacher materials for developing investigative skills**, helping you integrate practical work and the teaching of investigative skills into your lessons.
- **Student materials for developing investigative skills** encouraging a deeper understanding of the underlying science behind practicals, guiding students to think independently as scientists and helping their preparations for AS and A level assessment.

Understanding the new standard

- A **bank of exemplar student work** and **examiner commentaries**, available before first teaching to help you and your students understand the standard that's expected.
- **Additional sample assessment materials** to help you familiarise yourself with the assessment styles and to use with your students to help assess their progress throughout the course.
- **Enhanced examiner reports** and **feedback training events*** after each exam series.

Teaching and learning

- **Transition units** – written by experienced teachers, these classroom materials are designed for those initial AS lessons, to help your students develop the essential skills they need to transition from GCSE to A level study successfully.
- **Topic delivery guides** to refresh your knowledge on some of the AS and A level content, and offer teaching suggestions.
- **Teacher and student materials for developing maths skills** to help you and your students understand the mathematical requirements of the AS and A level specifications and give opportunities to practise applying these essential skills.

Tracking and progression

ResultsPlus

A free online service giving detailed, instant feedback on your students' exam performance.

- **Secure mock papers** that will be released when you need them.
- **Mock Analysis** – a specific component of our **ResultsPlus** service that allows you to use past papers as mocks and receive the same detailed analysis of students' exam performance.

examWizard

A free, easy-to-use exam preparation tool containing a bank of past questions to help you create your own mock exams and tests.

*There may be a charge for these events.

Subject and local support when you need it

- **New to Edexcel events** to support you as you prepare to teach our courses from September 2015.
- **Local network events** for the latest updates and providing opportunities to network and share best practice with fellow teachers.
- **Training events*** throughout the academic year to help with delivering the AS and A level courses.
- **Regular email updates** from our Science Team.
- **An expert Subject Advisor, Irine Muhiuddin, and specialist Science Team** available to answer your queries.

Learn more at
<http://quals.pearson.com/edexcelasandalevel/biologya/support>
and
<http://quals.pearson.com/edexcelasandalevel/biologyb/support>.

Published resources

Endorsed resources for: Edexcel AS and A level Biology A (Salters-Nuffield) and Edexcel AS and A level Biology B

We're committed to helping teachers deliver our new AS and A level Biology courses and students to achieve their full potential. To do this, we aim for our qualifications to be supported by a wide range of high-quality resources, produced by a range of publishers, including ourselves.

We're working with a range of publishers who have their resources endorsed:

- Hodder Education: Edexcel A level Biology Year 1 and Year 2 (Student Book, Student Guides, and Teaching and Learning Resources).
- Pearson: Salters-Nuffield AS/A level: Books 1 and 2.
Edexcel AS/A level Biology B: Books 1 and 2.

It is not necessary to purchase endorsed resources, including those published by Pearson, to deliver our qualifications.

Published resources from Pearson

Salters-Nuffield AS/A level Biology

The Salters-Nuffield (SNAB) resources have been tried and trusted for over a decade and are the only A level Biology resources that are supported by a dedicated project team run by the University of York Science Education Group (UYSEG).

Developed in collaboration with schools, educational specialists and scientists from universities and industry, the edition of Salters-Nuffield AS/A level Biology continues to offer a context-led approach to A level Biology designed to stimulate scientific interest and enquiry set in real-life contexts. With exciting new features throughout, Salters-Nuffield AS/A level Biology helps to develop successful independent biologists able to progress from GCSE and to further study at Higher Education and beyond.



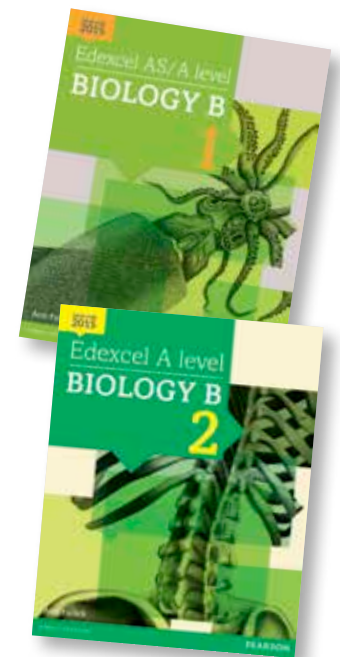
Edexcel AS/A level Biology B

Our paid-for resources are written specifically to help you teach the new Edexcel A level Biology B and to develop successful independent biologists able to progress from GCSE and to further study at Higher Education and beyond.

Developing a deep subject understanding: help your students understand the bigger picture and recognise connections across topics.

Removing the barriers to learning: understanding core conceptual knowledge and acquiring key scientific skills are essential to removing barriers to learning and developing confident and independent learners.

Synoptic learning and exam preparation: our Edexcel A level Biology B course approaches synoptic learning, consolidation and revision.



https://www.pearsonschoolsandfecolleges.co.uk/secondary/Science/16Biology/Edexcel-A-level-Science-2015/Edexcel_AS_and_A_level_Science.aspx

Get in touch!

**Supporting you for any of your
science qualification needs**

support.pearson.com/uk/s/qualification-contactus

