

# Thank you for joining today's event: **L3 Cambridge Advanced Nationals (AAQ)**

- This online session will begin at 4pm
- Please ensure that you are using Chrome or Firefox as your web browser
- If you have any questions for us, please type them into the chat window

# Troubleshooting

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## *Are you having issues with sound?*

### **I can't hear anything. What should I do?**

The main reason for sound issues is use of an incompatible web browser. To make sure the session runs smoothly, and for the best experience, please use **Chrome** or **Firefox**

### **I can't hear anything. Can I change the volume?**

You can adjust your speaker volume in 'My Settings'. Select 'My Settings' from the Collaborate panel (to open, click on the purple arrow icon in the bottom right of the screen). Click 'Audio and Video Settings'

### **I am still having sound issues – what next?**

If you continue to have issues with sound, please log out using the X button located at the top right of your screen and then re-join Blackboard using the guest link provided in your joining instructions

### **Contact us**

If you have tried all of the above and are still having trouble using Blackboard, please send us a message via the Blackboard chat window.

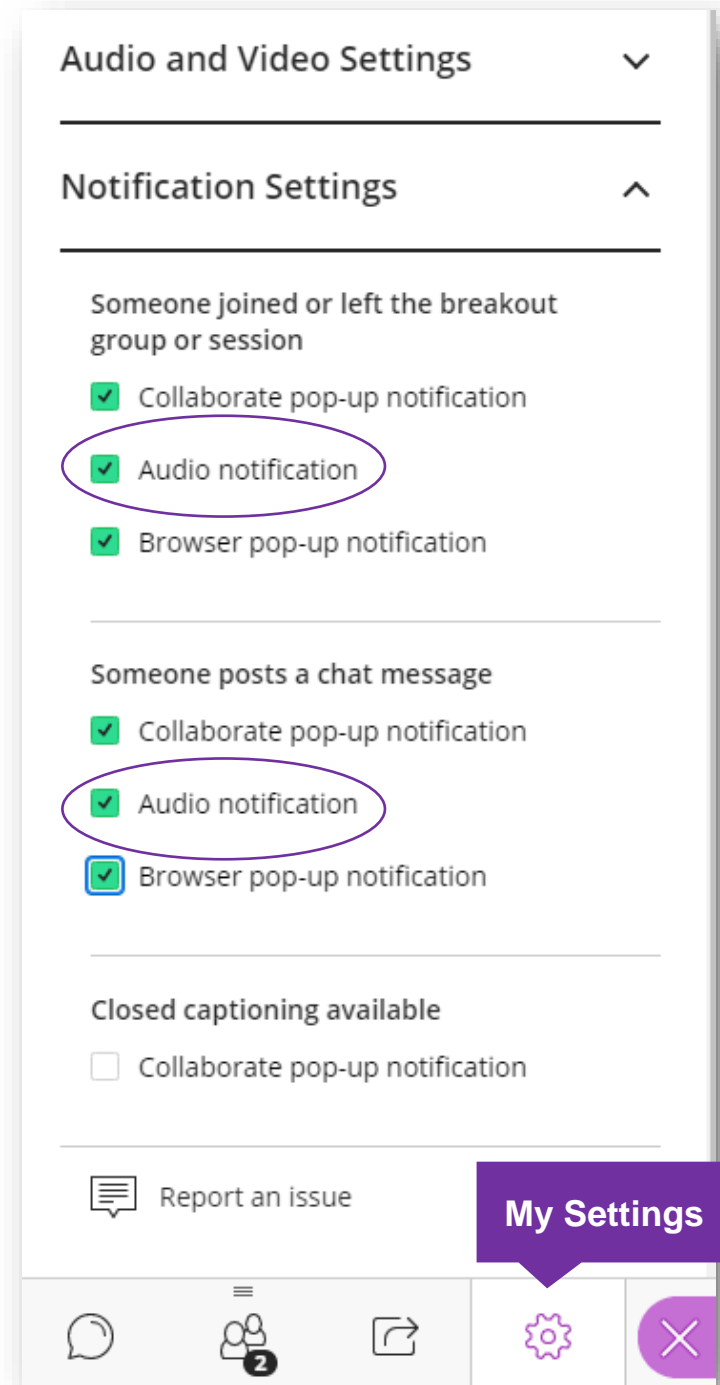
# Notification settings

To avoid any distractions during the session, you may find it useful to mute notifications

Select 'My Settings' from the Collaborate panel

Click on 'Notification Settings'

Untick the 'Audio notification' radio buttons





# L3 Cambridge Advanced Nationals (AAQ)

## Applied Science & Human Biology

The slides and recordings from this session will be sent to you on Friday 6 December.  
Please download the slides now or get in touch with us if you require the recordings sooner than this date.

Amy Brewer| *Science Subject Advisor*

# OCR subject advisors

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**BETHAN FOULKES**  
*GCSE Science & Applied Science*



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*GCSE Science & Applied Science*



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Book a  
meeting with  
us:



# Agenda

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- Introducing Cambridge Advanced Nationals (AAQs)
- What is unique about OCR's science AAQs?
- What are the benefits to students and teachers from studying our Cambridge Advanced Nationals?
- What support will be available for centres?
- What can you do next?

# Introducing Cambridge Advanced Nationals (AAQs)

# What are Alternative Academic Qualifications (AAQs)?

Designed for students aged 16 to 19 years, Alternative Academic Qualifications (AAQs) are Level 3 academic qualifications that can be combined with A Levels as part of a post-16 mixed-study programme. They are designed to help students learn the wider transferable skills, knowledge and understanding desired by universities.

[Cambridge Advanced Nationals](#), our Alternative Academic Qualifications (AAQs), will encourage students to:

- develop key knowledge, understanding and skills, relevant to the subject
- think creatively, innovatively, analytically, logically and critically
- develop valuable communication skills that are important in all aspects of further study and life
- develop transferable learning and skills, such as evaluation, planning, presentation and research skills, that are important for progression to HE and can be applied to real-life contexts and work situations
- develop independence and confidence in applying the knowledge and skills that are vital for progression to HE and relevant to the health and social care sector and more widely

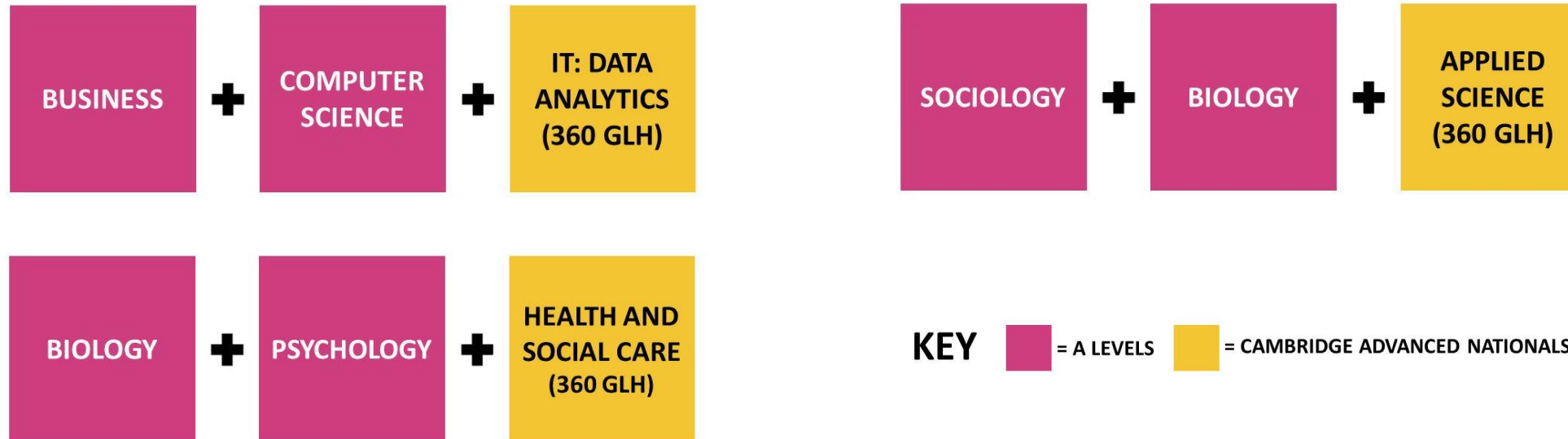


# Where do they fit into a post-16 programme of study?

Students who want to progress onto further or higher education, but don't want to study only A Levels (or a T Level programme), can choose a [mixed study programme](#). Cambridge Advanced Nationals are designed to complement existing A Level study programmes and provide flexibility for students, allowing them to choose a programme that best aligns with their abilities and goals.

Cambridge Advanced Nationals are currently available as a Certificate or Extended Certificate. The Certificate (180 GLH) is equivalent to one AS Level and the Extended Certificate (360 GLH) is equivalent to one A Level.

These can be taken alongside complimentary A Levels to create programme of study. Here are some [examples](#):



# How are Cambridge Advanced Nationals assessed?

Cambridge Advanced Nationals are assessed holistically and have a simple and intuitive assessment model, comprising:

- externally assessed units, which focus on subject knowledge and understanding
- applied or practical non-exam assessment units (NEA)
- optional NEA units to provide flexibility

Qualification	Size	External assessment (Exam)	Non-exam assessment (NEA)
Certificate	180 GLH	40%	60%
Extended Certificate	360 GLH	40%	60%

# Why choose Cambridge Advanced Nationals?

**Full compensation grading:** Students are always rewarded for their demonstrated abilities - every single mark your students earn will directly contribute to their final grade. [No mark will go to waste.](#)

**Every mark matters:** Gone are the days of hurdle elements in units. If a student meets all but one Pass criterion and some Merit criteria, they won't face failure. Our approach [compensates for performance at both the unit and qualification levels](#), ensuring fairness and encouragement for every student.

**Features teachers love and more:** Cambridge Advanced Nationals incorporate the popular features from our Cambridge Technicals, including visiting moderation, a blend of examination and coursework units, and we're keeping the well-recognised Pass, Merit, Distinction grade scale. Plus, you'll continue to benefit from our range of comprehensive support and resources.

**Pathways to university:** Designed in collaboration with teachers and universities, Cambridge Advanced Nationals equip students with a well-rounded skill set for today's undergraduate studies as part of a [Level 3 programme of study](#).

**Complementary practical application:** Designed to be taken alongside A Levels, Cambridge Advanced Nationals seamlessly [complement a mixed study programme](#) while maintaining a strong focus on the practical application of skills and knowledge - a valuable supplement to A Levels, enabling clear progression to university.

Hurdles based model

P1	M1	D1
P2	M2	D2
P3	M3	
P4		

In the hurdles-based model above, the student would fail to achieve a pass grade for the unit.

Compensation based model

P1	M1	D1
P2	M2	D2
P3	M3	
P4		

Using our new compensation-based model, the same student would still achieve a result for the unit.

Pass	Merit	Distinction
P1: Interpret the scan image to identify those regions of the brain likely to be affected by the TBI.	M1: Evaluate the advantages and disadvantages of using different scanning techniques for the diagnosis of the TBI in the case study.	D1: Justify why an EEG should be used to confirm the impact of the TBI on nerve impulse transmission in the patient's brain.
P2: Draw a fully annotated low-power plan diagram to show parts of the brain anatomy affected by the TBI.	M2: Describe the wider impact of the patient's injuries on their physical and mental wellbeing.	D2: Explain whether the spinal cord and nerves are affected by the TBI in the case study.
P3: Use research to describe how the patient's symptoms relate to the TBI in the case study.		
Pass	Merit	Distinction
P4: Use research to describe how a range of relevant potential treatments could be appropriate for the TBI patient.	M3: Evaluate two physical treatments and two psychological treatments which are needed to aid recovery of the patient.	D3: Analyse how the options chosen for pain management affect the patient on a cellular level.
P5: Create a logical treatment plan, containing all key components to meet the physical, psychological and personal needs of the patient.		
P6: Design a relevant schedule for drug prescription for the TBI patient.		
P7: Describe what contributions are required to be made by the specialists and non-specialists involved in the treatment plan.	M4: Discuss the use of different teams of healthcare professionals to support the patient.	
Pass	Merit	Distinction
P8: Create an appropriate presentation of the presentation of the treatment plan for the specialists identified in Task 2.	M5: Explain the most appropriate way for scientific terminology used in the presentation for the specialists to be communicated with the non-specialists.	D4: Justify the content of the presentation by detailing the scientific reasoning behind its inclusion.
P9: Suggest four adaptations to the presentation so that it can be used to communicate the treatment plan to the non-specialists in the case study effectively.	M6: Explain the adaptations suggested to the presentation in P9 so that the non-specialists in the case study can understand their contribution to the treatment plan.	
P10: Draw a simplified low power plan diagram to show parts of the brain anatomy affected by the TBI for the non-specialists in the case study.		
Pass	Merit	Distinction
P11: Summarise the feedback received for your treatment plan.	M7: Assess the strengths and weaknesses of the information used in the creation of treatment plan for the TBI patient.	D5: Justify any potential improvements to the information used in the creation of treatment plan for the TBI patient.
P12: Analyse the strengths and weaknesses of the materials created to present information to the specialists and suggested adaptations for the non-specialists.		

# Our range of subjects

## Cycle 1 subjects for first teaching September 2025

Subject	Size	
Applied Science	Certificate	180 GLH
	Extended Certificate	360 GLH
Human Biology	Certificate	180 GLH
	Extended Certificate	360 GLH
Computing: Application Development	Certificate	150 GLH
	Extended Certificate	360 GLH
IT: Data Analytics	Certificate	150 GLH
	Extended Certificate	360 GLH
Engineering	Certificate	180 GLH
	Extended Certificate	360 GLH
Health and Social Care	Certificate	180 GLH
	Extended Certificate	360 GLH

## Cycle 2 subjects – first teach: TBC

For cycle 2 we're developing qualifications in the following subjects (subject to DfE approval):

- Creative Media Production
- Cyber Security and Digital Networking
- Enterprise and Innovation
- Marketing
- Mental Health and Wellbeing
- Policing and Criminal Justice
- Sport
- Sustainability



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# Pause and Rapid Review

# What is happening in September 2025?

- The rapid review was introduced by the incoming Labour government to pause any more development of vocational qualifications and funding decisions while the necessary review was completed
- We are due to hear about their decisions at the “end of December”
- They will tell us what will be happening to the Technical qualifications and the new AAQs
- We are working on the assumption that Technicals will be defunded in July 2025 and the AAQs will start teaching in September 2025, but this is subject to change pending the decisions.
- We are encouraged by the very few amendments suggested by Ofqual and DfE (whose members do not change between governments) and the awarding of funding we subsequently received
- But we are ready and prepared for all outcomes and will communicate this with teachers in the New Year



# What is unique about OCR's science AAQs?

## Key points to know:



Set assignments for each new year 12 cohort for all NEA units, i.e. with a 2-year life-span



Clear and granular criteria: one criteria, one mark, one command word



Opportunity for students to improve and resubmit work (more on our moderation approach later)



Practical and math skills aligned to the science A levels: affordable, considerate, consistent



2 resits per exam available in a January or June series, i.e. 3 attempts per paper – best mark is used for certification



Strong focus on accessibility – mixture of question items, consistency each year – maximum 1 hour 30 per exam paper



“AO1, AO2 and AO3” in the external assessments, “AO2 and AO3” in the NEA units – applied to the context, plagiarism in mind throughout



Certificate option available – unique from other board’s AAQ proposals



**Field Studies  
Council**

Outdoor Learning Experiences



# Cambridge Advanced Nationals (AAQs)

**Key:** **M** Mandatory unit **O** Optional unit **E** Examined assessment **NEA** Non-examined assessment

## Applied Science

Fundamentals  
of Science

M

E

Science in  
Society

M

E

Investigating Science

M

NEA

Environmental  
Science

O

NEA

Analytical  
Techniques in  
Chemistry

O

NEA

Forensic  
Biology

O

NEA

Medical  
Physics

O

NEA

## Human Biology

Fundamentals of  
Human Biology

M

E

Health and  
Disease

M

E

Genetics

M

NEA

Biomedical  
Techniques

M

NEA

Human  
Reproduction

O

NEA

The Brain

O

NEA

Nutrition and  
Metabolism

O

NEA

Drug  
Development

O

NEA

# Unique features of Applied Science

- Combined science Unit F180 (Paper 1) with 20 marks for Biology, Chemistry and Physics, plus 10 marks for our six “core” practicals
- Pre-release for F181 (Paper 2) to enable you to prepare students for the first section of the paper.
- Large (90 GLH) Investigating Science (F182) independent project that aligns with the content on F180, particularly its practical work. A great chance to expand on the practical knowledge required for F180 during your timetabled lessons for F182. [Read my blog](#) to find out how this NEA can be managed and delivered successfully in your centre.
- Optional units with a biology, chemistry and physics theme so that you can choose based on your teaching specialisms or student aspirations
- Assessments will reflect a diverse range of individuals, families and contexts
- NEA units are either 60 or 90 GLH:

Unit size (GLH)	60	90
Total number of criteria	22	28
Number of pass criteria	11	14
Number of merit criteria	6	8
Number of distinction criteria	5	6
Total number of criteria needed for a unit pass	9	12
Total number of criteria needed for a unit merit	13	17
Total number of criteria needed for a unit distinction	18	23

# Unique features of Human Biology

- The first vocational human biology qualification from OCR
- Equal sized exam papers, with HSW and mathematical skills assessed across both (1 hour 15 mins long)
- Two mandatory 50GLH NEAs – biomedical techniques and genetics
- First qualification to include variations in sex traits (intersex), and therefore non-binary approach to sex hormones and organs, impact of bias in medical research and implications on diagnosis and treatment
- Assessments will reflect a diverse range of individuals and families in the scenarios
- NEAs include impact on physical and mental well-being of patients and carers of the diagnosis, treatment and rehabilitation

Unit size (GLH)	50
Total number of criteria	24
Number of pass criteria	12
Number of merit criteria	7
Number of distinction criteria	5
Total number of criteria needed for a unit pass	10
Total number of criteria needed for a unit merit	15
Total number of criteria needed for a unit distinction	20



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What are the benefits to students and teachers from studying our Cambridge Advanced Nationals?



# Benefits to students:

- Predictability in the assessments – Paper 1 will have one extended response (4 marks), paper 2 will have one 6-mark and one 9-mark question.
- Papers that are accessible and ramp-up – every question can be attempted.
- Minimum time sat in exam halls – maximum of 3 hours across 2 papers
- Chances to resit papers and improve their coursework outcomes in January and June
- No more hurdles – every single criteria and mark they achieve will count towards their final UMS
- If they fail the exams, they can still pass the qualification
- Content is relevant, updated, and career-orientated.
- Application is key and they will see the benefits of the studied content to future careers



# Benefits to teachers:

- Access to on-demand and live training throughout the year
- Access to teaching materials and assessment support (details coming up)
- Between 3 and 4 coursework assignments to mark per cohort, no portfolio of work necessary
- All the benefits of our collaborative and constructive moderation processes (more details coming up)
- A qualification aimed at students with a grade 4/4 and above in Combined Science and maths that is accessible and adaptive
- Deliver exciting, relevant and updated content that students will enjoy learning





# What support will be available for centres?

# Moderation with OCR

Read [my blog](#) for details about our Cambridge Technicals, but...

- No Lead Internal Verifier, no need to submit plans or attend compulsory training
- Plans for two long windows of submission per academic year that match the academic timetable (more details on this to follow in the New Year)
- In-person or virtual meetings to verify internal moderation and review a sample (usually about 6 candidates) per unit
- Constructive feedback from our moderators, with no new deadline for changes





# Applied Science

Teaching & Learning	Assessment	Training
<ul style="list-style-type: none"><li>• Textbook</li><li>• Switching Guide</li><li>• Mapping Guide</li><li>• Getting Started Guide</li><li>• Curriculum Planner</li><li>• Scheme of Work</li><li>• E-Learning course</li></ul>	<ul style="list-style-type: none"><li>• Annotated Sample Assessment Materials</li><li>• Assessment Story</li><li>• Practice Papers</li><li>• Candidate Style Answers (EA)</li><li>• Candidate Style Work (NEA)</li><li>• NEA Guide</li><li>• Student Guide</li></ul>	<ul style="list-style-type: none"><li>• Choosing AAQs and understanding the compensation model</li><li>• Starting to Teach</li><li>• Ask the SA</li><li>• Ask the Moderator</li><li>• Preparing for the Exam</li><li>• Preparing for the NEA</li><li>• Exploring the exam (<i>after live examination series</i>)</li><li>• Exploring the NEA (<i>after live examination series</i>)</li><li>• Enhance your teaching</li></ul>

# Human Biology

Teaching & Learning	Assessment	Training
<ul style="list-style-type: none"><li>• Switching Guide</li><li>• Mapping Guide</li><li>• Getting Started Guide</li><li>• Curriculum Planner</li><li>• Scheme of Work</li><li>• E-Learning course</li><li>• Third party support (<i>ongoing</i>)</li></ul>	<ul style="list-style-type: none"><li>• Annotated Sample Assessment Materials</li><li>• Assessment Story</li><li>• Practice Papers</li><li>• Candidate Style Answers (EA)</li><li>• Candidate Style Work (NEA)</li><li>• NEA Guide</li><li>• Student Guide</li></ul>	<ul style="list-style-type: none"><li>• Choosing AAQs and understanding the compensation model</li><li>• Starting to Teach</li><li>• Ask the SA</li><li>• Ask the Moderator</li><li>• Preparing for the Exam</li><li>• Preparing for the NEA</li><li>• Exploring the exam (<i>after live examination series</i>)</li><li>• Exploring the NEA (<i>after live examination series</i>)</li><li>• Enhance your teaching</li></ul>

# Key support – Teaching and Learning

Support Resource	What is it?
Switching guide	Offers a guide for moving to OCR from another awarding body. The Switching guide contains information on the differences between the specifications, including at the specification point level, differences between the assessment models, and some next steps that can be taken as you prepare to teach with OCR
Mapping guide	Offers a guide to help you move forward from your current OCR qualification to a new one
Curriculum planner	Suggested ways of delivering the specification content across a particular time frame
Scheme of work	A scheme of work that outlines the teaching of the specification over a 2-year course. Breaks down the specification into specification point, guided learning hours, learning intentions, teaching ideas, subject knowledge and further support.
Textbook	Print and digital publication covering the mandatory and optional units.
E-Learning course	A course to support the delivery of the Cambridge Advanced Nationals

# Key support – Assessment

Support resource	What is it?
Sample Assessment Material	A sample exam paper to ensure familiarity with the layout of the exam
Annotated Sample Assessment Materials	<i>‘Exploring our exams: a guide to our sample assessment material’</i> Understanding the format and structure of the exam, an insight into the assessment objectives and an explanation of the sample assessment
Assessment Story	<i>‘Understanding the assessment – examined and moderated’</i> Understanding the rationale for the assessment strategy
Candidate style answers	Answers produced to offer teachers an insight into how the assessment objectives are applied in the examined unit.
Practice papers	Practice papers to help students prepare for the examined units
NEA Guide	Guidance to support the delivery, internal assessment and submission of work
Candidate style work	For use by teachers only, with the purpose of helping you mark your candidates’ work. We will provide a range of example pieces of work with a Principal Moderator commentary measuring the work against the NEA requirements.
Student guide	Guides for parents and students on key points about their assessments.

# Key Support – Professional Development

Support Resource	What is it
Choosing AAQs and understanding the compensation model (suite level)	Understand how CANs have been designed and the new assessment framework. Also learn about the support and guidance you can expect from OCR.
Starting to Teach	Learn about the specification content, structure, question format and assessment requirements, as well as practical guidance on getting started in the classroom.
Ask the SA	Ask our internal experts the questions that matter most to you.
Preparing for the Exam	Gain the knowledge and understanding to optimise your delivery of all externally assessed components
Preparing for the NEA	Learn how to support students to develop the skills required for successful NEA work; learn about internal marking and moderation processes; and understand what other support resources are available to you.
Ask the Moderator	Ask our internal experts the questions that matter most to you.
Enhance your teaching	Guidance and support with subject knowledge and pedagogy

# Support for all OCR teachers



- Free My Cambridge login for all teachers (and technicians) via your exam officer that gives you access to
  - Teach Cambridge: teaching resources, schemes of work, assessment materials and set assignments
  - OCR Train: our on-demand training and standardisation platform
  - Interchange: request your moderation visits during the two windows
  - Active Results: compare your school's results against national averages and drill down into item-level and candidate-level analysis
  - Access to Scripts: see candidate papers after results day
  - Submit for Assessment: digital upload of candidate work for moderation
  - ExamBuilder: create assessments from our large bank of question from the Cambridge Technical course, as well as access to all A level and GCSE questions



# Support from the Science Subject Advisor Team

- Contact us via our email [ocr.vqscience@ocr.org.uk](mailto:ocr.vqscience@ocr.org.uk)
- [Book a meeting](#) with Bethan or Amy – we'll talk to individuals, departments or SLT. Please provide clear details when making your booking.
- Invite Bethan or Amy to come out to your school or MAT to talk about the qualifications and working with OCR
- Access to free Teacher Networks facilitated by us






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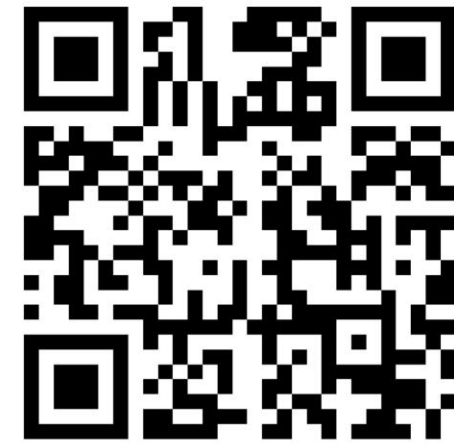
# What can you do next?



## Next steps...

- Fill in this form :  
<https://forms.office.com/e/5br7Gb6qJ5>
- Review the [specification and the sample assessment materials](#)
- [Sign up for updates](#)
- Complete an [Expression of interest form](#)
- Get in touch if you any queries and especially after the rapid review has been published

Cambridge Advanced Nationals  
(AAQs) Customer Feedback





# Questions and comments

The slides and recordings from this session will be sent to you on Friday 6 December.

Please download the slides now or get in touch with us if you require the recordings sooner than this date.

# Keeping up to date

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- Sign up to our subject email updates: <http://www.ocr.org.uk/i-want-to/email-updates/>
- Email: [science@ocr.org.uk](mailto:science@ocr.org.uk)
- Phone: 01223 553 998
- OCR Blog: <http://www.ocr.org.uk/blog/>
- Teacher Networks: <https://teach.ocr.org.uk/teacher-network-events#science>
- Other CPD opportunities: <https://www.ocr.org.uk/qualifications/professional-development/>