GCE A Level Examiners' Report

Biology

A Level

Summer 2026

© WJEC CBAC Ltd.2026



Introduction

Our Principal examiners' report provides valuable feedback on the recent assessment series. It has been written by our Principal Examiners and Principal Moderators after the completion of marking and moderation, and details how candidates have performed in each component.

This report opens with a summary of candidates' performance, including the assessment objectives/skills/topics/themes being tested, and highlights the characteristics of successful performance and where performance could be improved. It then looks in detail at each unit, pinpointing aspects that proved challenging to some candidates and suggesting some reasons as to why that might be.[1]

The information found in this report provides valuable insight for practitioners to support their teaching and learning activity. We would also encourage practitioners to share this document – in its entirety or in part – with their learners to help with exam preparation, to understand how to avoid pitfalls and to add to their revision toolbox.

Further support

Document	Description	Link
Professional Learning / CPD	Eduqas offers an extensive programme of online and face-to-face Professional Learning events. Access interactive feedback, review example candidate responses, gain practical ideas for the classroom and put questions to our dedicated team by registering for one of our events here.	https://www.eduqas.co.uk/home/professional-learning/
Past papers	Access the bank of past papers for this qualification, including the most recent assessments. Please note that we do not make past papers available on the public website until 12 months after the examination.	Portal by WJEC or on the Eduqas subject page
Grade boundary information	Grade boundaries are the minimum number of marks needed to achieve each grade. For linear specifications, a single grade is awarded for the subject, rather than for each component that contributes towards the overall grade. Grade boundaries are published on results day.	For unitised specifications click here: Results and Grade Boundaries and PRS (eduqas.co.uk)

[1] ***Please note that where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.***

© WJEC CBAC Ltd.2026

Exam Results Analysis	Eduqas provides information to examination centres via the WJEC Portal. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.	Portal by WJEC
Classroom Resources	Access our extensive range of FREE classroom resources, including blended learning materials, exam walk-throughs and knowledge organisers to support teaching and learning.	https://resources.eduqas.co.uk/
Bank of Professional Learning materials	Access our bank of Professional Learning materials from previous events from our secure website and additional pre-recorded materials available in the public domain.	Portal by WJEC or on the Eduqas subject page.
Become an examiner with WJEC.	We are always looking to recruit new examiners or moderators. These opportunities can provide you with valuable insight into the assessment process, enhance your skill set, increase your understanding of your subject and inform your teaching.	Become an Examiner | Eduqas

© WJEC CBAC Ltd.2026

Contents

	Page
Executive summary	5
Component 1 Energy for Life	6
Component 2 Continuity of Life	10
Component 3 Requirements for Life	14
Practical Endorsement	18
Supporting you – useful contacts and links	22

© WJEC CBAC Ltd.2026

Executive Summary

Overall, candidates performed well across all three components, demonstrating secure knowledge of much of the specification and strong mathematical skills. Extended response questions were generally answered successfully, with many candidates producing coherent, well-structured responses and accessing the higher mark bands.

Candidates generally showed confidence when recalling knowledge in familiar contexts and applying routine mathematical and statistical skills.

A consistent theme across all components was weaker performance when applying knowledge to unfamiliar contexts, interpreting data, or combining information from different parts of a question. Candidates often demonstrated understanding of biological concepts but did not fully relate their answers to the context provided. Practical and investigative questions also exposed gaps in understanding of experimental design, variables, and required practical activities.

The precision of scientific language remains an area for improvement. Across the qualification, marks were frequently lost through imprecise terminology, incomplete definitions, poor-quality explanations, and failure to address command words or use information provided in the question. In many cases, candidates showed relevant knowledge but did not communicate it with sufficient clarity to access full marks.

Key areas for improvement include:

- Accurate use of biological terminology and definitions.
- Application of knowledge in unfamiliar and synoptic contexts.
- Interpretation and evaluation of data, graphs and practical investigations.
- Understanding of required practical work and experimental techniques.
- Construction of concise, evidence-based scientific explanations.
- Careful reading of question stems and command words.

To support future performance, centres should make effective use of the Lab Book, past papers, mark schemes and examiners' reports. Regular practice with practical investigations, data analysis, application questions and extended responses will help candidates strengthen the higher-order skills needed to achieve the highest grades.

© WJEC CBAC Ltd.2026

BIOLOGY

GCE A level

Summer 2026

COMPONENT 1: ENERGY FOR LIFE

Overview of the Component

Component 1 of the A-Level Biology qualification covers topics on the biochemistry of photosynthesis and respiration, together with microbiology and ecology.

The paper assesses all three Assessment Objectives together with mathematical and practical skills relevant to this component.

Overall, candidates answered most questions well. All questions had an attempt rate of over 95% and only 10 out of 49 questions had a facility factor of below 40% However, some topics were less well answered. These included several questions that required recall of facts and definitions, questions where candidates were asked to use their own knowledge together with information provided and also several questions based on practical work outlined in the Lab Book. As in previous series, there are some concerns over the quality of written expression, recall of facts and candidates' knowledge and understanding of practical work associated with this component.

Comments on individual questions/sections

Question 1

This question focussed on biochemical pathways in a plant cell. Candidates were required to identify the photosynthetic and respiratory pathways and answer questions based on these pathways. Most of the questions tested recall and application of facts, mostly from Component 1 but also some from Core Content.

(a) Most candidates had no difficulty recognising the light independent stage of photosynthesis, but many did not provide all the details required to gain full marks for this question. The majority of candidates could recall the name of the enzyme involved in removing carbon dioxide but had more difficulty in expressing themselves to explain the need for different version of this enzyme (core content). Most could recall structural features common to both mitochondria and chloroplasts.

(b) This part of the question was less well answered and tested knowledge of the light independent stage of photosynthesis. There was considerable confusion over the role of ATP in the conversion of G3P to TP and some confusion between NADPH + H^+ (photosynthesis) and NADH + H^+ (respiration).

(c) Recall of elements and ions (core content) was sound.

© WJEC CBAC Ltd.2026

Question 2

The context of this question was energy flow through ecosystems.

(a) Most candidates were able to identify an omnivore and secondary consumer from a food web, but many did not state that arrows are used to show the direction of energy transfer between organisms. However, few candidates could state how detritivores feed and fewer could explain how their mode of nutrition increases the rate of natural recycling.

(b) Many candidates did not read the question on pyramids of numbers correctly and tried to give answers relating to pyramids of biomass or energy. There was a lack of understanding or an inability to explain how the size of the box in a biological pyramid related to numbers of organisms. The explanation of box size in the pyramid of energy, however, caused few problems.

(c) Calculating the mass of carbon available to secondary consumers was well answered by nearly all candidates but many had difficulty in explaining why the mass was low in terms of NPP = GPP - R.

Question 3

This question tested knowledge and understanding of microbiology.

(a) Gram staining was well recalled by most as was that Gram negative bacteria have an additional outer lipopolysaccharide layer in their cell wall. Again, there were issues in how candidates expressed their answer to why it is important to know whether a bacterium is Gram positive or Gram negative.

(b) Candidates are required to be able to recognise shapes and types of bacteria. Many misinterpreted this question completely. The definition of a facultative anaerobe was answered inconsistently with many not stating that they prefer or grow best in aerobic conditions.

(c) A surprising number of candidates did not state that <5% means less than 5% and gave either wrong answers or just stated a low level of oxygen. Most recognised that an optimal temperature of 42 $^{\circ}$C for culturing a bird pathogen suggests that the body temperature of a bird is 42°C or higher than that of humans. However, very few candidates understood that while *C. jejuni* would survive and reproduce when cultured at 42°C, human pathogenic bacteria would be killed.

Question 4

This question was set in the context of the respiratory electron chain in mitochondria together with a small synoptic question from Component 2.

(a) Given a diagram of the respiratory electron transport chain candidates had to recognise structures and substance associated with this pathway. Some candidates confused the matrix and intermembrane space and quite a few decided that the diagram showed electron transport in chloroplasts.

(b) Given information on the effects of carbon monoxide and DNP on the electron transport chain, candidates had to explain why the concentration of NADH + H^+ (in relation to CO) increases and why the rate of movement of H^+ across the inner mitochondrial membrane (in relation to DNP) increases. In both questions there was

© WJEC CBAC Ltd.2026

confusion as to the direction in which protons are transported and many incorrect statements e.g., diffusion though proton pumps. Clarity of expression was an issue in many answers.

A surprising number did not state that DNA is mutated by the action of a mutagen with many wrong answers given (e.g., hormones, amniotic fluid, hydrogen). The calculation of the minimum number of tablets was well done except for those who rounded down instead of up. Although mathematically correct, rounding down does not give enough DNP to cause death.

Question 5

This question tested knowledge and understanding of succession and practical skills associated with sampling to assess biodiversity.

(a) Most candidates recalled sere as the correct term for a stage in succession (a variety of spellings were seen). However, many did not read the information provided and had difficulty in explaining why a woodland hedge is the result of human action on a climax community or why trimming hedges prevents climax community from forming.

(b) Recall of definition again caused problems, this time of habitat and ecosystem. Sampling using quadrats is a practical set out in the Lab Book that candidates should be familiar with. Candidates were not penalised for describing the use of a grid to lay quadrats, but some method was required. Most candidates lost a mark for describing the use of % cover of each species or only describing that they would record the number of plant species present and not the number of individuals of each species in addition.

(c) The calculations caused few problems. When evaluating the use of a formula to estimate the age of a hedge, few candidates understood that the formula is more accurate for hedges that are actually older and hardly any referred back to the information given at the start of the question to explain how planned hedges with large numbers of tree and shrub species renders the formula inaccurate. Some candidates gained two marks for use of data and understanding that there was a small sample size or only focussed on trees and shrubs rather the total plant biodiversity. It was evident that the majority had not referred back to the three hedges shown in the table and had not understood that a 30m length of hedge may not be representative or used the information at the start of the question. If a question specifically instructs a candidate to use all the information provided, they need to look back in the question and follow the instruction given. Most candidates could identify at least one additional item of information needed before deciding that a hedge can be removed.

Question 6

This question tested practical skills associated with photosynthesis and a knowledge and understanding of limiting factors.

(a) While well answered some candidates confused the independent and dependent variables or did not give enough detail to gain the marks. Many candidates seemed unfamiliar with $NaHCO_3$ being a source of carbon dioxide for aquatic plants.

© WJEC CBAC Ltd.2026

(b) There were few problems with the calculation of light intensity but carelessness in plotting the graph cost marks. Many candidates ignored the instruction to draw a curve of best fit, and many did not draw their line through the origin (0,0) even though they were told to do so. Some candidates plotted the wrong data even though the axes were labelled.

(c) Candidates should be encouraged to describe a relationship from a graph in the form: as the independent variable/ x-axis increases the dependent variable/ y-axis increases/ decreases. For example: as light intensity increases the number of bubbles per minute increases. Just stating values from the x-axis or what is happening to the value of the y-axis is not enough. Few could give a creditworthy explanation with many referring to the Calvin cycle rather than the light dependent reaction.

To suggest and explain the result at a distance of 0.1m, candidates needed to make the link that at 0.10m from the plant the light intensity would be greater. There were two ways they could approach the answer:

- A value of 105 would be expected because the graph plateaus so light is no longer a limiting factor or another factor is limiting the rate of photosynthesis; or
- A suggested value of lower than 105 could have been due to increased light energy causing damage to photosynthetic pigments so reducing the rate of photosynthesis.

Many candidates gained the first two marking points but then suggested that temperature might be limiting factor which was not accepted. Quite a few candidates did not refer back to the table of results or the graph and made statements about a higher light intensity increasing the number of bubbles per minute.

The last part of this question required candidates to recognise that as light intensity increased temperature (of the solution in the beaker) increased. Most could use this idea to explain that this increases the kinetic energy of molecules and that eventually enzymes are denatured.
There was confusion in some answers suggesting that the lack of the light independent stage causes fewer bubbles to be produced rather than light dependent reaction.

Again, there was a lack of familiarity with the role of the water tank as a heat shield in this experiment.

Question 7

This was the QER and tested candidates' knowledge of the nitrogen cycle and eutrophication. Many excellent answers were seen to all parts of this question.

Most candidates scored well when describing the formation of nitrates and eutrophication and most recognised that legumes contain N-fixing bacteria, Rhizobium. The majority, however, did not recall that the legumes/ bacteria need to die and decay to release their nitrogenous compounds into the soil for use by other plants.

There was some confusion over the use of terms such as nitrification, denitrification and nitrogen-fixing. Also, quite a few candidates suggested that the lack of light caused by an algal bloom would kill plants due to a lack of respiration rather than photosynthesis.

Overall, this was a well-answered question.

© WJEC CBAC Ltd.2026

BIOLOGY

GCE A level

Summer 2026

COMPONENT 2: CONTINUITY OF LIFE

Overview of the Component

All three Assessment Objectives were assessed in this paper through both practical and theoretical contexts.

The assessment included content relating to pollen production, phylogenetic trees, genetic engineering, natural selection, mitosis and meiosis, PCR and genetic fingerprints, and female hormones.

The following aspects of the assessment were well answered:
Mitosis and meiosis and pollen grains (1aii and 4aii and 5aii)
Kingdoms and domains (2b)
PCR and primer development (6aii, bi and biii)
Female hormones (7 first section)
The mathematical skills were generally good.

The following aspects of the assessment were less well answered:
Natural selection in a given context (4biv)
Interpreting information (5c, 6biv).

Comments on individual questions/sections

Question 1

Students are expected to know the structure of a mature anther, and many identified the structures. The roles of mitosis and meiosis in the development of mature pollen grains came up as part of the QER last year. Many knew the details in depth, but a minority mixed up the processes. For (a)(iii) the function of the phloem was often given as transport of nutrients which was not enough to gain credit. Many spellings were seen for dehiscence, and they were given credit if they were phonetically close.

Question 2

Students should expect some synoptic questions, and this tested their knowledge of where oxidative phosphorylation occurs. Most gave mitochondria but many thought the matrix, inter membrane and even grana were correct. For (b)(i) just relatedness of organisms was insufficient to gain the mark. Candidates had to mention something about evolution so evolutionary relatedness of species was a good answer. Most gave the two kingdoms for (b)(ii), however many gave mammals and insects as kingdoms, presumably because they are labelled on the diagram. Stating which arrow shows the most recent common ancestor of birds and mammals gave some candidates a problem, with a few writing the name of a group (amphibian, frog and monkey for examples).

© WJEC CBAC Ltd.2026

For (c)(i) most candidates gained a mark for "*the more closely related the organism, the fewer number of differences between the sequence*". That was fine, but the question asks for an analysis of cytochrome c, which is a protein. The answer should be in the context of amino acid sequence. However, if the candidate wrote about DNA base sequences, they were only penalised once as the concept is still the same. Many only gave one reason for (c)(ii) when two were asked for.

Question 3

Most candidates gave beta pleated sheet for (a)(i) and most gave peptide bond for (a)(ii), although many other bonds found in tertiary structures were given (disulphide, ionic, hydrogen). Surprisingly (b)(i) had the lowest facility factor on the whole paper. This is in core concepts. The microvilli are labelled so any mention of cilia was rejected, and the mark could not be gained which was a shame as many candidates recognised columnar epithelium but then made a basic error. Candidates also believed that the microvilli "waft" food through the digestive system. The better candidates realised that the surface area would decrease and less digested food products would be absorbed into the haemocoel. Fewer candidates gave the reason for the insect death which had to relate to the lack of products e.g. less or no glucose for respiration. Many candidates gave the reason as less oxygen absorption, but it was made clear that this is the digestive system, so no credit was given for this.

The context of enzymes used for the production of modified DNA was important for (c)(i). Reverse transcriptase was not used. Many gained all the marks available for the calculation in (c)(ii) and allowances were made for those who didn't reduce the number by 90% or didn't halve the original number of nymphs. For (c)(ii) control or controlled variable was rejected.

Question 4

This was a long question testing all of the Assessment Objectives and several core concepts. Part (a)(i) asked for why the anther showed that the plant is wind pollinated so answers referring to feathery stigmas gained no marks. The anther being outside the plant instead of outside the flower also gained nothing. For (b)(i) oxygen concentration being a condition that should be kept constant did not gain marks. The statistical test for (b)(ii) came down to a choice between chi-squared and Student's *t*-test with slightly more favouring the correct answer.

Gaining four marks for 4(b)(iii) was rare. Many did spot that in set 2 all of the seedlings survived no matter what the distance. Set 1 was often described as having few survivors at longer distances; this was not enough. Better candidates wrote that all survived up to 10m distance and as distance increased over 10m the number of survivors decreased. The same problem occurred for root length in set 2. The roots are shorter up to 10m and then increase over the 10m distance.

There was a maximum of four marks for (b)(iv) form a possible six marking points. Many good answers that were in the correct context were seen. Some candidates gave a generalised account of natural selection with no context of heavy metal rich soil or tolerant seedlings so tended to only gain the mutation mark (mark point B). For part (v) two suggestions were asked for, and many candidates only gave one, or gave two types of seed dispersal. A large number of candidates seemed to have confused seeds and pollen with seed dispersal by wind causing pollination. Pollen being eaten and spread in animal faeces was also seen.

Part (c) was mostly core content. Predictably, some candidates wrote a complementary base sequence for mRNA that contained T instead of U. Most spotted that with methylation, the

© WJEC CBAC Ltd.2026

shape of the cytosine base has changed so it is no longer the complementary shape for guanine to bond to.

Question 5

In part (a), the risk had to contain an idea of the damage caused (e.g. skin irritation, burns) and when in the method this could occur (e.g. spilling the acid when transferring it to the root tip), as well as the control measure for one mark. 5(a)(ii) was the best answered question on the paper.

The practical aspect of suggesting inaccuracies is important (a)(iii). Far too many candidates gave incorrect counting of cells and suggested that they should either be counted again or someone else should count. Multiple people counting and then calculating a mean gained no marks.

For the calculation in (b)(i) the most common problem was candidates confusing answers given to two decimal places with two significant figures. Candidates could still gain two marks even if they had not followed the instructions. For (b)(ii) most worked out that anaphase had been prevented but quite a few wrote metaphase even though there were 28 cells in that stage. There must be spindle fibres to align the chromosomes down the equator so spindle fibres not forming didn't gain credit.

For part (c) it was hoped that the candidates would use the standard deviation data to help them answer. This was rarely the case and a concentration of 30ppm was given. If the explanation for that concentration was that it gave the lowest mean mitotic index, one mark was awarded. The best candidates spotted that if the standard deviations for 20ppm and 30ppm were considered there was no significant difference between the two values therefore 20ppm was more advisable. An explanation of less weedkiller need be used or it's cheaper was sometimes seen.

Part (c)(ii) was often well answered. Unfortunately, some candidates wrote a method that changed the weedkiller concentration not the exposure time. Credit would still be gained for controlling other variables. If the method was carried out using a root tip squash candidates were restricted to a maximum of three marks. The root tip in the squash would already be dead and so no growth could occur.

Question 6

Many suggestions for the source of tiger DNA in the faeces were credible but tigers eating tigers was discounted. A significant minority of candidates thought that protein in the faces contains DNA. For 6(a)(ii) it was the DNA being amplified, not the faeces. The sequence of bases used for the primer in (a)(iii) is unique to the tiger and so only the tiger DNA is amplified gained two marks. Some candidates were unlucky as they wrote that the sequence was different to the other large cats or the prey species. It has to be different to all of the other species to work.

For 6(b)(iv) a range of answers were seen, from 4 (the number of bases) to 65 (the number of individual bands). The best answers pointed out that numbers 4 and 7, and 8 and 9 were the same. For 6(b)(v) the best answers referred to harm to the tiger and potential harm to the researcher (tigers may rip your face off!). Just unethical was not enough for a mark.

Question 7

Candidates responded well to the QER question, generally scoring in the upper two marking bands.

© WJEC CBAC Ltd.2026

The first section was usually answered very well but many students became bogged down in detailed descriptions of oogenesis which were irrelevant.

For the second section a large number of candidates pointed out that the corpus luteum had degenerated or words to that effect. Many didn't mention that the embryo secretes HCG, and this would maintain the corpus luteum. However, candidates still gained credit for writing that or that the progesterone released maintains the endometrium. A lot of students wrote about the lack of sperm around the ovulated oocyte shows that it was not fertilised.

The number of follicles decreasing with age is in the stem of the question. It was hoped that this would help in answering the third part. Only the best candidates spotted that the follicles release oestrogen (which many had written about in the first part but not in this context). A lack of follicles leads to less oestrogen release and the subsequent removal of the FSH inhibition. Credit was still gained for writing about FSH inhibition and its removal.

© WJEC CBAC Ltd.2026

BIOLOGY

GCE A level

Summer 2026

COMPONENT 3: REQUIREMENTS FOR LIFE

Overview of the Component

All assessment objectives were covered in this paper.

Topics covered included Nutrition, classification, gas exchange and plant and animal transport. Plant transport examined the movement of water and mineral ions, allowing candidates to demonstrate recall and using given information to provide explanations. Animal transport focused on blood vessels, the heart, pressure changes and valves. Gas exchange in plants, animals and insects was covered. The nervous system was covered in relation to the synapse, inhibitors and organophosphates.

There were practical elements assessed: forming conclusions and understanding of statistical testing, the use of a null hypothesis, set up of practical equipment and tissue plan drawing.

There were synoptic elements within the paper ranging from biological molecules to photosynthesis.

Question 3 on plant transport gained the lowest facility factors for some of the question parts. This was due, in part, to poorly worded answers which did not allow the awarding of some marks.

Overall, all questions were attempted by most candidates. The lowest percentage attempt rate was for 1(b)(ii) on the features of the Kingdom Fungi.

Comments on individual questions/sections

Question 1

Most candidates were able to identify the processes in holozoic nutrition and state differences between the two Domains. It was good to read clear responses for an explanation of an ectoparasite showing good recall. Many candidates could correctly identify the type of enzyme and the bonds that were hydrolysed.

Question 2

Candidates made good use of the pressure graphs in their explanations of negative pressure breathing. Fewer were able to clearly describe the action of the inner pleural membrane pulling on the lungs to increase the volume. A regular answer seen was describing changes in the volume and pressure of the thoracic cavity. This was not given credit as the requirement was to explain how negative pressure was generated in the alveoli and between the pleural membranes.

When describing the advantage to the insects of location of the tracheoles, many responses gave unclear descriptions of the tracheoles delivering oxygen directly to the cells. Similarities between human and insect gas exchange surfaces could be recalled well, but in more than a few instances candidates stated a thin membrane.

© WJEC CBAC Ltd.2026

Question 3

The table in 3(a)(i) seemed to cause candidates some problems as many candidates did not gain all the marks available. Good understanding was shown in many responses for the apoplast pathway and how this pathway is blocked.

It was good to read the answers for 3(b)(i) and 3(b)(ii). Candidates gave clear and full answers to the null hypothesis and conclusion. Incorrect responses were due to not stating that there would be no difference in the means, and a small number stated that there was no significant difference even though the calculated *t*-value was higher than the critical value. Most candidates could describe how mineral ions were moved into the xylem, but few could explain why they needed to use a carrier protein due to them being charged.

The final part of this question linked in their understanding of the link between magnesium ions, chlorophyll and photosynthesis. There were some very good answers from stronger candidates who included details of the light dependent and independent stages. Most knew that magnesium ions were needed to synthesise chlorophyll, but some thought it was needed to make chloroplasts.

Question 4

There were some very good responses in this question. Candidates knew the structure of a neurone and could describe how glutamate came to be released into the cleft. Fewer candidates wrote about depolarisation of the synaptic knob as the trigger for calcium ion channels opening. It was noticed that many omitted to write that the neurotransmitter vesicles move and then fuse with the pre-synaptic membrane. Most were able to state that the process was exocytosis. There was good use of scientific vocabulary in the responses.

The sections on atropine and organophosphates were generally very good. There was some confusion in some cases about enzyme active sites and the receptors. There were some very good explanations of atropine blocking the receptors and preventing depolarisation of the post-synaptic membrane. The effect of organophosphates was understood by many, but some wrote accounts of the atropine being an inhibitor of either the organophosphate or the acetylcholinesterase.

Question 5

Most candidates could recall the structure of the heart. This was evident in the labelling exercise and in the longer responses. Good scientific language was used with correct terminology for the phases of the cardiac cycle and the structures involved. In (c)(i) many responses failed to gain all the available marks. Many could identify the letters for the valves involved. Fewer were able to give the explanation for the valves opening and closing. This needed to be a comparison of the pressures on either side of the valve. It was good to read the responses given for the tissue plan errors. Aortic stenosis proved no issue for many candidates who had read the given information and analysed the graphs. The main areas for improvement would be to state that backflow was to the left ventricle, rather than just backflow.

Question 6

The potometer is a fiddly piece of apparatus to get to work, and examiners understand that candidates may not have used one. They did however show a good understanding of the reasons for the precautions. In question 6(b)(iii), some responses were simply a statement of the data rather than an explanation. Good responses could identify that the water molecules

© WJEC CBAC Ltd.2026

had higher kinetic energy and higher wind speed would remove water molecules from the leaf surface increasing the water potential gradient.

Question 7

This was the QER question. Most candidates formed three clearly defined sections in their writing. In the first section they were required to describe the structure of the glomerulus and the Bowman's capsule. This was done well by many. Some forgot to mention capillaries, instead focussing on the afferent and efferent arterioles and the pressure generated. Many were able to describe the basement membrane and the podocytes. Fewer responses were given about the cell types i.e. endothelial cells and epithelial cells. When these were mentioned there were a variety of errors, including – squamous endothelium and a range of epithelium types.

Use of the graph and the explanations was good. Most could state that the glucose concentration decreased in the proximal convoluted tubule, and wrote this out fully rather than abbreviating to PCT. Again, there were good explanations of the urea concentration changes and the reasons for this. There were many very good and detailed answers. In the final section some candidates described the usual effect when ADH is secreted, only gaining credit if they said that this then does not happen, and several did not add this point. Candidates should address the question asked to avoid missing out on marks as it was clear they understood the normal processes. It was good to read some very fluent and confident answers, showing appropriate use of scientific language.

Question 8 (Option A – Immunology and Disease)

In part (a)(i), the majority of candidates were able to correctly define the term *endemic.* However, many candidates were unable explain the term 'humans can act as a reservoir', which limited access to this mark. Centres should continue to emphasise the application of definitions in context.

Responses to part (b)(i) were mixed. Whilst a number of candidates could identify a natural barrier and therefore gain the first marking point, many struggled to explain why it functioned as a barrier. This indicates that whilst knowledge of structures is present, there is less confidence in linking structure to function. Part (b)(ii) was answered well. However, some candidates gave generalised disease responses rather than those specific to cholera. Candidates should be encouraged to read the question carefully and tailor their responses to the given context to access all the marks available.

In part (c)(i), many candidates were able to correctly identify *Vibrio cholerae* as Gram-negative and provide an accurate description of its cell wall structure. However, fewer candidates were able to link this to the mechanism of action of penicillin and therefore explain why the antibiotic is ineffective. This prevented access to the final mark.

The calculation in part (c)(ii) was completed successfully, with most candidates achieving full marks. This indicates secure mathematical skills within this cohort. For part (c)(iii) and (c)(iv), most candidates answered well overall. The majority of candidates were able to interpret the table correctly and provide appropriate explanations, showing good data-handling skills.
In part (d)(i), most candidates successfully provided the correct label. Parts (d)(ii) and (d)(iii) were also generally well answered; however, a number of responses lacked precision in terminology. Candidates often conveyed a general understanding but were unable to access full marks due to insufficient use of key scientific terms.

Parts (e)(i) and (e)(ii) were answered well, with most candidates demonstrating secure understanding and accessing most marks available.

© WJEC CBAC Ltd.2026

Question 9 (Option B – Musculoskeletal Anatomy)

In part (a)(i), candidates were able to name the three types of cartilage. However, only a small number were able to correctly match each type to the relevant image. Parts (ii) and (iii) were answered well, with many candidates demonstrating a sound understanding of the structure and functions of cartilage.

In part (b), most candidates were able to correctly identify the postural condition in part (i) and provide an appropriate treatment in part (ii).

In part (c)(i), many candidates successfully compared the structure of fast- and slow-twitch muscle fibres and gained the available marks. However, in part (ii) some candidates struggled to explain the importance of these fibre types and apply their knowledge specifically to the demands of ballet dancers.

Part (d)(i) was answered very well, with majority of candidates able to identify the correct lever and justify their choice. Most candidates gained full marks in part (ii) for the calculation, showing good mathematical skills. In part (iii), many candidates were unable to clearly explain the advantage of the lever system, and so did not gain this mark.

In part (e)(i), many candidates demonstrated the necessary knowledge but lost marks by not reading the question carefully enough and giving the location of the injury rather than the region of the body. Candidates should be encouraged to pay close attention to the specific requirements of questions before answering. In parts (ii) most of the candidates were able to explain how validity could be improved and in part (iii) identify an advantage of surgery over the use of NSAIDs. In a minority of cases, candidates' answers were vague and so were not able to gain the mark.

Question 10 (Option C – Neurobiology and Behaviour)

In part (a), the majority of candidates were able to identify the relevant structures of the brain and successfully complete the table in part (ii). Most candidates also completed the calculation accurately and gained both marks available, indicating a secure understanding of the mathematical skills.

For part (b), most candidates were able to give the definition required in (i), although a notable minority were unable to do so. In (ii), candidates could typically provide one or two valid advantages but often struggled to secure the third marking point. Part (iii) was, however, answered well, with no significant areas of concern.

Responses to part (c) were generally strong. Most candidates answered part (i) and part (iii) well. However, in part (ii), candidates found it more challenging to identify an appropriate risk and link it clearly to a relevant preventative measure.

In part (d), some candidates were able to describe the role of the medulla in the fight or flight response in (i), but a few struggled to make this link clearly. In (ii), while most candidates attempted to explain the shape of the curve, a large number did not explicitly describe the curve as required by the question. Candidates should be encouraged to read questions carefully and ensure that all aspects of the command words are addressed. Part (iii) was well answered, with no concerns noted.

© WJEC CBAC Ltd.2026

BIOLOGY

GCE A level

Summer 2026

PRACTICAL ENDORSEMENT

Overview of the Component

General Comments

The centres observed during the academic year demonstrated a good understanding of the requirements of Practical Endorsement. The following is a summary of observations made from the monitoring reports together with a brief commentary:

- Suitable plans of practical work were prepared by the departments and used by all members of teaching staff. These plans were either incorporated into the Scheme of Work or kept as a separate document. Both methods were considered acceptable. Good plans allowed for the development of skills within Practical Endorsement and ensured all elements of each CPAC were covered. They detailed the CPAC to be assessed in each practical, the proposed time in the teaching year where it would be carried out and provided evidence that the centre would cover all the apparatus and techniques identified in Appendix A part (c) of the specification.
  Centres are reminded that this plan must be available to the monitor during visits.
- Candidates were informed of the CPAC assessed in the introduction of the observed practicals. In many cases, the candidate worksheets also identified the CPAC that would be assessed in the class further reinforcing what the teacher was looking for.
  This is all good practice. Candidates should know what you are assessing and how this will be judged.
- Accurate and up-to-date Teacher and Candidate Records were maintained by all the centres visited. These were recorded in an Excel Spreadsheet, often showing the CPAC element (e.g. CPAC3(a)) achieved in each practical.
  It is appropriate to remind centres that although it is not necessary to record CPAC to the detail of each element in the spreadsheet, candidates must evidence competence of all aspects of each CPAC. Monitors will check for this in a visit. Centres are strongly advised to annotate the candidate work showing the element achieved (e.g., CPAC 4(a) or CPAC 4(a&b)).
- There was evidence of feedback to candidates. Feedback was given either verbally or in writing.
  This *is good practice. Practical Endorsement is intended to help candidates develop good practical skills, and feedback helps complete the learning loop.*
- There was evidence of standardisation across **all** subject teachers when Practical Endorsement was delivered by a team of teachers. A variety of evidence was seen, including departmental minutes showing time was given to standardisation and documentation showing cross-marking between teachers on selected work.
  Standardisation is a requirement of Practical Endorsement and is recorded in the monitor's report of the centre. It must be implemented for a centre to pass the monitoring visit.
- In some centres, descriptors of minimum standards necessary to achieve a CPAC in a practical were available to all teachers on the course. This is judged good practice and is particularly helpful in large departments where there are many teachers of the subject.
  See for example, CPAC Pen Portraits on the EDUQAS website.

© WJEC CBAC Ltd.2026

- Candidates are informed by the teacher whether they have achieved Practical Endorsement before the final outcomes are submitted to Eduqas in accordance with JCQ requirements.

Comments on individual questions/sections

Assessment of Practical Endorsement

Centres should ensure candidates pass the Practical Endorsement 'by consistently and routinely' meeting the criteria. Candidates don't need to achieve a CPAC every time, but they should show skill development throughout the course. Evidence of passing each CPAC statement should increase, especially towards the end. Assessment plans must provide opportunities for candidates to demonstrate progress.

Some practical work will likely be done in small groups. When used for assessment, each candidate must provide evidence of meeting the criteria independently. Centres should ensure that group work allows for individual performance to be assessed.

Notes on assessment of CPAC

Once again, the Monitor struggles to add to previous comments. Centres should review the following comments closely to meet the expectations of PE.
It is important to set high expectations for PE early in the course. You can afford to set your standards relatively high for each CPAC; you can always relax later in the course. Be fussy about what you expect. Make sure candidates know what is expected, what fails to reach the standard, why it fails and what they need to do next time to meet the standard.

CPAC 1

This CPAC assesses the candidate's ability to follow written instructions accurately. The monitor will respect the judgment of the teacher unless there is clear evidence of incorrect assessment.

If a teacher needs to intervene or interpret instructions for a candidate, then this CPAC should not be awarded.

CPAC 2

This CPAC involves higher-level skills and requires careful planning to ensure sufficient development time before assessment. Generally, we do not expect to see this CPAC assessed in the first two terms of an A level course**.** However, we do expect to see evidence of some assessment of this criterion by the end of the first year of the A level course.
Your plan should show you know where and when you are going to assess **each element** of this CPAC. It is also important that sufficient time is given to candidates to develop the necessary skills before assessment occurs. This skill may be evidenced by a candidate planning to carry out a procedure and then adapting their approach, as necessary. It is **not** necessary to assess every element of CPAC2 each time this CPAC is assessed. However, it is a requirement that each element of CPAC 2 is met by each candidate during the course. If you are monitored, the monitor will look at the coverage of each element.

CPAC 3

It is important to be selective when you assess this skill in Biology. There are many opportunities, and you do not need to assess CPAC3 every time they do a practical.

© WJEC CBAC Ltd.2026

CPAC3(a) This is best evidenced by a simple written risk assessment. Centres are advised that candidates are first instructed in what makes a good risk assessment. There can be some variation in the quality of risk assessments accepted by candidates by centres. Make sure that you have suitable criteria for accepting risk assessments that all members of teaching staff understand.

It is expected that the candidate should identify the most significant hazards and risks and have considered suitable controls. If this is not done, do not award the risk assessment.

CPAC3(b) Direct observations of candidates working safely by the teacher working during practical sessions or fieldwork will be accepted by the monitor for 3(b). Please avoid awarding this CPAC for simple attendance of the lesson. Did the candidate follow the risk assessment and work safely? If you needed to 'remind' the candidate about safe working practice, then do not award the criterion.
If this is assessed in the observed practical by the monitor, then please expect questions about the candidate's performance from the monitor.

CPAC 4

This CPAC deals with both qualitative and quantitative data.

CPAC4(a) 'making accurate observations'.

- Data that was recorded in the form of tables were generally well assessed by centres. Suitable tables **must** have appropriate headings and units, where relevant. The units must be written in the table column head and not in the body of the table. If units are missing, the criteria should not be awarded.
- Occasionally some centres are still rather lenient when marking candidates' diagrams. The following points should be borne in mind when assessing this CPAC:
  The following outlines some of the essential skills we expect in diagrams (those in bold are bare minimum to be award the skill).
  - **There should be a title – top or bottom of diagram**
  - **Accuracy is key**
  - **Sharp pencil used**
  - Continuous clear lines
  - **Key structures are labelled**
  - **Scale present, if relevant**
  - Annotation lines should be straight (ruler used) and annotations written horizontally
  - **Annotation lines don't cross**
  - Shading not used

  See also see page 18 of Microscopy skills resource.

CPAC4(b) 'obtaining accurate, precise and sufficient data...'

This is generally suitably assessed. When checking data ask yourself questions to judge suitability:

- Is it recorded to appropriate precision? Make sure that recordings are to the correct number of decimal places. If data readings are not always consistently recorded by candidates, then do **not** award the criterion.
- Is there sufficient data? Is the data what you expect? Please set suitable standards at the beginning of the course. It does not matter if a candidate did not always achieve the criterion.

© WJEC CBAC Ltd.2026

CPAC 5

This important higher-level skill should be assessed from early in the course. There is no shortage of suitable assessment opportunities. CPAC 5 has two elements:

a) Uses appropriate software and/or tools to process data, carry out research and report findings.
b) Sources of information are cited, demonstrating that research has taken place, supporting planning and conclusions.

CPAC5(a) There should be evidence of candidates processing data using graphs and calculations. Centres should also require candidates to use software (e.g., Excel, dataloggers) to draw graphs and/or to carry out statistical analysis. Sometimes Excel is not well used for graph drawing. Candidates will likely need instruction on how to correctly use spreadsheets (e.g. Excel) to do this.

Whether graphs are constructed on paper or using Excel make sure they are constructed correctly, i.e., there is a title, each axis is correctly labelled, points plotted correctly, an appropriate scale used, etc before awarding this element. Set suitable minimum standards early in the course and stick to them.

Processing data also involves carrying out calculations. This may involve transformation of data using mathematical equations, statistical analysis etc. Once again this can be done 'manually' or using spreadsheets

CPAC5(a) also includes 'carry out research and report findings'. The report does not need to be long; it may simply be the conclusion they draw from their data. However, it is not appropriate to award this CPAC for a one-word answer. A conclusion requires a reasoned response to the data observed. Any research might be internet or book based.

CPAC5(b) This is not a difficult CPAC to evidence, but in 2025/26 it was still often the most poorly evidenced skill in candidate work. Candidates must understand why this is an important skill to develop and the consequences of failing to do this in higher education. Stress this to candidates.

Please try to get candidates in the habit of evidencing research by giving references every time they source information. This should happen from **early** in the course. Make it become second nature to candidates. The information referenced may be, for data or a quote; the information may come from a textbook, journal or website EDUQAS data sheet.

Summary

- Successful delivery of Practical Endorsement needs careful thought and planning. Make sure that there are ample opportunities for candidates to evidence all elements of each CPAC statement over the two years of the course.
- Ensure that candidates are clearly informed which CPAC is assessed in a particular practical session and they understand what is required to succeed.
- Give suitable feedback to candidates so that they can improve their skills.
- Make sure that candidates are informed whether they have achieved Practical Endorsement before the outcomes are submitted to Eduqas in accordance with JCQ requirements.
- Finally, make Practical Endorsement a servant of the subject. Use Practical Endorsement as part of an assessment for learning strategy. Do not let it become an end in itself.

© WJEC CBAC Ltd.2026

Supporting you

Useful contacts and links

Our friendly subject team is on hand to support you between 8.30am and 5.00pm, Monday to Friday.
Tel: 029 2240 4252
Email: science@eduqas.co.uk
Qualification webpage: AS and A Level Biology | Eduqas

See other useful contacts here: Useful Contacts | Eduqas

CPD Training / Professional Learning

Access our popular, free online CPD/PL courses to receive exam feedback and put questions to our subject team, and attend one of our face-to-face events, focused on enhancing teaching and learning, providing practical classroom ideas and developing understanding of marking and assessment.

Please find details for all our courses here: https://www.eduqas.co.uk/home/professional-learning/

Regional Rep Team

Our regional team covers all areas of England and can provide face-to-face and online advice at a time which is convenient to you.

Get in contact today and discover how our team can support you and your students.
Regional Support Team | Eduqas

Eduqas Qualifications

We are one the largest providers of qualifications for schools, academies, sixth form and further education colleges across England, offering valued qualifications to suit a range of abilities. Each and every one of our qualifications is carefully designed to engage students and to equip them for the next stage of their lives.

We support our education communities by providing trusted qualifications and specialist support, to allow our students the opportunity to reach their full potential.

© WJEC CBAC Ltd.2026



WJEC
245 Western Avenue
Cardiff CF5 2YX
Tel No 029 2026 5000
Fax 029 2057 5994
E-mail: exams@wjec.co.uk
website: www.wjec.co.uk

© WJEC CBAC Ltd.2026