

International A Level Biology

IAL Biology pre-release scientific article
FAQs

UNIT 5: Respiration, Internal Environment, Coordination and Gene Technology







Introduction

- The purpose of this pack is to provide teachers with general guidance on using the pre-release scientific article.
- If you have any enquiries regarding these materials or have any other questions about the course, please contact our Science subject advisor on teachingscience@pearson.com.



How to use the scientific article

Q. Should I study the scientific article before the exam?

A. Yes. The scientific article is released before the examination in order to give centres and students time to study the article before the exam.

Q. Can I ask for guidance on what components of the pre-release scientific article may or may not be assessed?

A. No. Pearson cannot provide additional guidance to candidates or centres regarding what aspects of the pre-release article will be assessed in the examination.

For example:

The article for Summer 2025 makes reference to CRISPR, a topic not covered in the specification “Forsberg and his colleagues used the CRISPR gene-editing technique”.

If a centre was to ask: ‘Do candidates need to know how CRISPR gene-editing works?’ We would not be able to give any guidance.

It is up to candidates and centres to decide how they use the article to prepare for the examination.



Q. Can a centre of candidate ask for guidance on the administrative aspects of the pre-release scientific article.

- A. Yes. Centres and candidates can ask the subject advisor for guidance around the administration of the pre-release article (teachingscience@pearson.com).

For example:

You can ask about the date the pre-release article will be released and how to obtain a copy of the article.

Q. I have annotated my copy of the scientific article. Can I take this copy into the exam with me?

- A. No. You will be given a fresh copy of the article at the beginning of the examination.

Q. How much time should I spend studying the scientific article?

- A. The time required to study the scientific article is not proscribed in the specification and to some extent will be different for each student and centre. However, remember questions on the scientific article account for just over 20% of the marks available on the unit 5 examination paper.



What sort of questions might be asked.

Q. Will all the questions based on the scientific article relate to unit 5 (topics 7 and 8)?

A. Not necessarily. The examination paper for unit 5 may include an element of synoptic assessment from topics 1 to 7. Questions based on the scientific article are often well suited to synoptic assessment.

Q Can I ignore biological terms that are used in the article but that are not detailed in the specification.

A. No. When you study the article you should make sure you understand and can explain the meaning of all biological terms used in the article.

For example:

Q8(a) WBI15 January 2024

Give a definition for the term sarcopenia (paragraph 1).

The term sarcopenia is not mentioned in the specification. However, students studying the article would need to understand the term to make sense of the article.



Q. If a biological technique mentioned in the article is not detailed in the specification do I need to learn about the technique?

- A. Yes. If a biological technique is mentioned in the article but is not in the specification, you might be asked a question about the technique. Such questions would focus on the principles of the technique in relation to biological concepts covered in the specification. You will not be expected to know specific methodological details for these techniques.

For example:

Q8(c) WBI15, Summer 2025

Describe the roles of nucleic acids and enzymes used in CRISPR gene editing to remove some of the Y chromosome genes (paragraph 5).

CRISPR is not detailed in the scientific article. However, a basic knowledge of how it works is required to understand paragraph 5. Credit was given for the use of RNA sequences as guides (to identify genes) and the role of endonucleases in cutting the ds DNA.

Q. The question paper gives paragraph references for each scientific article question. Will these paragraphs contain the answer to the question?

- A. In general no. The paragraph references are there to guide you to the relevant context for the question. However, occasionally there may be a question that assess your ability to interpret or summarise information in the identified paragraphs.



Q. How can I prepare for questions on the scientific article

- A. There are lots of approaches that you might take and the way you prepare will depend on your own learning style and the guidance provided by your teachers.

However, some suggestions are:

Read the article carefully making notes as you read:

- *Identify any biological concepts in the article and link these to the specification.*
- *Make a list of biological terms and techniques used in the article. Make sure you can explain each term and technique.*

When you feel you understand the article. Have a look at past papers to familiarise yourself with the style of questions that have been asked previously.

Then for each paragraph:

- *Produce a set of questions and mark schemes. Try producing questions and mark schemes for different command words.*