

Assessment Prep with Kognity

IGCSE Physics

What is this guide for?

This guide is designed to help you make the most out of Kognity as a tool to prepare students for success both in formative assessments and IGCSE exam preparation.

How does Kognity help with assessment preparation for IGCSE Physics?

According to [John Hattie](#), Professor of Education and Director of the Melbourne Educational Research Institute at the University of Melbourne, Australia, feedback is an important driver for improving teaching and learning. Formative assessments play a large role in consistent feedback throughout the year as students prepare for their IGCSE exams. Kognity provides efficient tools for immediate feedback to both the student and teacher.

“

*Think of feedback
as received,
not given.*

”

- John Hattie

For students:

Students can test their problem solving, interpretation and analysis skills in Physics through completing worked examples and receiving immediate feedback on their responses. In addition, at the end of each section, students can complete section questions that are auto-graded, allowing them to receive feedback right away on their progress.



For teachers:

Teachers get immediate feedback on their students' progress through the performance overview dashboard, located on the statistics page. Here, teachers can view a visual representation of student quiz and assignment scores. Teachers can then easily identify those students who need help, which makes intervention fast and efficient.

Below you will find some ways teachers can use Kognity's resources to successfully prepare their students for IGCSE Physics assessment components. Click on each picture to explore more in Kognity Physics!

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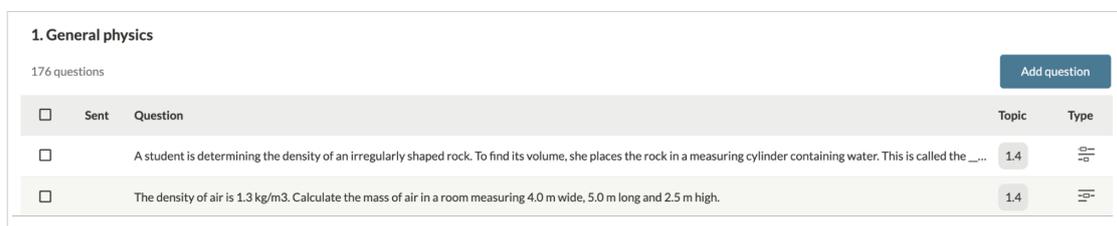


How does Kognity help with IGCSE Assessment Preparation?

How does Kognity help with formative assessments?

Revision Quizzes

Kognity's [question assignments](#) can be used as revision quizzes for review at the end of a unit. Teachers can drill students on specific techniques and tools using multiple examples. All question assignments are auto-graded, so students and teachers can immediately receive the results. Teachers can then revise any common mistakes before starting to teach new content.

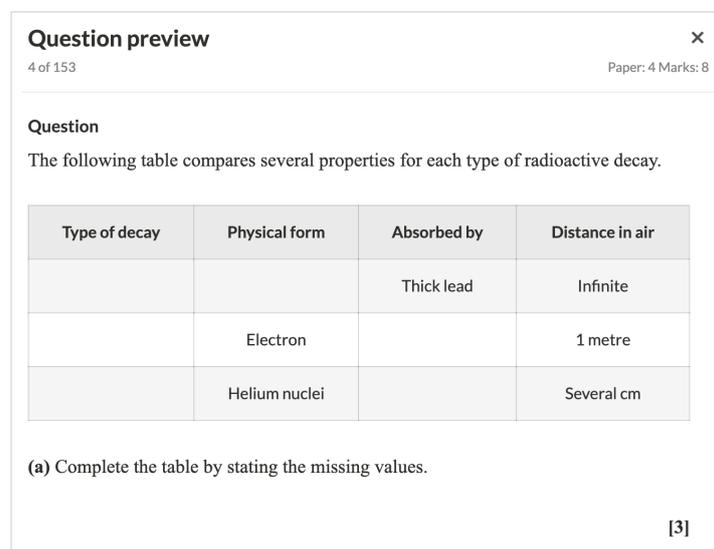


The screenshot shows a '1. General physics' section with 176 questions. An 'Add question' button is visible. Below is a table of questions with columns for 'Sent', 'Question', 'Topic', and 'Type'.

<input type="checkbox"/>	Sent	Question	Topic	Type
<input type="checkbox"/>		A student is determining the density of an irregularly shaped rock. To find its volume, she places the rock in a measuring cylinder containing water. This is called the _...	1.4	MC
<input type="checkbox"/>		The density of air is 1.3 kg/m ³ . Calculate the mass of air in a room measuring 4.0 m wide, 5.0 m long and 2.5 m high.	1.4	MC

Exam Practice Tasks

Kognity provides exam-style questions, marks schemes and model answers that teachers can use in a variety of different ways with their students. For example, teachers can go over a practice paper as a class, write the answer together, and focus on examiner comments. This is also a great way to familiarize students with command terms.



The screenshot shows a 'Question preview' window for a physics exam task. It includes a table comparing properties of radioactive decay and a question asking to complete the table.

Question preview 4 of 153 Paper: 4 Marks: 8

Question
The following table compares several properties for each type of radioactive decay.

Type of decay	Physical form	Absorbed by	Distance in air
		Thick lead	Infinite
	Electron		1 metre
	Helium nuclei		Several cm

(a) Complete the table by stating the missing values.

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How does Kognity help with formative assessments?

Homework/Progress Assessment

Question assignments or exam style assignments are given to students. Depending on the quality of the response, further questions can be added to reinforce or stretch their ability.

Assignment trends ⓘ

Student name	Submitted	Score	Q1	Q2
Kyla Alvarez	Yes	2/2	Green	Green
Johan Bernadotte	Yes	0/2	Red	Red
Hugo Cabret	Yes	1/2	Red	Green
James Denkin	Yes	2/2	Green	Green
Dennis Franklin	Yes	1/2	Green	Red
Melissa Gilbert	Yes	1/2	Green	Red

End of unit assessment

Teachers can give an end of unit formative assessment through strength questions to help students to identify their areas of weakness. Teachers can also assign examination questions to build knowledge and enable practice.

Strength test

Question 1
The floors of a high-rise building are 3 m apart. A lift moves upwards at a speed of 2 m/s. How long will it take for the lift to go up 20 floors?

60 s #1

10 s #2

120 s #3

30 s #4

[+ Report feedback or error](#)



How does Kognity help with IGCSE Assessment Preparation?

There are many different ways teachers can use Kognity features to prepare students for IGCSE Physics papers.

- Teachers can use Kognity content with knowledge organisers to assist completion and help assess accuracy.
- Past examination questions can be given using the question bank which allows bulk practice or specific assignment of questions.
- Reference material for a review lecture... e.g. Today's lecture will focus on section 7.
- Exam Breakfast / Lunch Notes and flashcards created from Kognity materials such as the Glossary.

background radiation

The average level of radiation detectable as part of everyday life, due to a combination of natural and man-made sources.

balance

A device for comparing (and measuring) masses and weights.

balanced forces

Forces acting in opposite directions, to leave no net force on an object.

barometer

An instrument used to measure atmospheric pressure, made typically from a single tube of mercury.

2. Thermal physics

Question 2.1 **Paper 3** **11 marks**

Question 2.2 **Paper 4** **5 marks**

Question 2.3 **Paper 4** **9 marks**

Question 2.4 **Paper 4** **5 marks**

Question 2.5 **Paper 4** **8 marks**

Question 2.6 **Paper 4** **8 marks**

Question 2.7 **Paper 4** **8 marks**

Additionally, throughout all of these activities the teacher must develop the ability to stand off and encourage their students to use their own resources in the first instance where assistance is required. (example: *The 4 b's principle*: Brain, **Book**, Buddy, Boss.)