

IBDP Physics

Top tips for Success

What are your top tips for success, or “hacks”, for getting the most out of Kognity for your subject? Think of this in terms of “what questions might a new Kognity user ask me?” and formulate your tips in a question and answer format.



How do I prepare students for success in IBDP Physics Paper 1?

Understand the Format: Familiarise students with the multiple-choice structure and covered topics.

Review Core Concepts: Regularly reinforce key physics concepts, focusing on challenging areas.

Practice Questions: Use past exams and sample questions to improve familiarity and time management.

Active Recall: Encourage active recall techniques and spaced repetition for better memory retention.

Kognity Tools: Utilise Kognity’s strength tests and battles to identify strengths and weaknesses.

Data Analysis: Develop skills in interpreting data, graphs, and experimental results.

Exam Strategies: Teach effective strategies like eliminating wrong answers and managing time.

Regular Feedback: Provide feedback on practice exams to learn from mistakes.

Self-Assessment: Use checklists to monitor progress and identify areas needing review.





How can I get the most out of the question banks / question assignments?

Question assignments are your basic tool to gauge a student's skill in a particular topic.

Questions can be selected from different sections or topics. Question sets can be assigned to the whole group, or they can be tailored and assigned to specific students (say, students requiring extra practice).

Teachers can also write their own questions (and add the answers, so that Kognity will grade these) and assign them just as they would others. These questions can be labelled with a specific section so that they are easy to look up afterwards.



What should students focus on when reading the textbook?

All subtopics are divided into sections (just as they are in the IB Physics curriculum).

Each section will have one or more boxes (Definition, International Mindedness, Study Skills, etc.) covering key information which students should pay attention to.

The last section in each subtopic is a Checklist - these highlight key concepts from the entire subtopic.

When reviewing, have students focus on these specific features, so they can be as efficient as possible.





How can I make sure students are working with Kognity on their own?

While questions answered in the “Practice” section (Strength test, Strength Battle, Exam-style questions) will not generate an automatic report (like assignments created by the teacher do), they will be registered in the class Insights.

Head over to the Class Insights and you can see which students are working on their own and which ones are lagging behind. Use this to encourage kids to take responsibility for their learning and work on their own.



Is there something in particular I can do to help students prepare for IBDP Physics Paper 1-2?

Papers 1A, 1B and 2 cover the basic syllabus (Topics A-E for SL/HL).

Have students start by reading the textbook, paying particular attention to the Checklist at the end of each subtopic. You can ask students to build concept maps from these, which will help them organise and eventually recall all the information.

For Paper 1, have students go over the Strength Tests on their own, and assign multiple choice questions from the provided question banks. For this part, build assignments with a sample of questions from all subtopics.

Once students have practised for Paper 1A, move on to Paper 2. For this part, have students work on Exam-Style Questions on their own, and build assignments with the short-answer questions found in the question bank. Again, select a sample of questions from all subtopics.

For Paper 1B, students should start by reading subtopic 1.2. After this, they can practise laboratory skills by reading specific practicals (from the Practicals section in the textbook) and paying attention to the way data is analysed (these practicals also include review questions).





Is there something in particular I can do to help students prepare for their Internal Assessment?

Writing a good Internal Assessment has a lot to do with organising properly.

Have students read the Internal Assessment topic in the textbook 1.2. While sections here do not have review questions, you can add your own and assign them, to make sure students understand what is expected of them.

Check Practical 1.11 (investigating the acceleration of free fall) with your students, which has an example on linearizing values to graph them. Explain how they can start by collecting raw data, and what it means to “process” their data in order to write an appropriate analysis and conclusion.



Does Kognity grade my students' work?

Kognity does automatically grade any question which includes answers - for example, all questions found in the question banks in the “Assignment” section. Any question written by the teacher for which an answer has been provided will be graded as well.

Teachers can check past grade reports for any assignment for a particular class.

