# Assessment Prep with Kognity

IBDP Environmental Systems and Societies

# 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 IBDP exam preparation.

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# How does Kognity help with assessment preparation for IBDP ESS?

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 IBDP 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 ESS 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 IBDP ESS assessment components. Click on each picture to explore more in Kognity ESS!

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# **Revision Quizzes**

Kognity's <u>question assignments</u> 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.

<b>1.2. Systems</b> a	and models	Add q	uestion
Sent	Question	Торіс	Туре
	Based on the diagram below, state whether the blue arrows represent a transfer or a transformation.	1.2	
	The use of models, by simplifying complex interactions within the examined systems, provides only a partial view of that systems and the processes within it. Answer	2 areas	

# Notebook and Checklists

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Kognity's notebook feature allows students to make their own notes and print out if necessary for consolidation. Students can use the notebook feature when they are performing self-assessment of knowledge and understanding at the end of each chapter with the checklists.

#### What you should know

At the end of this *Subtopic 1.2 - Systems and models*, you should be able to:

- Explain the component parts and the emergent properties of a system.
- Explain, using examples, that systems can vary in size.
- Distinguish between open, closed and isolated systems.
- Construct a systems diagram from a given set of data or information.
- Explain the differences between energy flows and matter cycles.
- Explain with the use of examples the differences between transfers and transformations.
- Construct a systems diagram from a set of information using the correct symbols boxes for stores and arrows for flows (pointing in the direction of flow).
- Explain, using examples, what models are.
- Evaluate the use of models as a tool for predicting behaviour and outcomes in the real world.

# Self-Study

To provide students with resources for self-directed active recall study, use strength tests and battles. Students can also use self-assessment checklists before a test or exam to help students identify areas of weakness.

Strength test	••••
Question 1 Photosynthesis is a change of light energy into chemical energy. Therefore of a:	re, it is an example
O Transformation	#1
O Flow	#2
O Storage	#3
O Transfer	#4



## **Internal Assessment**

To ensure success in the IA, teachers must spend time introducing and explaining the criteria and responsibilities to their students. Kognity's IA topic is a great resource for both teachers and students to understand the requirements and see samples, as well as formats for planning and practicing their presentations. Below are some specific ways Kognity helps students prepare for the IA.

The following sections give students the opportunity to practise all the data collection techniques they will need for the IA:

- Sections <u>9.1.8</u> <u>9.1.11</u> have sample research questions with guidance on alternative data collection techniques that can be used.
- Section <u>9.1.12</u> talks about questionnaires and surveys as a method of data collection. Check these sections carefully – especially if you have not had students use secondary data source's before
  - They must have 3 data sets included but with independent and dependent variables
  - They must have a minimum of 30 data points

# **IB Exam Papers**

Subtopic <u>9.2</u> is an Exam guide which includes revision techniques, common exam mistakes, and a detailed explanation of Papers 1 and 2 for students to access at any time throughout the year. Exam tips are written by IB examiners and provide students with an understanding of what is expected of them on their exams. These contain tips from examiners about:

- Pitfalls and common problems to avoid and how to avoid them
- What students should include in responses
- What case studies / examples they need to know

#### ① Exam Tip

Make sure you understand how the concepts of evolution, speciation and biodiversity are linked.

## Paper 1

Students have access to a whole guide on Paper 1 in section <u>9.2.5</u>. There are also two paper 1 style questions on Kognity's exam style assignment that can be made available by issuing an exam style assignment. A word to the wise, it is better to use these in topic 1, this needs to be done towards the end of the course as it tends to cover numerous topics.

1. Foundations of environmental systems and societies
Question 1.1 Paper 2 9 marks
Question 1.2 Paper 2 10 marks
Question 1.3 Paper 2 7 marks
Question 1.4 Paper 2 10 marks
Question 1.5 Paper 2 7 marks
Question 1.6 Paper 2 9 marks
Question 1.7 Paper 1 35 marks
Question 1.8 Paper 1 35 marks
Question 1.9 Paper 2 20 marks

# How does Kognity help with IB Assessment Preparation?

# Paper 2

Students have access to a whole guide on Paper 2 in section <u>9.2.6</u>. There are also numerous sample questions for the students to access in the exam style questions.

1.	Foundations of environmental systems and societies
	Question 1.1 Paper 2 9 marks
	Question 1.2 Paper 2 10 marks
	Question 1.3 Paper 2 7 marks
	Question 1.4 Paper 2 10 marks
	Question 1.5 Paper 2 7 marks
	Question 1.6 Paper 2 9 marks
	Question 1.7 Paper 1 35 marks
	Question 1.8 Paper 1 35 marks
	Question 1.9 Paper 2 20 marks

### Anything that says

- Paper 2: 20 marks these are the extended response question
- Paper 2: less marks these are short answer questions from section A paper 2

#### In both cases the questions

- Are in the format of the IB questions
- Use only CT's
- Have a full mark scheme
- Give warnings of things to be wary of