

Starting the School Year with Kognity

Topic: 5 Geometry

Lesson: Ready for Action Lesson Plan

Subject: IGCSE Mathematics



What can I use this lesson plan for?

This is a great lesson plan for introducing students to both the IGCSE International Maths and the IGCSE Maths curriculum, as well as Kognity's digital textbook features in the beginning of the school year. The activities in this lesson work well with remote or in person learning. As the year progresses, you can use these activities with different sections of both IGCSE Maths and International Maths digital textbooks.

Lesson Objectives:

Students will be able to apply Kognity's digital textbook features to classroom learning in IGCSE Mathematics.



Time Allotment:

Recommended time is *one hour*, however the revision activity provides opportunities for extensions.



Materials:

[5.2.0](#) (the big picture). This section can be found in *IGCSE Maths* OR *IGCSE International Maths*.

Activities with Kognity

Hook

Tell students they are going to start the unit by doing a pre-assessment in their Kognity textbook to get a sense of how much they know about the symmetry and construction in Geometry. Students should do the following:

- Head to the practice centre and take the [Strength Test](#) for Subtopic [5.2](#) (Symmetry and Construction).
- Review their completed answers while they wait for classmates to finish.
- Discuss each of the questions as a class.

Introduction Activity

With the [overview](#) projected on the board (in person) or through screen share (remote), give a brief introduction of Kognity and the useful features for students, **by explaining that:**

- The content in each section of the book incorporates features such as **videos, study skills boxes, applets, and activities** to enhance students' learning.
- Each subtopic has a series of **section questions** that allow students to check their knowledge and understanding in small increments.
- The **practice centre** has exam style questions, strength tests and battles for all topics that allow students to check their knowledge and understanding of each topic. As they engage with the **strength test and battles**, their **strength bar** (on the overview page) will increase, allowing them to keep track of their strong content areas and areas they need to work on.
- Teachers can assign [readings](#) and [questions](#) and can keep track of student progress.

Group Activity

1. Have students get into groups of three.
2. To practice navigating through Kognity's platform, task students to click to section [5.2.0](#).
3. Ask students to discuss the purpose of the "big picture," feature at the start of each Subtopic.
4. Ask each group to watch the [embedded video](#) in [5.2.0](#), *the most unbelievable building on earth*. Then, have them discuss the following questions:
 - a. What shapes can you see in the building in the video?
 - b. Why is this building great for desert conditions?
5. When each group has watched the video and discussed the questions, bring the class together to share their answers.

Independent Activity

1. Have students read section [5.2.0](#) and complete the section questions at the end of the reading.
2. When students are finished, they should navigate to section [5.2.1](#). Ask students to read the section and experiment with the protractor applet.
3. Have students complete the worked example questions once they feel comfortable using the protractor apple.

Revision Activity

At the end of subtopic [5.2](#), there are several possible activities you can do with your class.

- Do the *Exploration Activity* in section [5.2.5](#).
- Respond to each checklist bullet point in section [5.2.4](#) in their [Kognity notebooks](#) to test their knowledge and understanding.
- Have students go to the [practice centre](#) to take the [5.2 Strength test](#) as a post assessment, or engage in a [strength battle](#) with a classmate (These questions encompass all of topic 5).
- Assign your students [Practice/Exam-style questions](#), where they can answer one to two questions for a specific subtopic that has already been discussed in class. These questions are modelled after IB exams and are invaluable when students are preparing for exam papers.
- Create a [question](#) or [reading assignment](#) on any topic or subtopic. Then, have students head over to the [Assignments tab](#) to identify how assignments are presented to them. Now they can complete their first graded homework/activity on Kognity!