

Starting the School Year with Kognity

Topic: Structure 1: Introduction to the particulate nature of matter

Lesson: Ready for Action Lesson Plan

Subject: IB DP Chemistry



What can I use this lesson plan for?

This is a great lesson plan for introducing students to both the Chemistry curriculum and Kognity's digital platform 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 topics in the Chemistry digital book.

Lesson Objectives:

Students will be able to apply Kognity's digital book features to classroom learning in Chemistry.

Time Allotment:

Recommended time is *one hour*, however the revision activities provide opportunities for extension.

Materials:

S1.1.0 (the big picture)

Activities with Kognity

Hook

Tell students they are going to start the unit by considering the experiences they have had using models in science. Think about the benefits and limitations of the use of a physical model to teach concepts or to demonstrate their understanding. They will then consider how to apply the use of models to learn the concepts of elements, compounds and mixtures.

Introduction Activity

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, animations, external links, TOK** and **Nature of Science** boxes 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 book assignments and questions and can keep track of student progress.

Group Activity

1. Tell students they are going to complete a 'virtual scavenger hunt' to help familiarise themselves with Kognity and its features, as well as to introduce the IB chemistry course.

Note: This could be done as a timed activity with the group who finishes first being the 'winner'.

2. Give each group a list of clues to which they have to find the answers in section S1.1.0 (the big picture).
The following clues could be used:

1. The Guiding Question (How can we model the particulate nature of matter?)
 2. The inconsistencies in the model of the solar system (the distances between planets are not correct and the size of the planets are not to scale)
 3. The prior learning required in this course (no formal knowledge, only their personal experience)
3. When students have completed the scavenger hunt, have students share their answers with the class.

Note: this can be done in any section of Structure 1.1

Independent Activity

1. Have students follow the link to the Collected Practicals section from the Practical skills box at the end of section S1.1.0. This section includes:
 - Introduction to the Inquiry process that supports understandings in the Chemistry course
 - A list of Collected practicals that address the Tools that students will use throughout
 - A brief outline of the Internal Assessment process
2. When they have engaged with all material, ask students to read the Practical activities: Safety section (O.1.4) and add a few other safety guidelines in their Kognity notebooks.
3. Have students discuss their responses with a partner.

Additional Activities

When students finish subtopic S1.1.0, there are several possible activities you can do with your class.

- Students can write a Reflection to communicate to record their thoughts about what they have learned so far. The teacher can respond with feedback to the student or make a personal note about each student's reflection.
- Set a book assignment for the next subtopic S1.1.1a for students to read in preparation of learning the content.
- Have students browse through the Glossary and the Chemistry data booklet in 1.3.0 to see the resources available in the platform.

