

Kognity for NGSS Educators

Make the most out of Kognity's key features to promote skills-based learning in an interactive, cohesive & fun way!



Feature Boxes

Throughout the content, you will find embedded feature boxes highlighting the three dimensional learning focus with helpful information, story threads and classroom activities. These are designed to make three-dimensional learning clear for both teacher and student right up front.

Activity boxes, Science and Engineering Practice feature boxes & more are ready for you to explore!

Science and Engineering Practice
 Planning and carrying out investigations
 Analyzing and interpreting data

In this section, you are going to be completing a virtual lab. In this lab, you will carry out a mini investigation into photosynthesis then use your data to draw conclusions.

In this lab, you will look at a few different variables, which are factors that can be changed, controlled, or measured during an experiment.

Knowledge-check questions

Alongside frequent opportunities for inquiry and reflection, there are periodic knowledge-check questions to help students test their understanding of the topic.

Knowledge check
 Click a question to answer

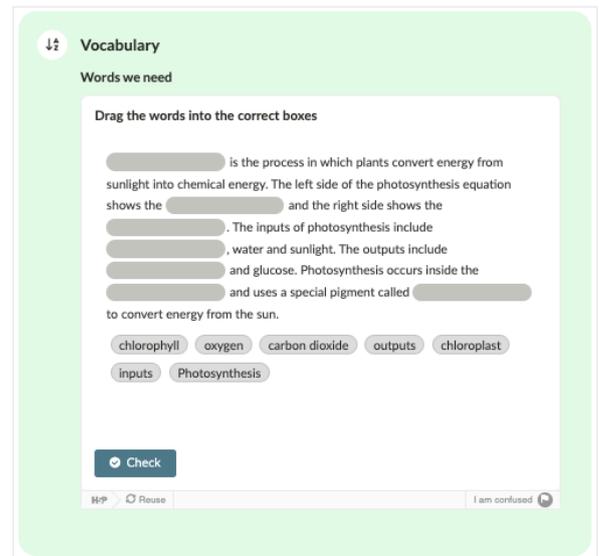
- 1 Which test tube would be considered the control for the experiment.
- 2 What is the purpose of covering test tube 2 in tin foil?
 To limit the amount of _____ available for _____ and observe the effects of cellular respiration.

Submit answers

Glossary & vocabulary boxes

Highlighted throughout the book, your students will find glossary words that are linked to key definitions that support their knowledge in academic and content level vocabulary.

But, practice is key! Vocabulary boxes are embedded in the content and offer interactive opportunities to learn or consolidate understanding of a new word, sentence starter or definition.



Vocabulary

Words we need

Drag the words into the correct boxes

_____ is the process in which plants convert energy from sunlight into chemical energy. The left side of the photosynthesis equation shows the _____ and the right side shows the _____. The inputs of photosynthesis include _____, water and sunlight. The outputs include _____ and glucose. Photosynthesis occurs inside the _____ and uses a special pigment called _____ to convert energy from the sun.

chlorophyll oxygen carbon dioxide outputs chloroplast

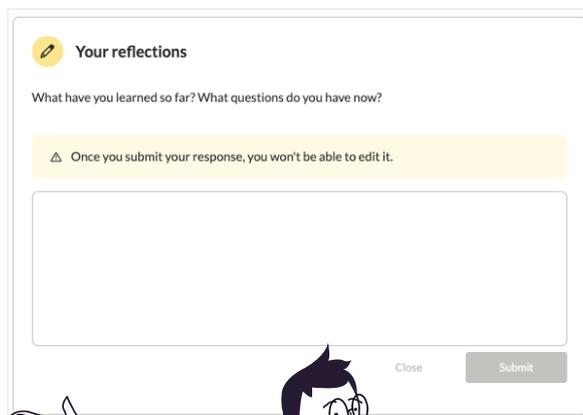
inputs Photosynthesis

Check

HP Rouse I am confused

Reflection questions

At the end of each section, you will find a 'Reflection and summary' subsection, a key component to NGSS learning and in developing an inquiry-based skillset.

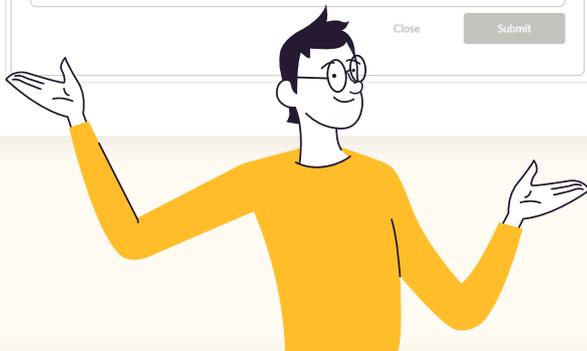


Your reflections

What have you learned so far? What questions do you have now?

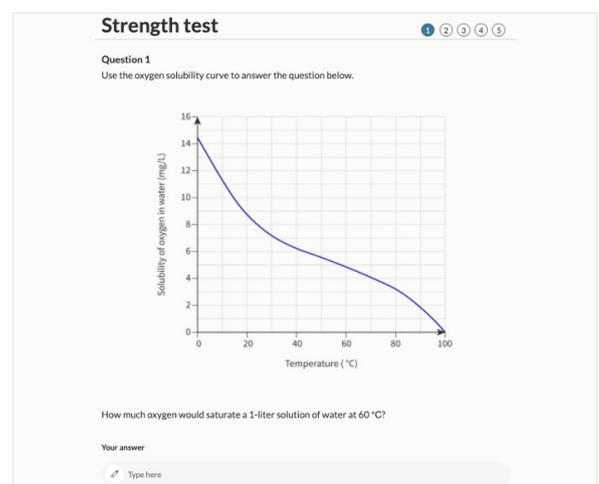
Once you submit your response, you won't be able to edit it.

Close Submit



Strength questions

Each subtopic has an opportunity for your students to test their knowledge and comprehension. Have your students explore the 'Practice' section to receive immediate feedback on their progress and understanding!



Strength test

Question 1

Use the oxygen solubility curve to answer the question below.

Solubility of oxygen in water (mg/L)

Temperature (°C)	Solubility of oxygen in water (mg/L)
0	14
20	10
40	7
60	5
80	3
100	0

Temperature (°C)

How much oxygen would saturate a 1-liter solution of water at 60 °C?

Your answer

Type here

Investigations

Additionally, each subtopic you and your students are encouraged to use Investigations related to the themes covered in this resource. The Investigations 'transfer tasks' offer further opportunities to inquire, explore and apply what you've learned in a different context.