

Kognity and the Next Generation Science Standards

This guide outlines the structure of the Kognity for High School Science books with explicit connection to the NGSS. We will explore where the alignments can be found in the content and how you can use the connections to structure and inform your teaching.

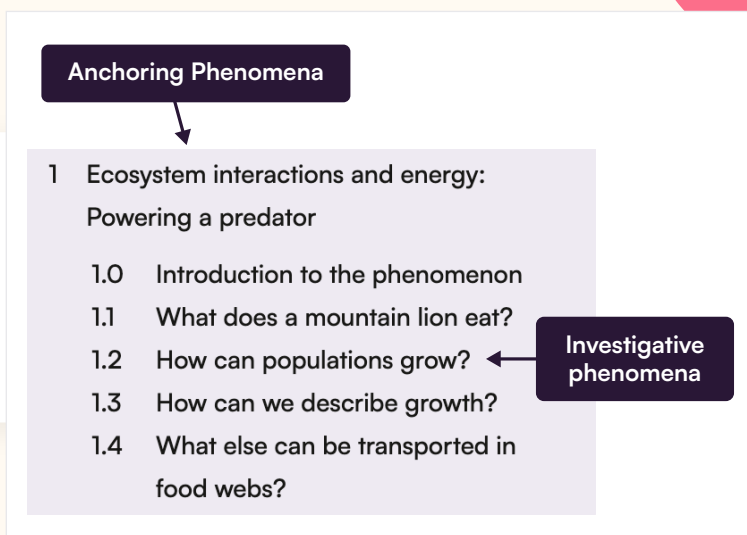


UNIT

Each unit in Kognity is the **Anchoring Phenomenon** that anchors all the learning of a unit. Anchoring Phenomena are observable events that occur in the universe that we can use our science knowledge to explain or predict.

MODULE

The modules are the **Investigative Phenomena**, which students will explore and observe as part of the storyline that links back to the Anchoring Phenomenon



LESSONS


Performance Expectations

Performance Expectations are the assessable statements of what students should be able to accomplish in order to demonstrate understanding.

All learning should link back to a Performance Expectation. For more information on performance expectations, refer to your Teacher Guide provided by Kognity.


The three dimensions

1. **Disciplinary Core Idea (DCI)** identifies why a phenomenon occurs, otherwise known as the main scientific idea.
2. **Cross-cutting concepts (CCC)** connect concepts across sciences and other disciplines. Examples of this are systems or patterns shown in colored boxes in the content of the book.

 **Crosscutting Concept**

Structure and function
When crystals or minerals dissolve in water, their structure changes, thereby changing their physical and chemical properties. Crystals are no longer in their rigid, organized, lattice shape, but instead, have broken up into their electrically charged ions due to the slight positive and negative ends of water surrounding the crystal.

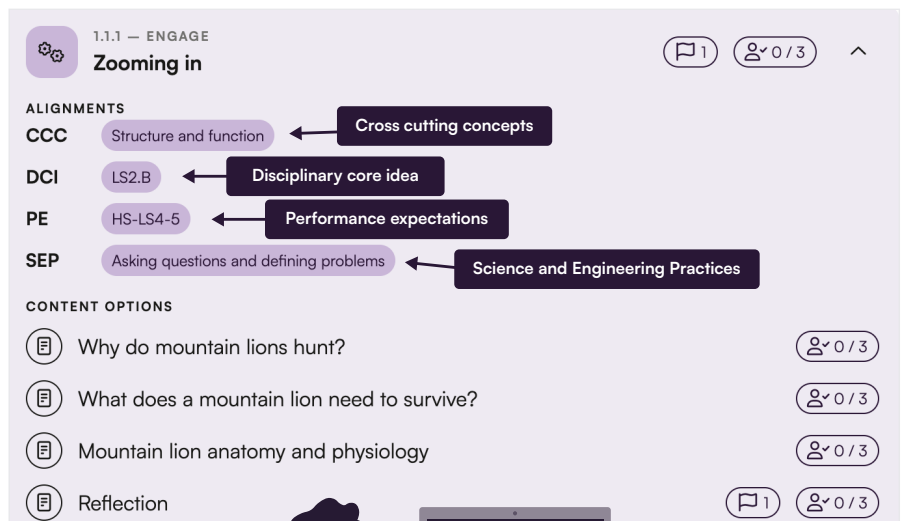
3. **Scientific and engineering practices (SEP)** are tools to apply concepts and skills to be able to investigate further.

 **Science and Engineering Practice**

Engaging in argument from evidence
Conclusions need to be supported by evidence from investigations for them to be considered valid.

Where can I find the NGSS alignments?

Each of the lessons in a module has alignments to cross cutting concepts, disciplinary core ideas, science and engineering practices, and performance expectations. The standards can be found in the table of contents under **Lessons**. Each of the content options in the lesson aligns to one or more of the standards.







1.1.1 — ENGAGE
Zooming in

ALIGNMENTS

CCC	Structure and function	Cross cutting concepts
DCI	LS2.B	Disciplinary core idea
PE	HS-LS4-5	Performance expectations
SEP	Asking questions and defining problems	Science and Engineering Practices

CONTENT OPTIONS

	Why do mountain lions hunt?	0/3
	What does a mountain lion need to survive?	0/3
	Mountain lion anatomy and physiology	0/3
	Reflection	0/3

