

# START HERE!

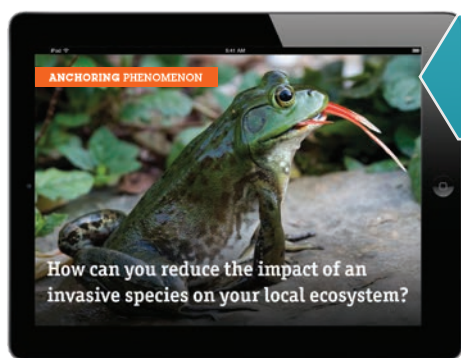
CALIFORNIA

## Miller & Levine • Experience Biology

The Living Earth



3-Course Model program aligned to the California framework suggested segments:



1

### Anchoring Phenomenon

Each of the six Instructional Segments support the CA framework. The **Anchoring Phenomenon** video launches the segment, prompting students to engage in inquiry, ask questions, and investigate the phenomenon.

### Investigative Phenomenon

Students become the scientist, while building **Claim-Evidence-Reasoning** skills with real-world Investigative Phenomenon Case Studies! A **Case Study** launches every chapter with an intriguing, open-ended question.

2

### Can San Francisco sourdough be copied?

**Phenomenon** The city of San Francisco is famous for many things, including its sourdough bread. The bread has a distinctive chewy texture and tangy acidic taste, making it one of the city's favorite treats. What makes San Francisco sourdough unique?



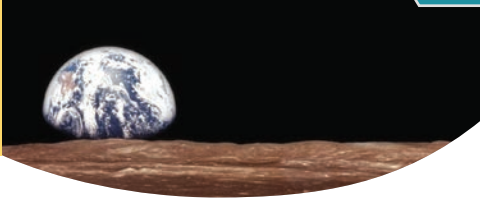
LESSON  
3.1

### Introduction to Global Systems

3

#### EVERYDAY PHENOMENON

How many of  
Earth's global  
systems can you see  
from the moon?



#### VOCABULARY

biosphere • ecology •  
species • population •  
community • ecosystem  
• biotic factor • abiotic  
factor • atmosphere •  
hydrosphere • geosphere

Early astronauts made many scientific discoveries about the moon and space. But they also made some unexpected emotional discoveries when they saw Earth suspended in lifeless space. "We came all this way," Astronaut William Anders wrote, "to study the moon,

### Everyday Phenomenon

Engaging prompts support student development of inquiry skills. Everyday Phenomenon engagement builds understanding of the Anchoring and Investigative Phenomena.

### Active Student Experiences

Students build Science & Engineering Skills using labs, data analysis, and performance-based tasks. Find easy connections to understand the three dimensions at point of use in the Student and Teacher Editions.

4



#### Modeling Lab

#### Open-Ended Inquiry

### A Model of Meiosis

**Problem** How does meiosis change a diploid cell into haploid gametes?

In this lab, you will plan and develop a model of meiosis. You will choose materials to represent the cell and chromosomes, assemble and manipulate the materials to represent the stages of meiosis, and use the model to explain the process.

You can find this lab in your digital course.



# 3-COURSE MODEL



## Science Literacy

**Biology Foundations** supports understanding with interactive experiences that reinforce the three-dimensional aspect of learning. In addition to reading tools, there are opportunities for visual literacy, where students are able to label and create models and describe their understanding.

5

**READING TOOL** Sequence of Events As you read your textbook, identify the sequence of events that influenced Mendel's conclusions about genetics. Pay attention to his experiments with the  $F_1$  and  $F_2$  generations. The first event is filled in for you.

Sequence of Events	Conclusions
Mendel observes that his pea plants are true-breeding.	

Available in English and Spanish

**Performance-Based Assessment**  
SCIENCE PROJECT

Standards

00:01

**Growing More and Better Corn**

STEM Evaluating Information

6

## Performance-Based Assessment

Engineering and inquiry tasks give students opportunities to demonstrate their understanding of DCIs, SEPs, and CCCs.

## Revisit the Anchoring Phenomenon

Students **revisit the Anchoring Phenomenon** multiple times on their sense-making journey. They continue to make progress on their Claim-Evidence-Reasoning activities at the end of every chapter.

7

**PROBLEM WRAP-UP**

**Battling Blights with Disease Resistance Genes**

**PROBLEM:** HOW CAN YOU IDENTIFY AND USE DISEASE RESISTANCE GENES TO HELP POPULATIONS RECOVER FROM AN EPIDEMIC?

**TASKING** End of Unit 4

**Solve It**

If you did not complete the STEM Project, **Modeling Disease Resistance Gene Discovery**, research disease resistance genes in plants and why they are important. How do scientists use their knowledge of these genes, genetics, and biotechnology to help plant populations recover from epidemics? Record the results of your research here.

8

## Partnerships

Point-of-use interactives from **HHMI BioInteractive** engage students with videos, animations, tutorials and activities. **Labster** immersive 3D virtual lab simulations provide students with radically interactive, first-hand learning experiences. Find these resources and more on the **Savvas Realize™** digital platform.



Contact Your Savvas Representative: [Savvas.com/CABiology](https://www.savvas.com/CABiology)

**SAVVAS**  
LEARNING COMPANY

800-848-9500 | [Savvas.com/CAScience](https://www.savvas.com/CAScience)

Copyright © 2020 Savvas Learning Company LLC All Rights Reserved. Savvas™ and Savvas Learning Company™ are the exclusive trademarks of Savvas Learning Company LLC in the US and in other countries. Pearson and Pearson logo are registered trademarks of Pearson Education, Inc. SAM: 9781418331108

Join the Conversation  
@SavvasLearning



Get Fresh Ideas for Teaching  
[Blog.Savvas.com](https://www.savvas.com/blog)

ScPr1581R549