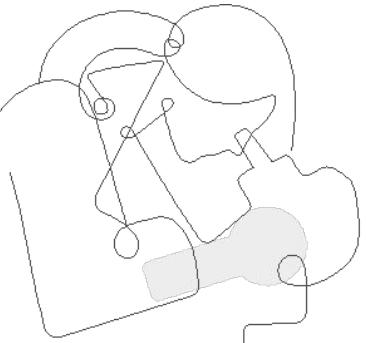
Amplify Science

Navigation Program Essentials / Guided Planning

Grade 1, Unit 1: Plant and Animal Defenses

Part 1



School/District Name: LAUSD
Date: December, 2021
Presented by:

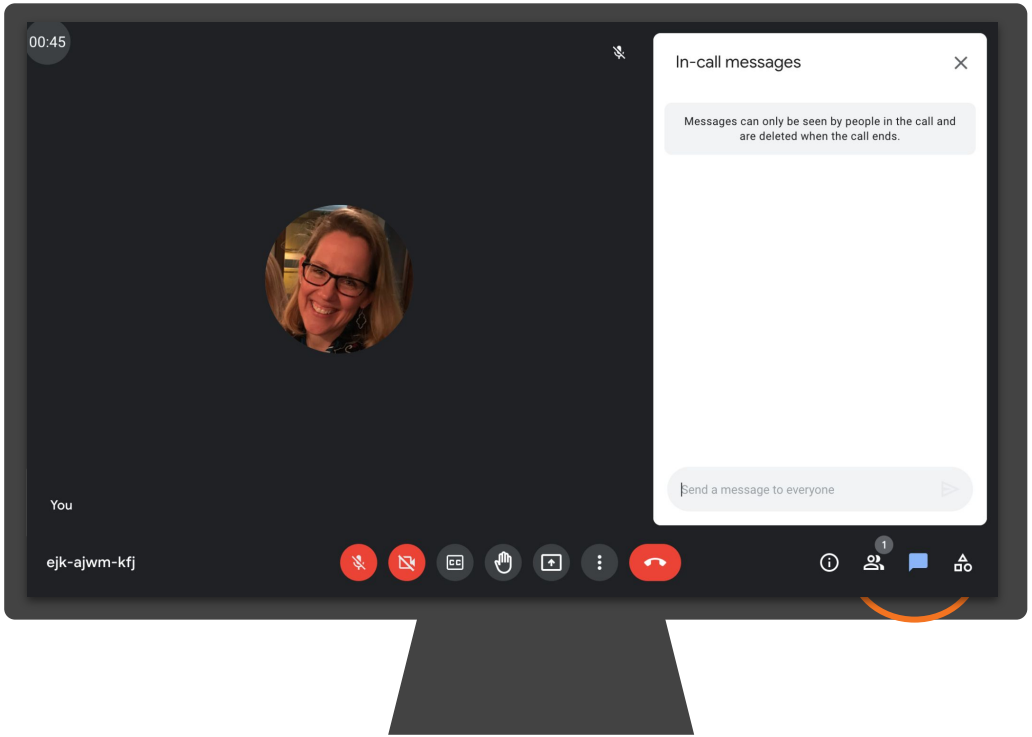
TOP RATED BY EDREPORTS

PLPG CERTIFIED PROVIDER

Ice Breaker!

Who do we have in the room today?

- **Question 1:** Which aspects of implementing the Amplify Science standard curriculum are you most excited or hopeful about?
- **Question 2:** What do you feel most hesitant about?



Amplify's Purpose Statement

Dear teachers,

You do a job that is nearly impossible and **utterly essential.**

We are in your corner – extending your reach, saving you time, and enhancing your understanding of each student.

Thank you for working with us to craft rigorous and riveting learning experiences for your classroom.

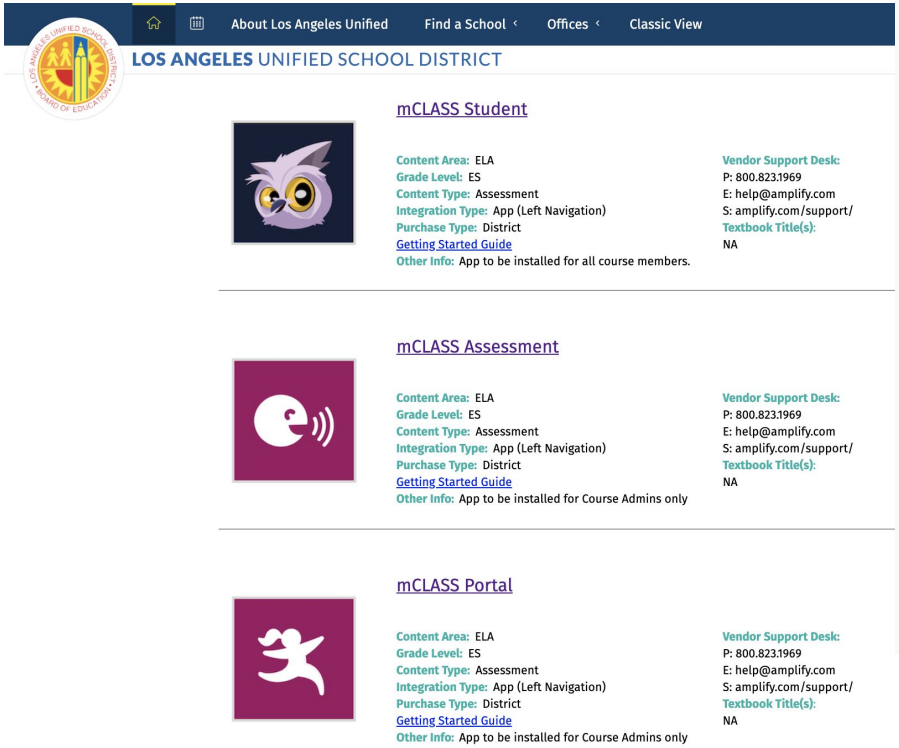
We share your goal of **inspiring all students to think deeply, creatively, and for themselves.**

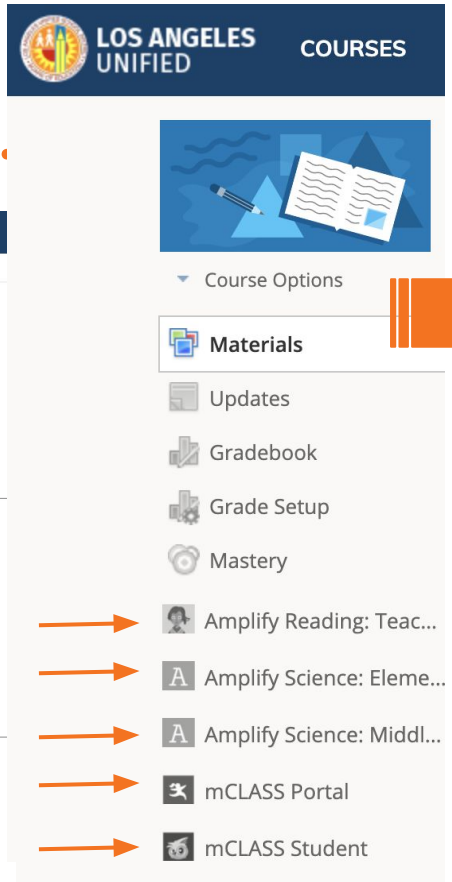
Sincerely,
Amplify

Norms: Establishing a culture of learners

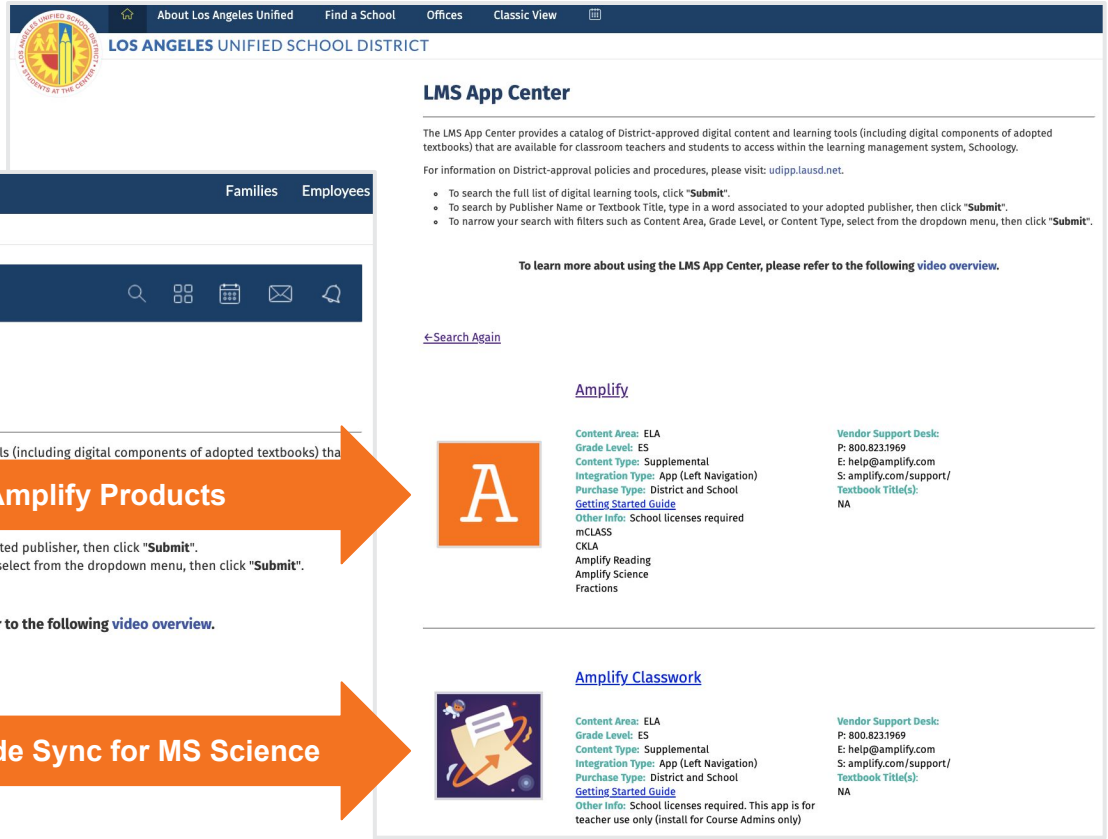
- **Take risks:** Ask any questions, provide any answers.
- **Participate:** Share your thinking, participate in discussion and reflection.
- **Be fully present:** Unplug and immerse yourself in the moment.
- **Physical needs:** Stand up, get water, take breaks.

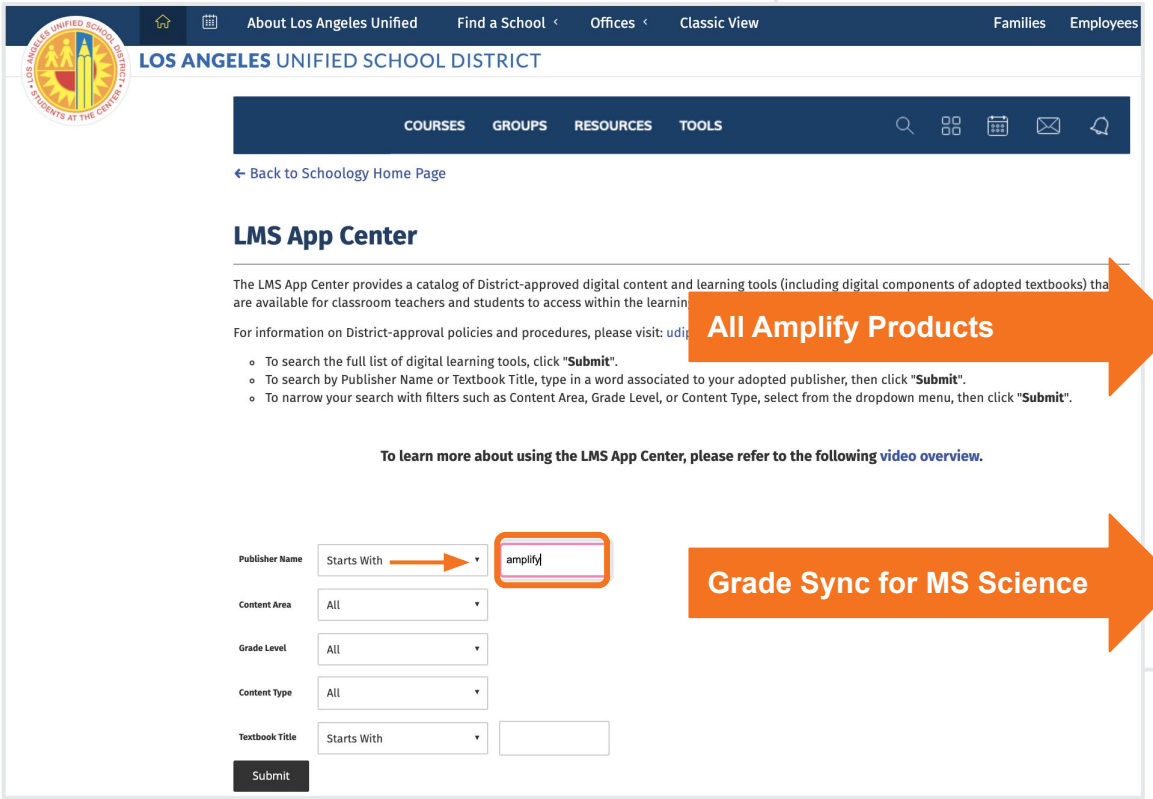
Last year's Amplify apps.





This year's app(s).





All Amplify Products

Grade Sync for MS Science

my.amplify.com

Amplify. MY ACCOUNT ADMIN REPORTS LAUNCH PROGRAMS TERIN NGO

mCLASS Educators: To view or make changes to your account go to mclass.amplify.com.

Hi, Terin

Classes

Programs & Licenses

Account Settings

Help Center

CKLA Hub

CKLA Resource Site

mCLASS Assessment

mCLASS Reporting

Reading 6-8

Reading K-5

Science

Vocabulary

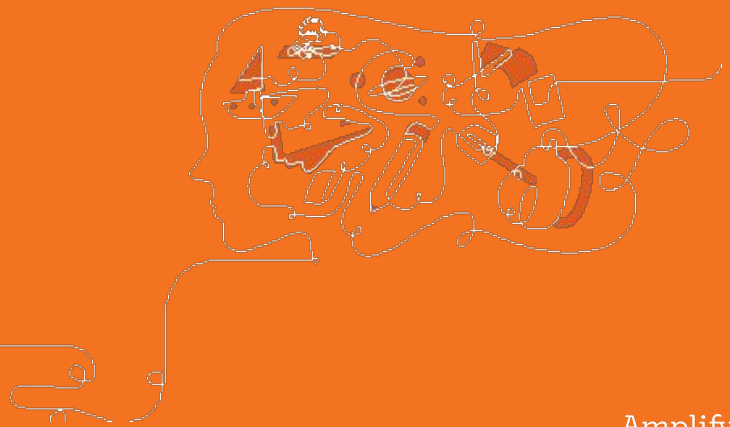
Amplify. on Schoology

2021-2022

Join Amplify Science Schoology Group

To join Amplify Science Schoology ES Group: W4PK-W466-63F5B

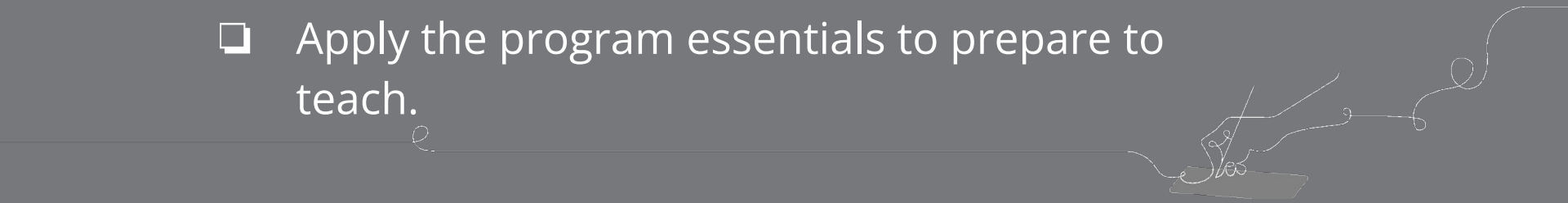
Part 1

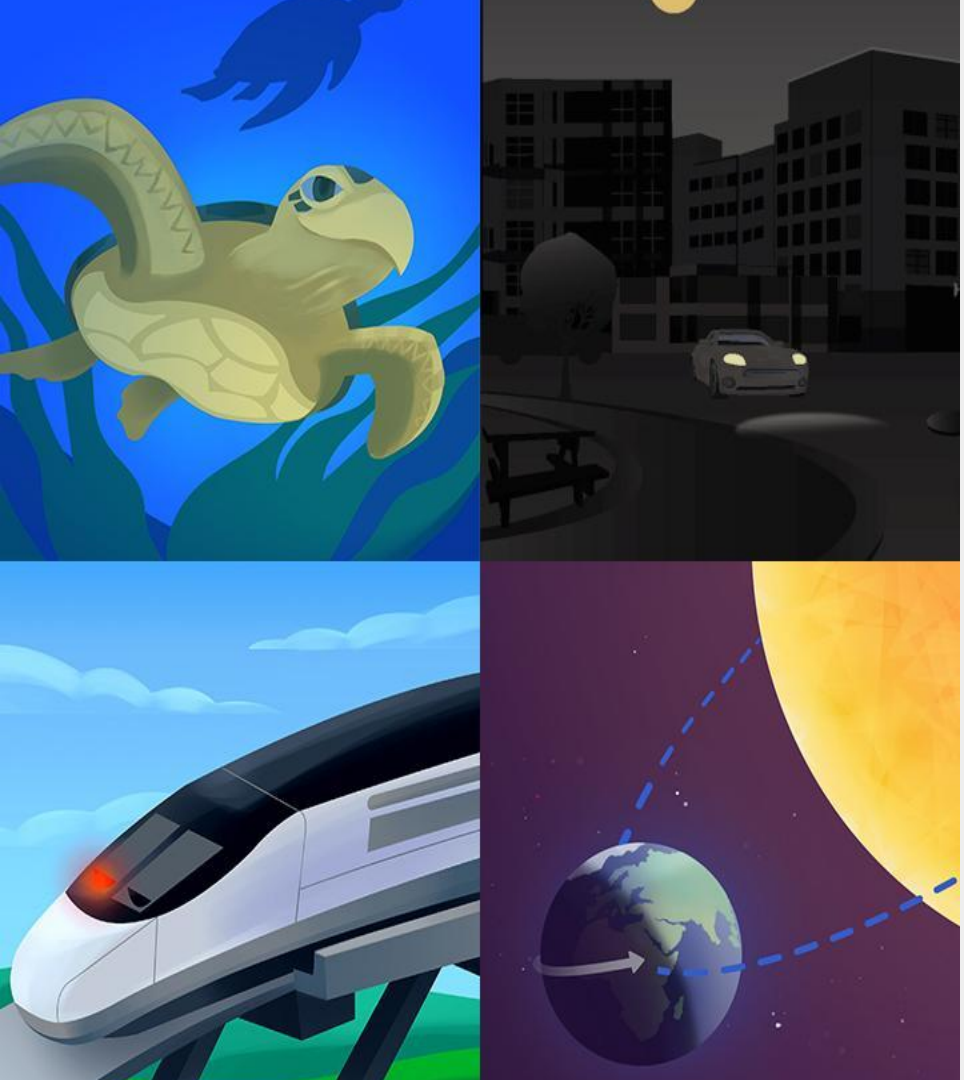


Overarching goals

By the end of this workshop, you will be able to:

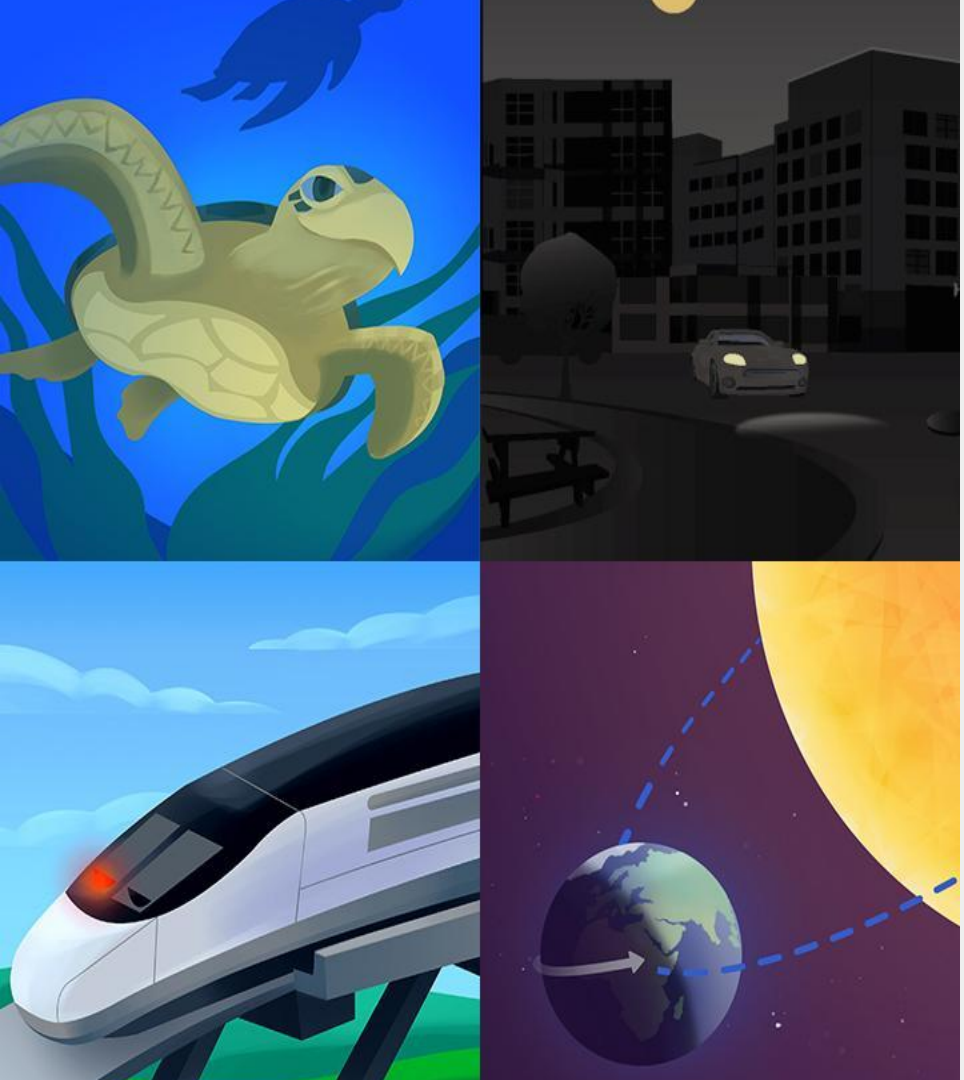
- ❏ Navigate the full Amplify Science standard curriculum.
- ❏ Understand the program's phenomenon-based approach.
- ❏ Apply the program essentials to prepare to teach.





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing



Plan for the day: Part 1

- **Introduction and Framing**
- Phenomenon-based Instruction
- Program Essentials
- Closing

THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

+ Amplify.

Amplify Science

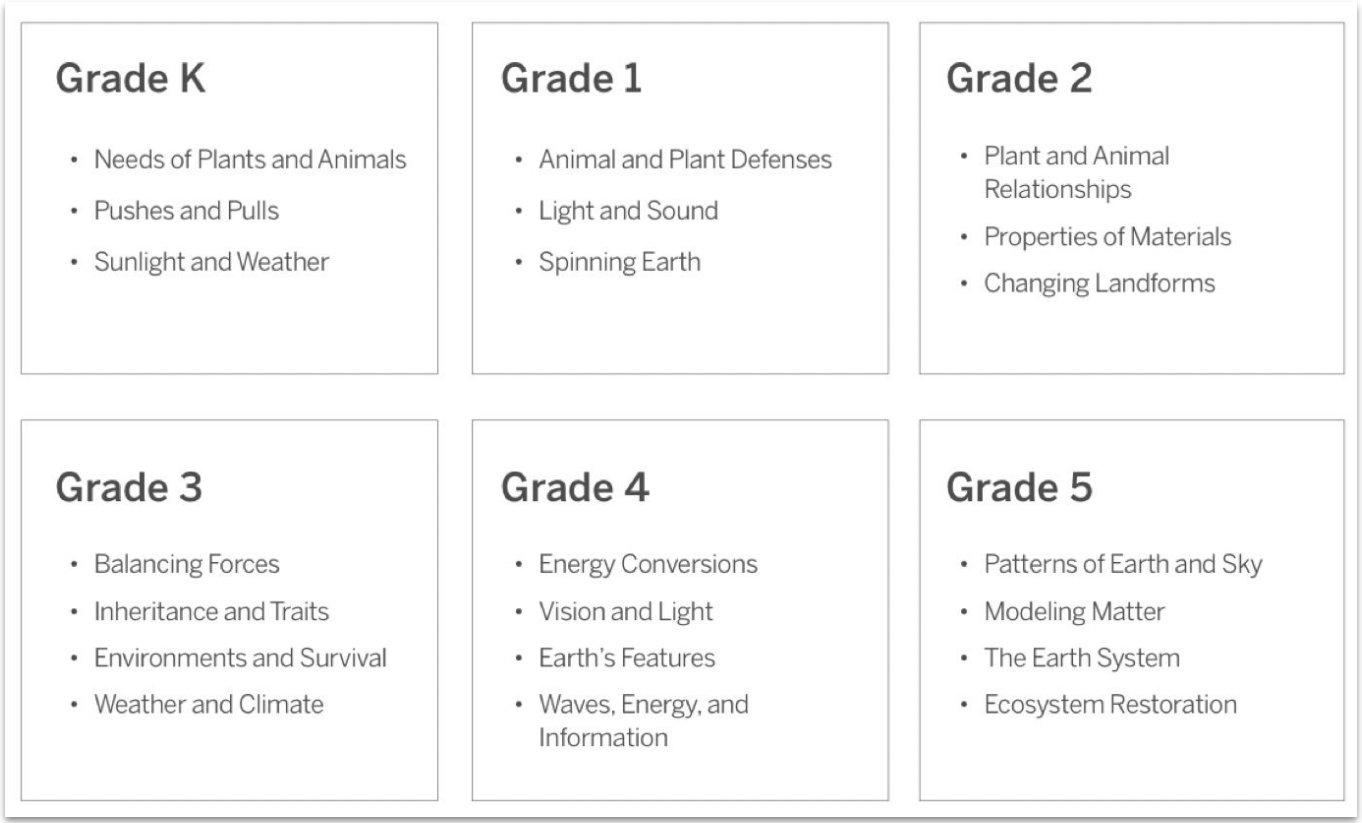
Next Generation Science Standards

Disciplinary Core Ideas — What students figure out

Science and Engineering Practices — How students figure out the science

Crosscutting Concepts — The habits of thinking that help students organize information

Course curriculum structure



Key takeaways:

- There are 22 lessons per unit
- Lessons at grades K-1 are 45 minutes long

Year at a Glance: Grade 1

Animal and Plant Defenses

Domain: Life Science

Unit type: Modeling

Student role: Marine Scientist

Light and Sound

Domain: Physical Science

Unit type: Engineering Design

Student role: Light and Sound Engineer

Spinning Earth

Domain: Earth and Space Science

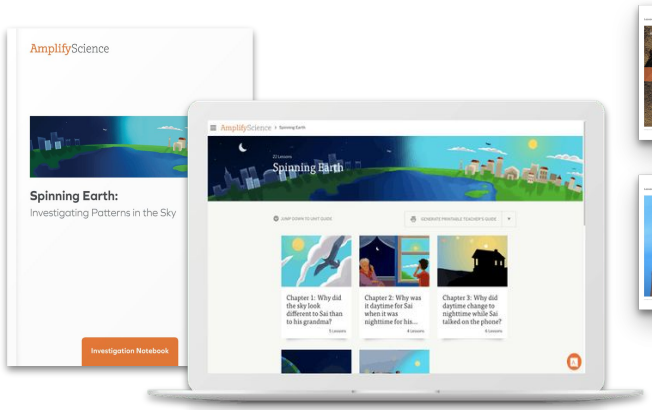
Unit type: Investigation

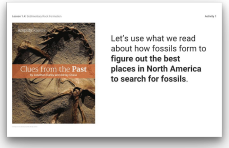
Student role: Sky Scientist

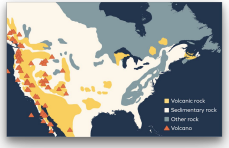
K-5 Program components

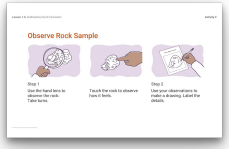
Teacher materials

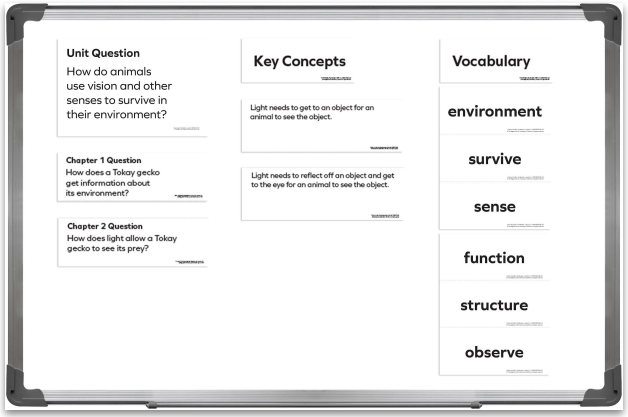
- Teacher's Guide (print and digital)
- Classroom Slides
- Classroom wall materials
- Embedded assessments
- Program Guide
- Program Hub
- Amplify Help Site







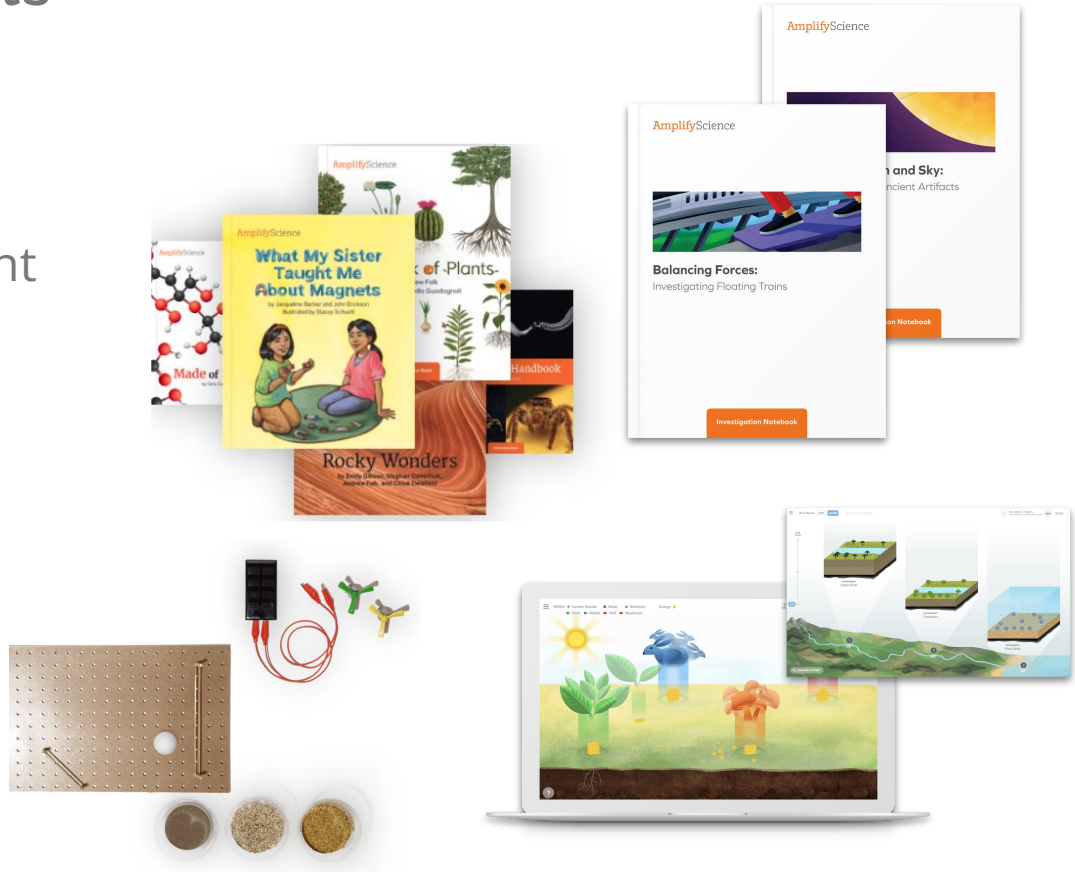




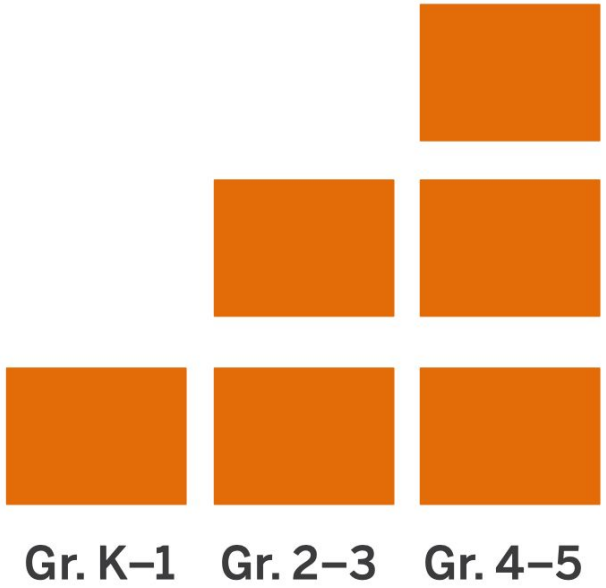
K-5 Program components

Student materials

- Hands-on materials
- Investigation Notebooks (print and digital)
- Student books
- Digital Applications



What are the digital components of Amplify Science Elementary?

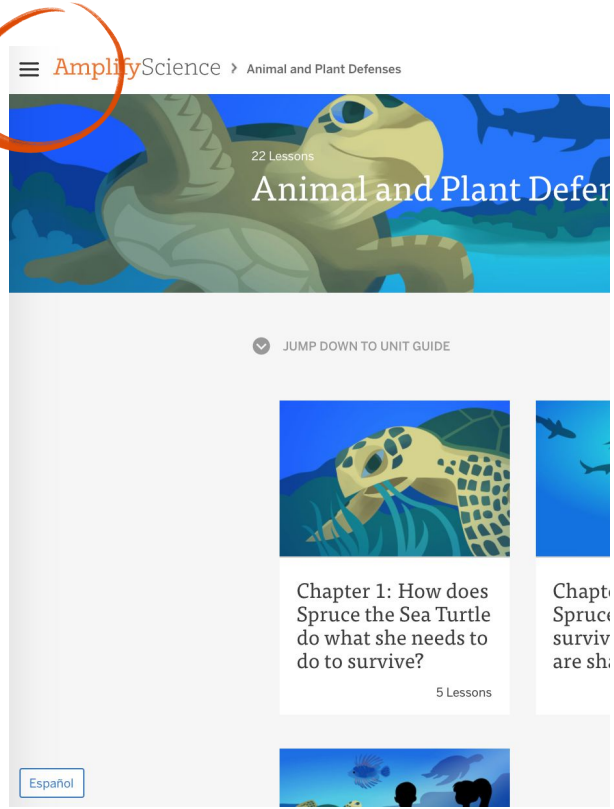


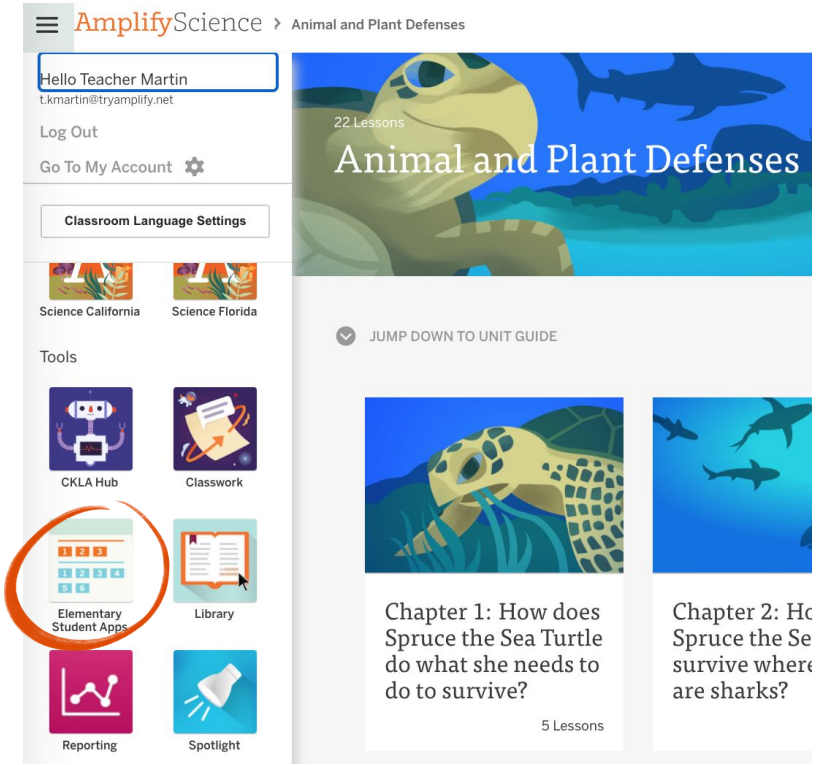
Student Simulations

Student Science Practice Tools
(sorting tool, diagramming tool, modeling tool, data tool)

Teacher's Guide
(Online digital books for students)

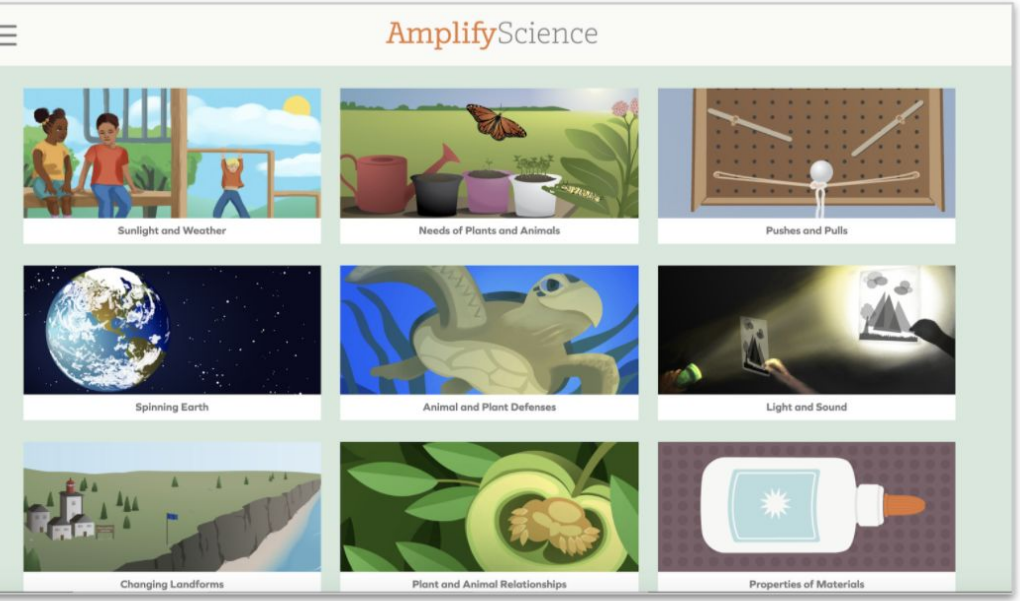
Navigating to the Student Apps page

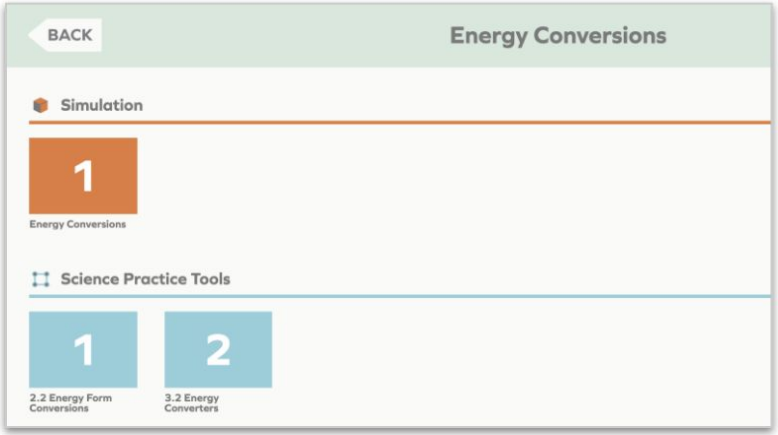




Student apps page

The elementary digital experience for students grades 2-5 is through the student apps page: apps.learning.amplify.com/elementary





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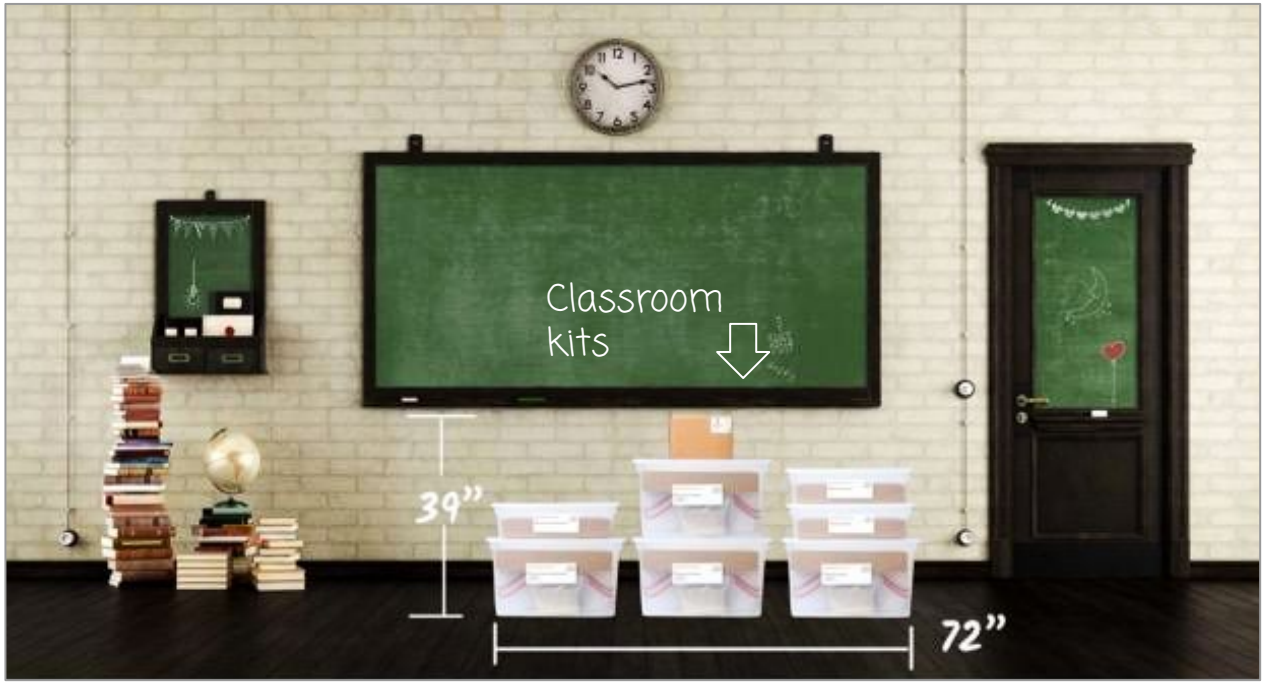
K-5 Program components

Classroom kits



Classroom Kits

Built for a class of 36 students, with consumables for two years

LAUSD Microsite- https://amplify.com/lausd-science

Welcome to Amplify Science!

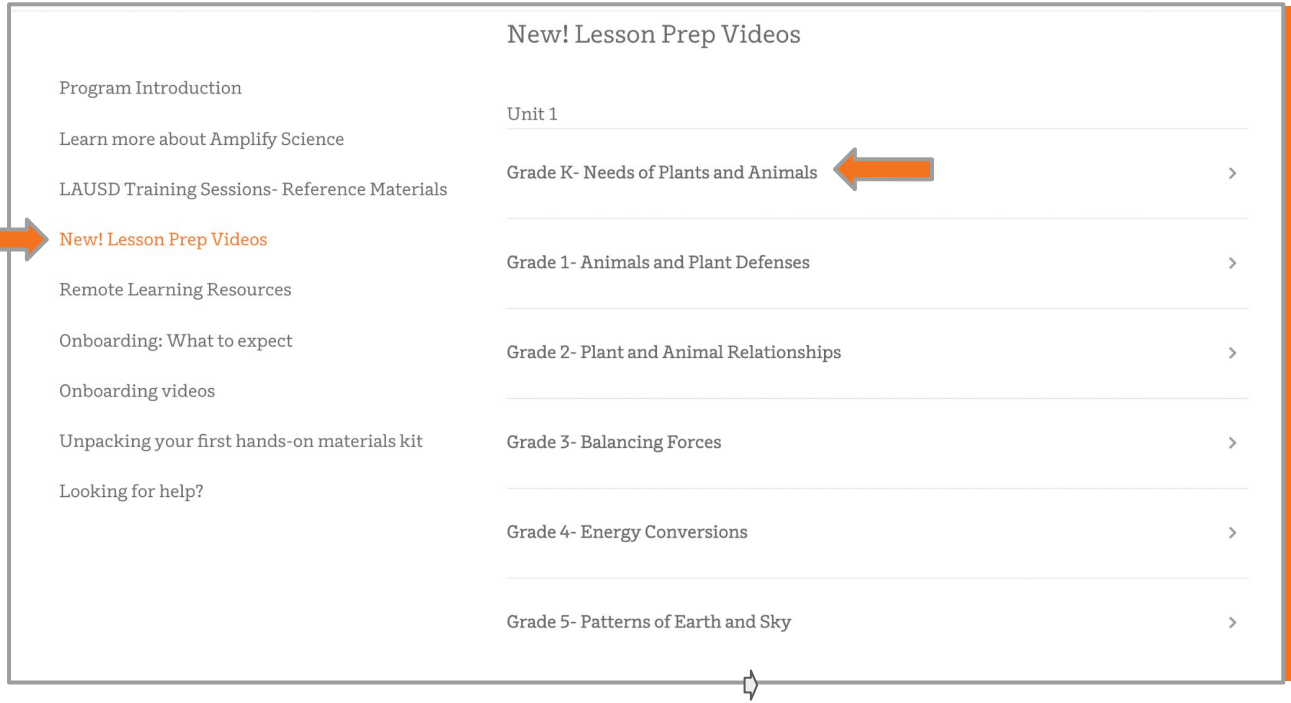
This site contains supporting resources designed for the LAUSD Amplify Science adoption for grades TK–8.

- Access the Amplify Science Program Hub (To help orient you to the new design, watch this video and view this reference guide.)
- Find out more about Amplify Science@Home
- Share the Caregiver Hub (Eng/Span) with your families
- For LAUSD ES Teachers- Amplify Science & Benchmark Advance Crosswalk
- Instructional guidance for a Responsive Relaunch of Amplify Science in 21-22

Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!

Unit 1, K-5 Lesson Prep Videos

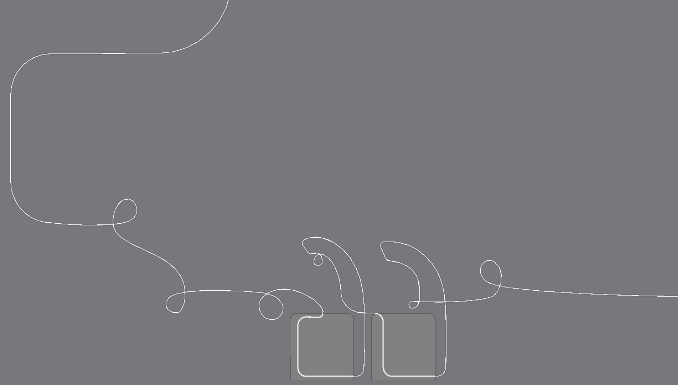
Classroom kits

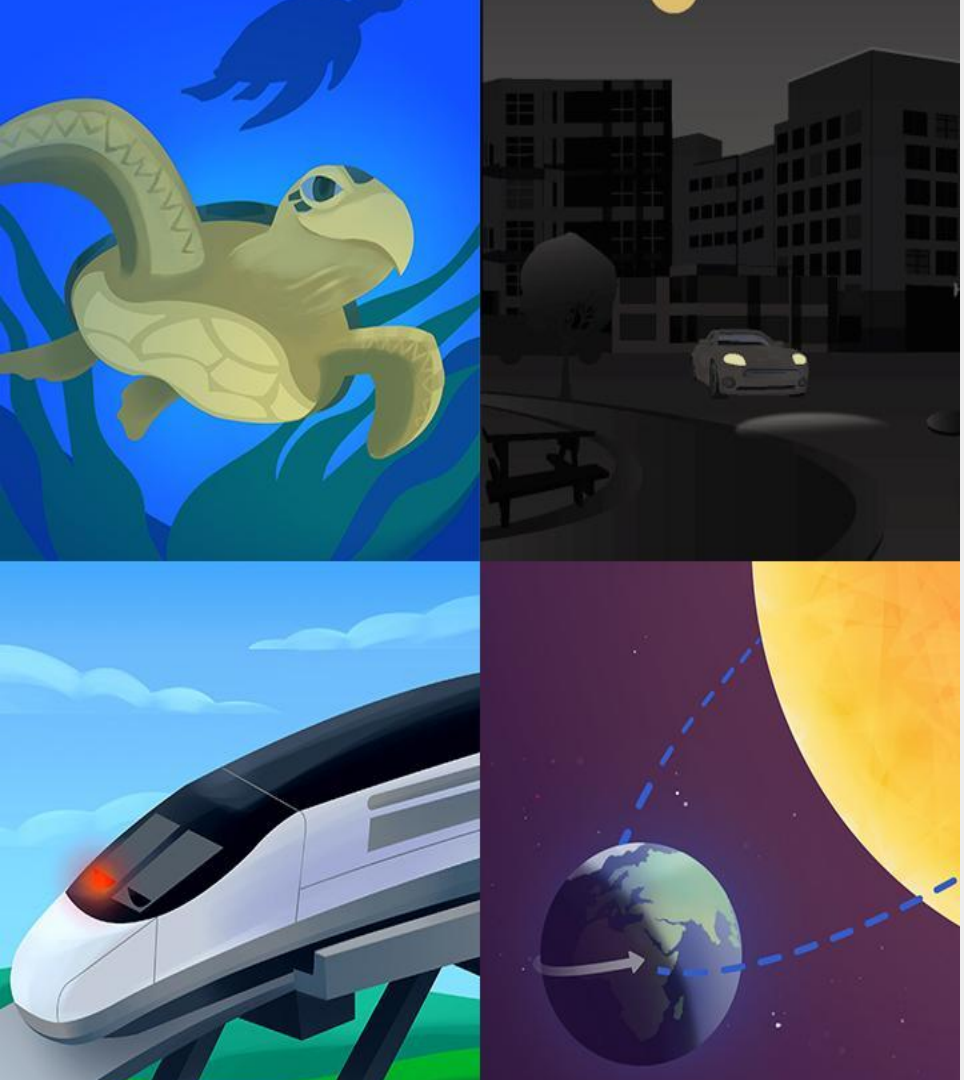


Classroom Kits

Built for a class of 36 students, with consumables for two years

Questions?





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing

Next Generation Science Standards

Phenomenon-based learning and teaching

A scientific phenomenon is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.

Comparing topics and phenomena

Topic-based	Phenomenon-based
Chemical reactions	There's a reddish-brown substance in a town's tap water.

Next Generation Science Standards

How might learning be different?

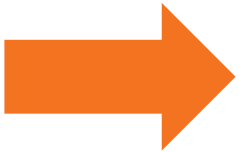
Topic-based	Phenomenon-based
Chemical reactions	There's a reddish-brown substance in a town's tap water.
Electric circuits	A flashlight won't turn on, even though it used to work.
Natural selection	A population of newts has become more poisonous over time.

Comparing topics and phenomena

A shift in science instruction

from learning about

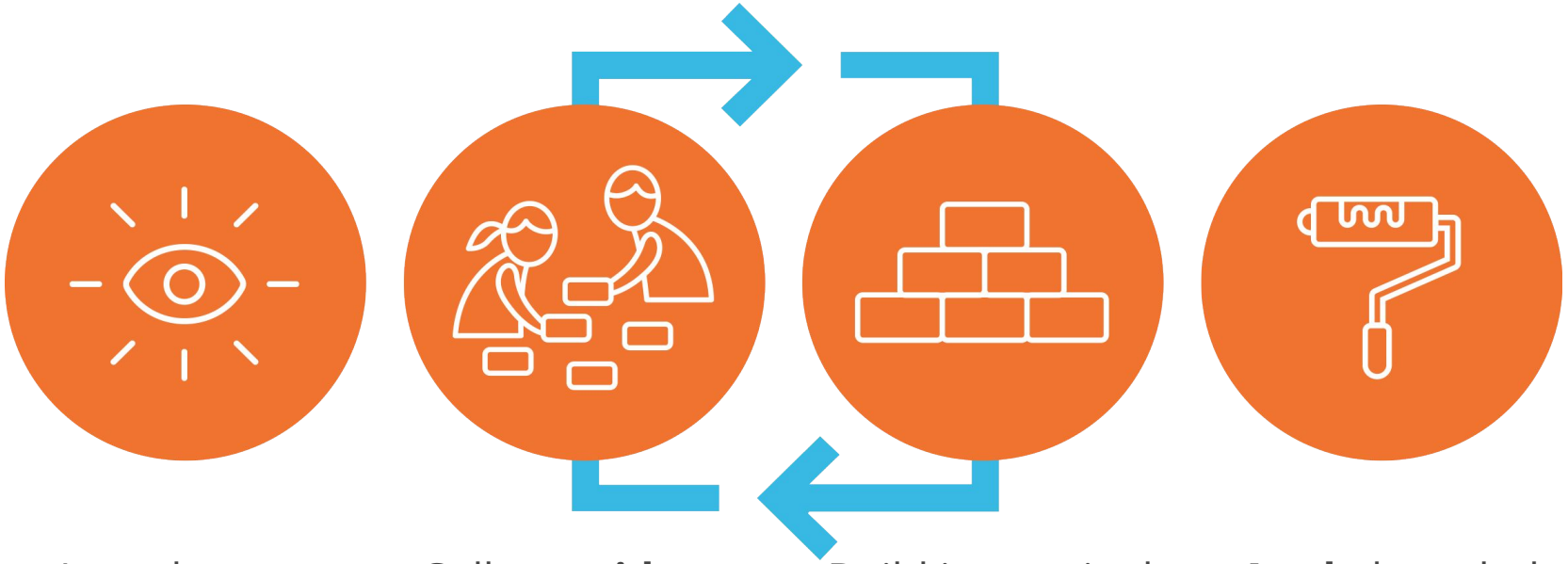
(like a student)



to figuring out

(like a scientist)

Amplify Science Approach



Introduce a **phenomenon** and a related problem

Collect **evidence** from multiple sources

Build increasingly complex **explanations**

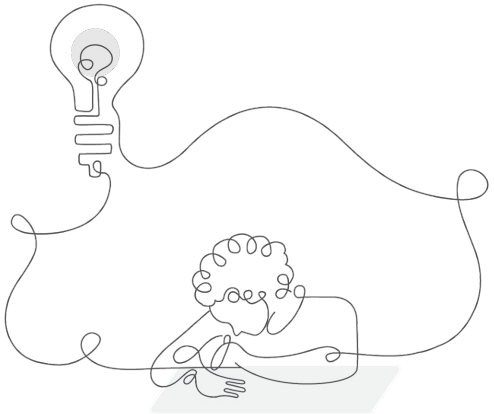
Apply knowledge to solve a different problem

Previewing the unit

Introducing the phenomenon

Amplify Science units are designed around complex phenomena that drive student learning through the unit.

Pay attention to the phenomenon, or observable event, students will figure out in your unit.



We are going to be **scientists** and investigate animals and plants.

First, we will look at a picture and talk about what we see.

What do you know about **aquariums**?

Scientists ask questions to learn about the world. They ask questions about animals and plants.

We will ask questions to learn more about animals and plants, too.

What **questions** do you have about the animals and plants that live in the aquarium?

This animal is a **sea turtle**.

A sea turtle named **Spruce** lives at the aquarium.

Soon people from the aquarium will take Spruce **back to the ocean**.

They will let Spruce go.

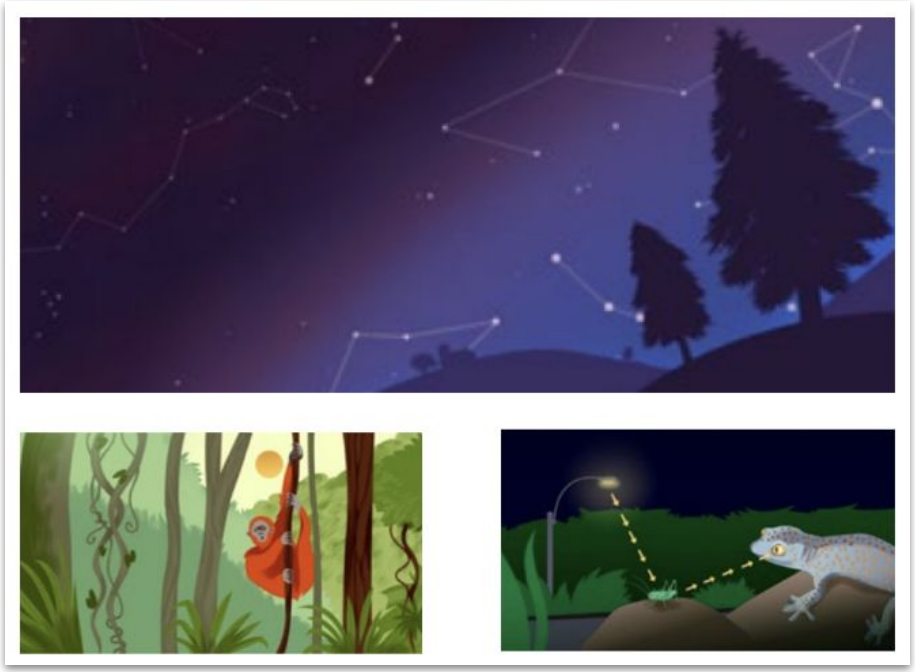
Kids who visit the aquarium are worried that Spruce might not survive in the ocean.

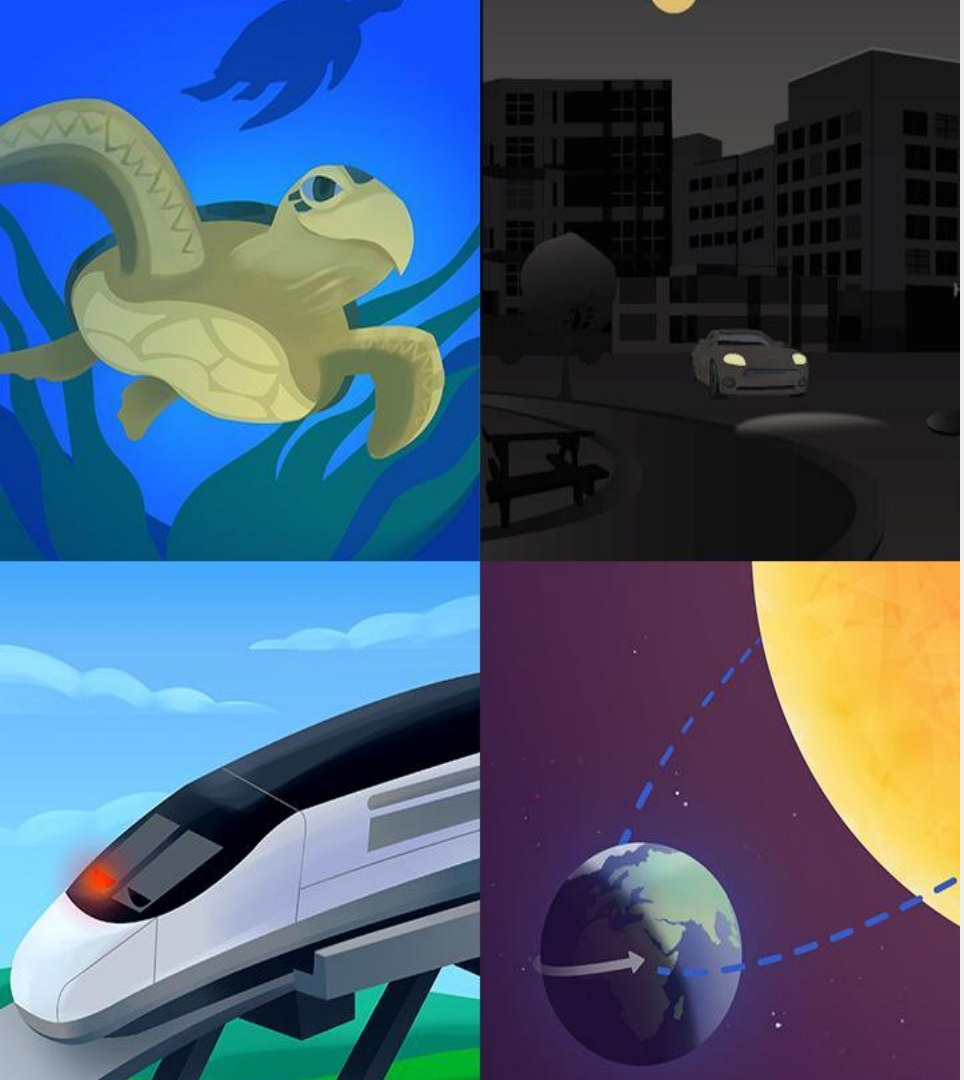
The director of the aquarium needs our help to explain to the kids **how Spruce will survive, or stay alive,** once she is back in the ocean.

Amplify Science

Anchoring phenomenon

- Complex and rich
- Drives learning through a whole unit
- Specific and observable
- Relatable at students' developmental level





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing

Unit structure

Unit

↓

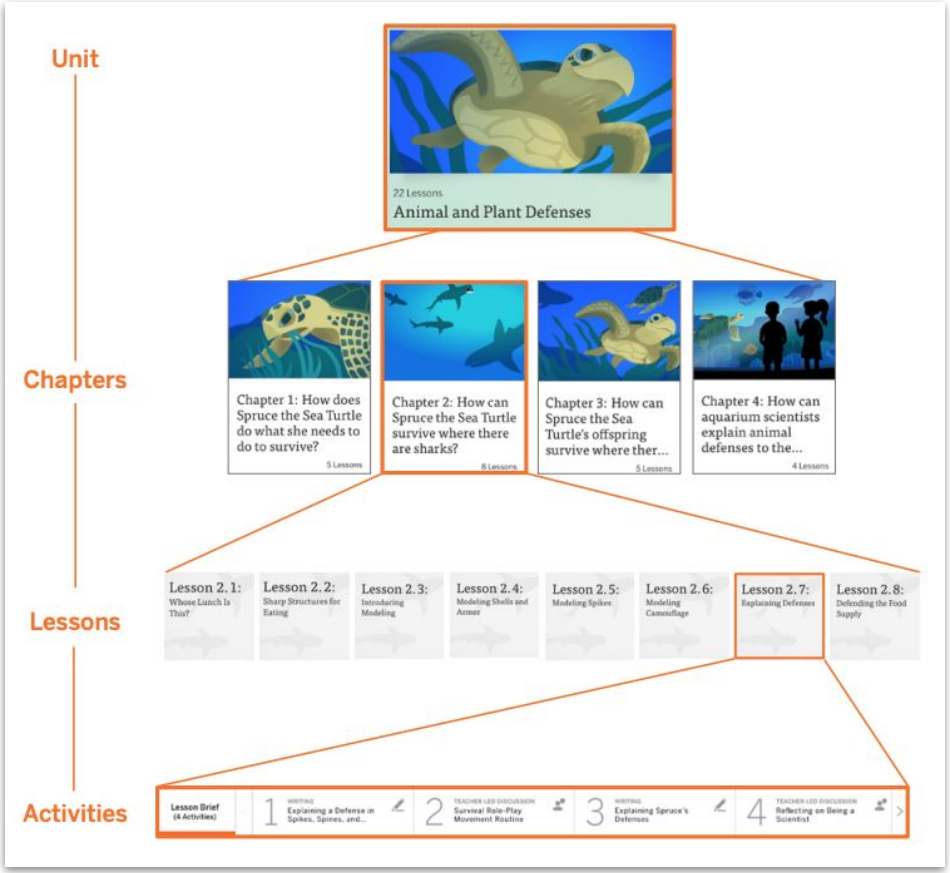
Chapter

↓

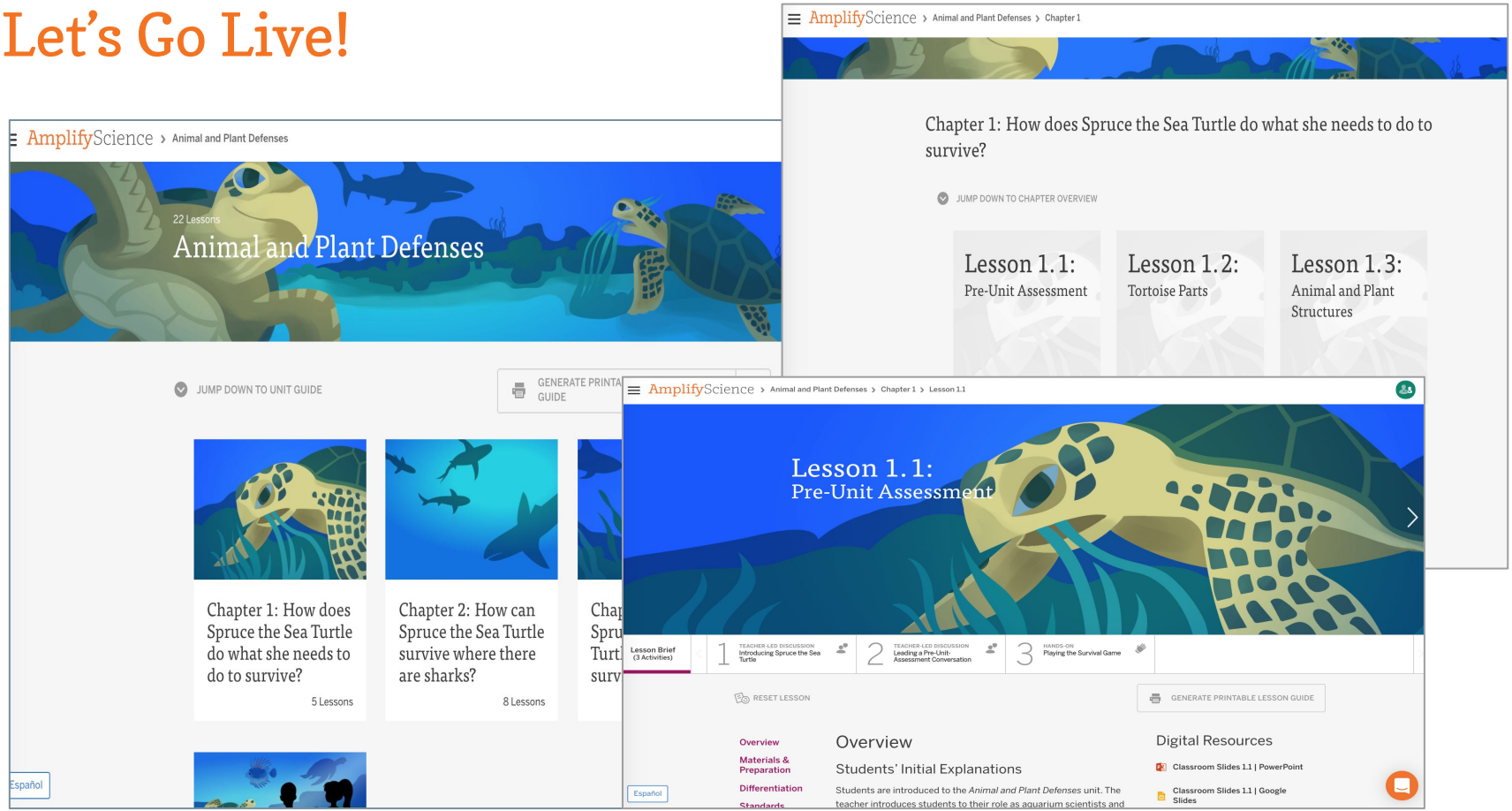
Lesson

↓

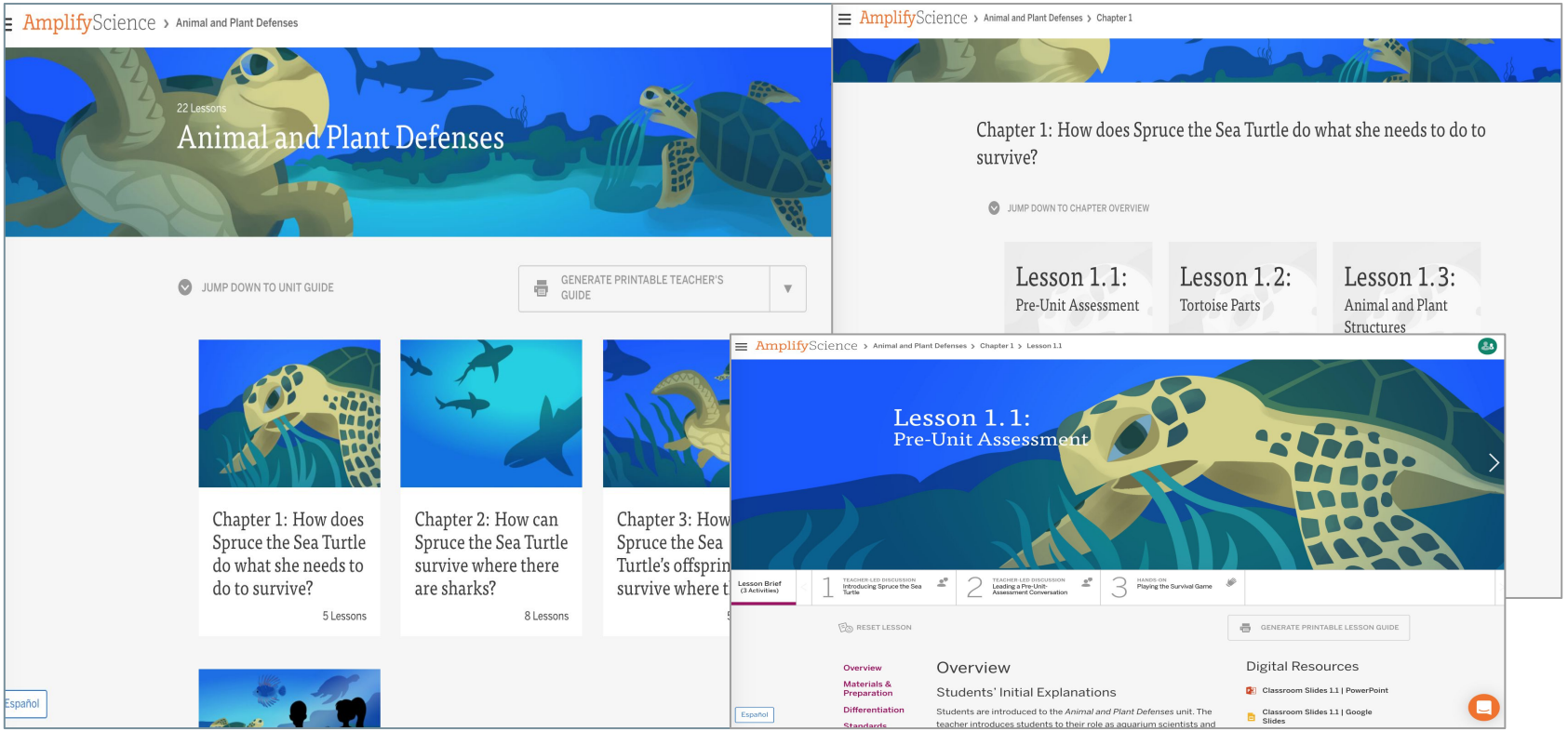
Activity



Let's Go Live!


AmplifyScience › Animal and Plant Defenses
22 Lessons
Animal and Plant Defenses
JUMP DOWN TO UNIT GUIDE
Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?
5 Lessons
Chapter 2: How can Spruce the Sea Turtle survive where there are sharks?
8 Lessons
Español
AmplifyScience › Animal and Plant Defenses › Chapter 1
Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?
JUMP DOWN TO CHAPTER OVERVIEW
Lesson 1.1: Pre-Unit Assessment
Lesson 1.2: Tortoise Parts
Lesson 1.3: Animal and Plant Structures
AmplifyScience › Animal and Plant Defenses › Chapter 1 › Lesson 1.1
Lesson 1.1: Pre-Unit Assessment
Lesson Brief (3 Activities)
1 TEACHER-LED DISCUSSION Introducing Spruce the Sea Turtle
2 TEACHER-LED DISCUSSION Leading a Pre-Unit-Assessment Conversation
3 HANDS-ON Playing the Survival Game
RESET LESSON
GENERATE PRINTABLE LESSON GUIDE
Overview
Materials & Preparation
Differentiation
Standards
Overview
Students' Initial Explanations
Students are introduced to the Animal and Plant Defenses unit. The teacher introduces students to their role as aquarium scientists and
Digital Resources
Classroom Slides 1.1 | PowerPoint
Classroom Slides 1.1 | Google Slides
Español

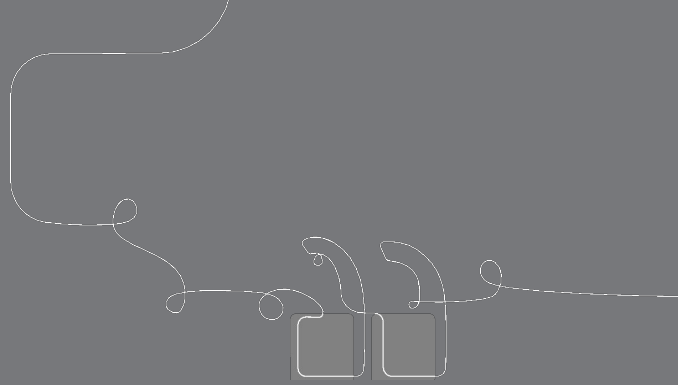
Explore the Essentials!



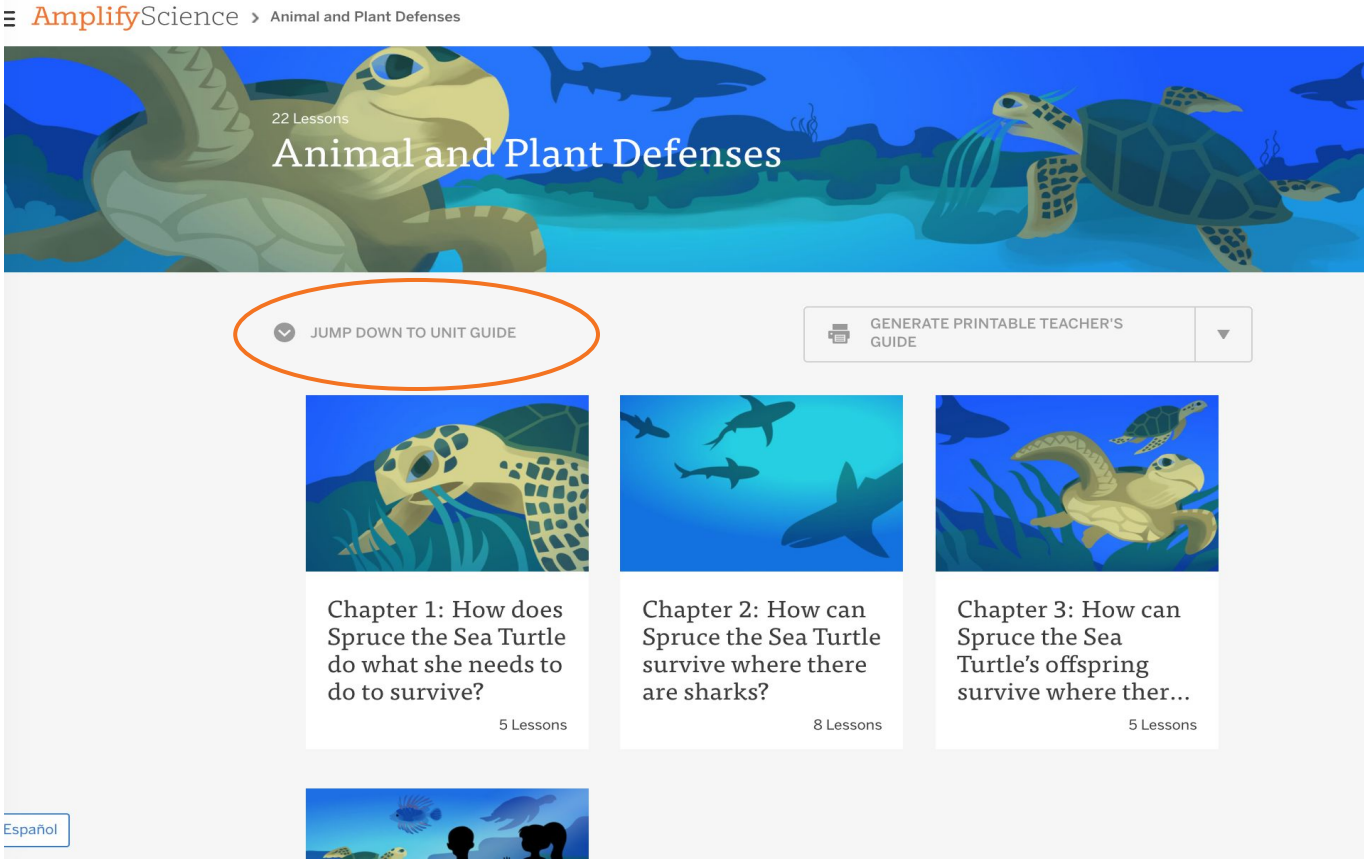
Navigation summary

1. Select your first unit
    a. You are now on the Unit Landing Page.

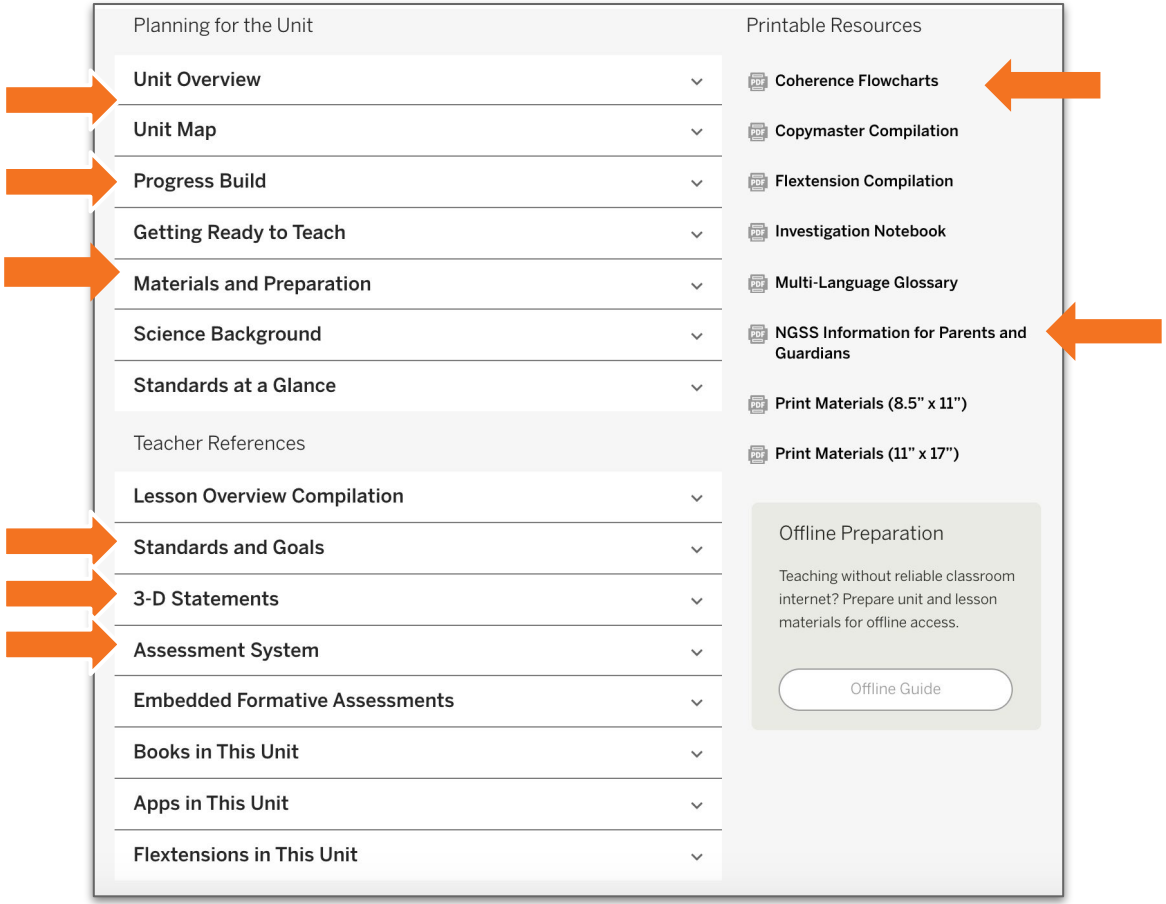
2. Select **JUMP DOWN TO UNIT GUIDE.**
    a. **Or scroll down the page to *Planning for the Unit* and *Teacher References***



Unit Landing Page



Key Unit Guide Documents for Unit Planning



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Core Unit Planning & Internalization

Unit Title:	1

Overview

[Resources: Unit Overview, Teacher's Guide, Coherence Flowchart, Unit Map, 3-D Statements]

What is the phenomenon/real-world problem students are investigating in your unit? 2	Student Role: 3
Unit Question: 4	Relationship between the Unit Phenomenon and Unit Question: 5
By the end of the unit, students figure out... 6	
How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit? 7	

1

Unit Guide resources:
- Unit Overview
- Unit Map
- Coherence Flowchart

Unit Guide resources:
- Lesson Overview Compilation
- Unit Overview

Unit Guide resources:
- Unit Map

Unit Guide resources:
- 3D Statements at the Unit Level

Core Unit Planning & Internalization

Unit Title:	Animal and Plant Defenses

Overview

[Resources: Unit Overview, Teacher's Guide, Coherence Flowchart, Unit Map, 3-D Statements]

What is the phenomenon/real-world problem students are investigating in your unit?	Student Role:
How can a sea turtle survive in the ocean after being released by an aquarium?	Marine Scientists
Unit Question:	**Relationship between the Unit Phenomenon and Unit Question:**
How do animals and plants survive?	The phenomenon provides concrete examples and motivation for students to discover the core ideas of the unit about how organisms and their offspring survive, particularly how they avoid being eaten.

By the end of the unit, students figure out...

Sea Turtles have a hard shell that stops a predator from biting and eating it. Sea turtles use camouflage, which makes it difficult for predators to find and eat sea turtles.

How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?

Students investigate how animals and plants, as well as their offspring, use their structures meet their needs for survival. Students apply what they learn by developing models and constructing explanations to communicate their ideas

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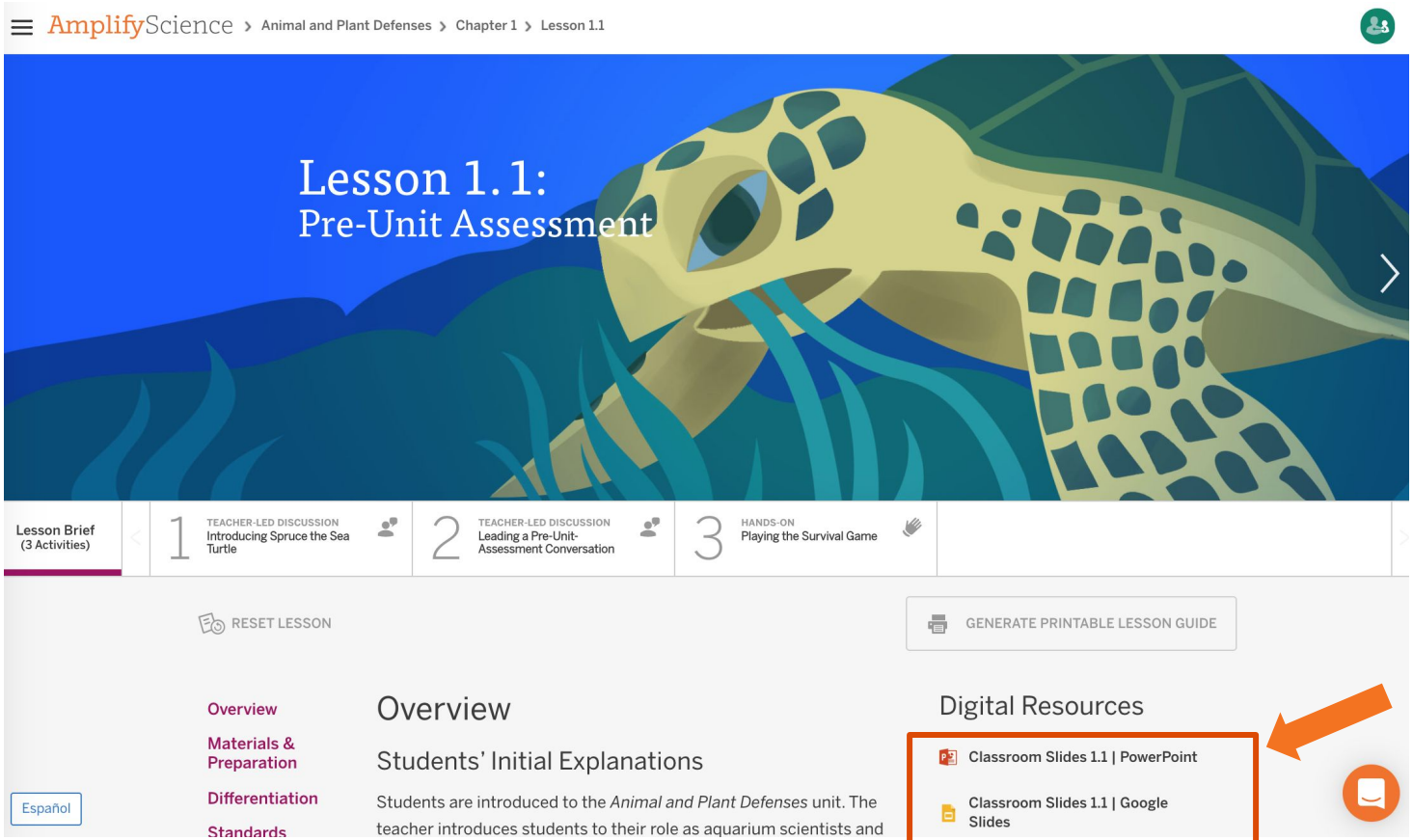
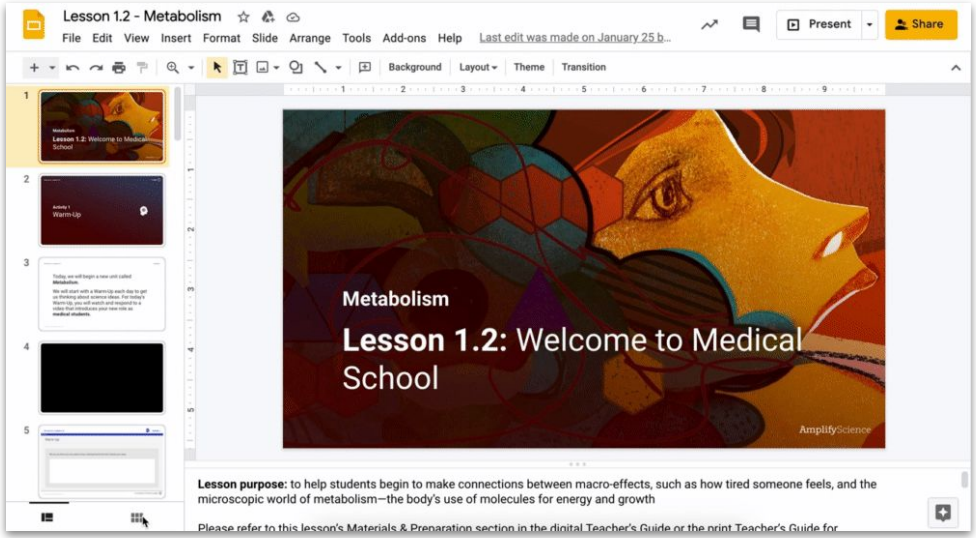
Navigate to a lesson page



Using Classroom Slides as a planning tool

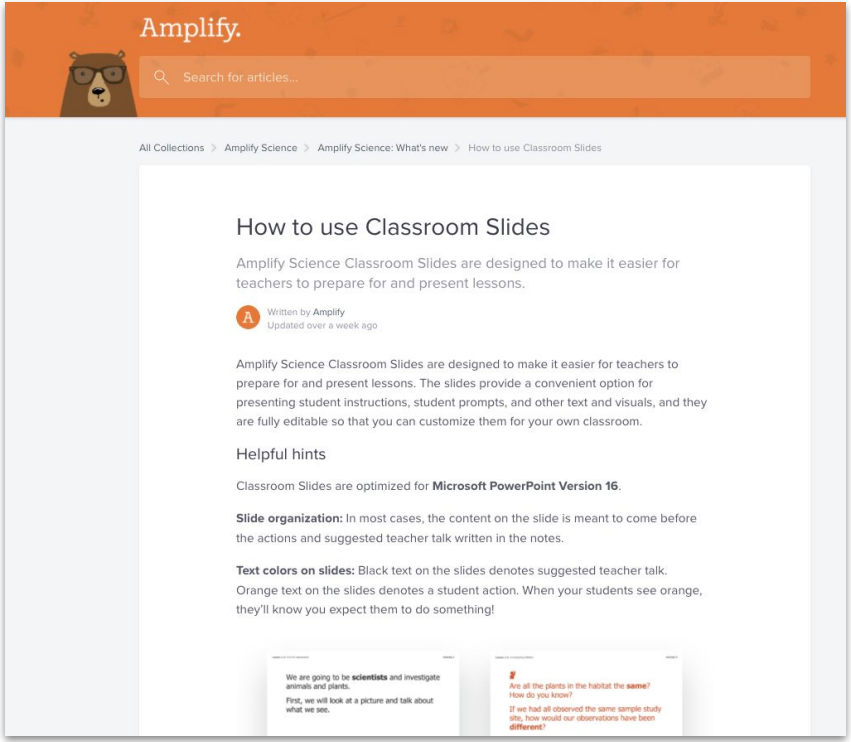
Teacher tip: Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

This is a useful first step for preparing to teach the lesson.



Teaching with Classroom Slides

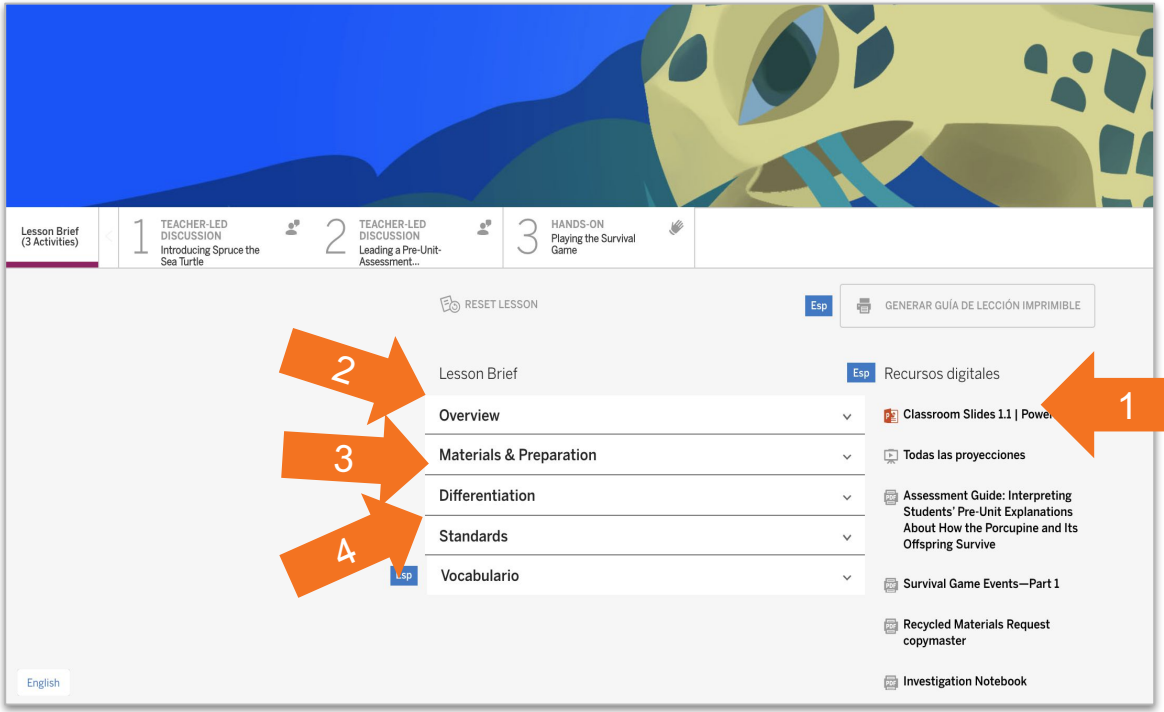
This detailed guide on the Amplify Science Help Site includes tips for teaching with Classroom Slides and information about the different symbols and activity types you'll find in the slide deck.



4 Easy Steps to Teaching a lesson

DIRECTIONS:

1. Download the **Classroom Slides** for **Lesson 1.1** and review them.
2. Read the **Overview**.
3. Explore the **Materials & Preparation** document.
4. Read the **Differentiation** document.



Navigation Temperature Check

Rate yourself on your comfort level accessing Amplify Science materials and navigating a digital curriculum.

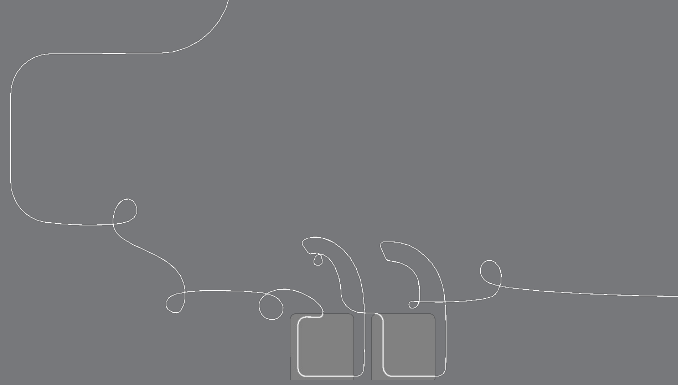
1 = Extremely Uncomfortable

2 = Uncomfortable

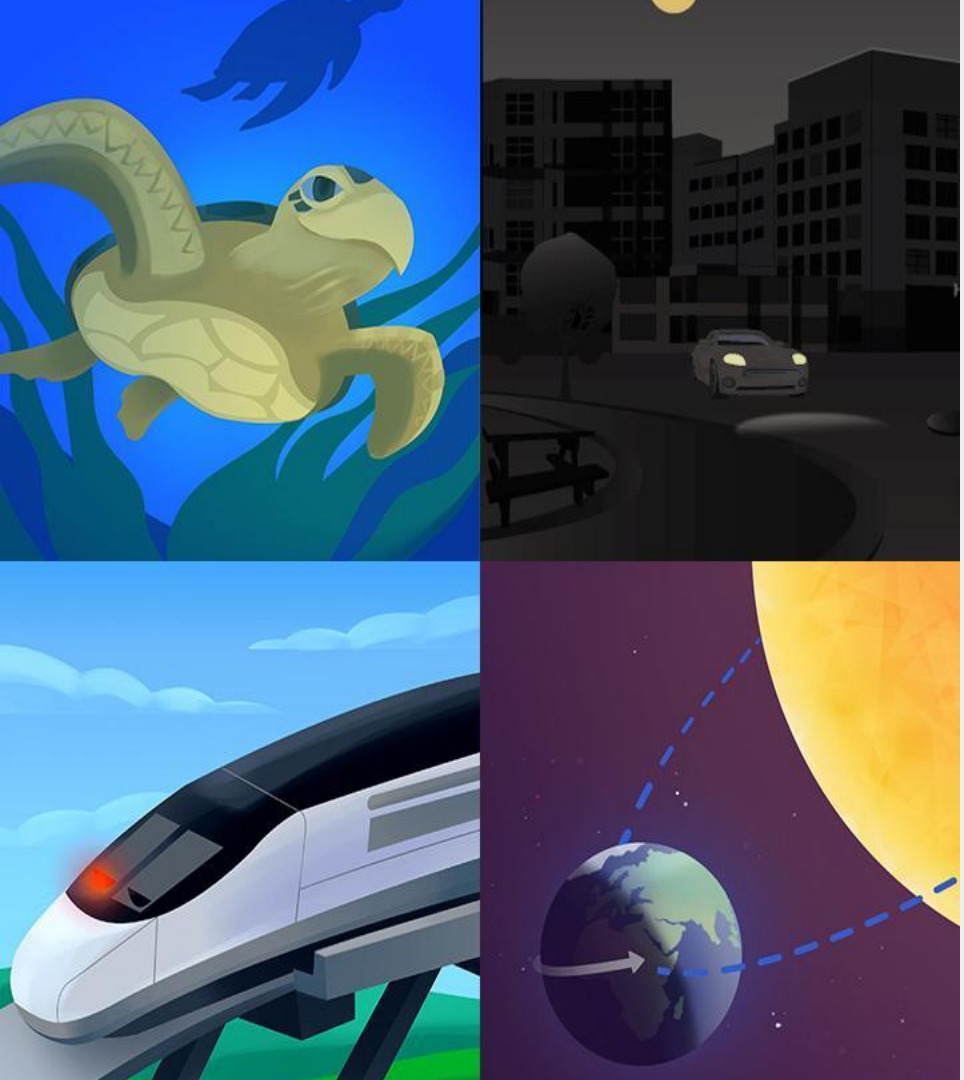
3 = Mild

4 = Comfortable

5 = Extremely Comfortable



Questions?



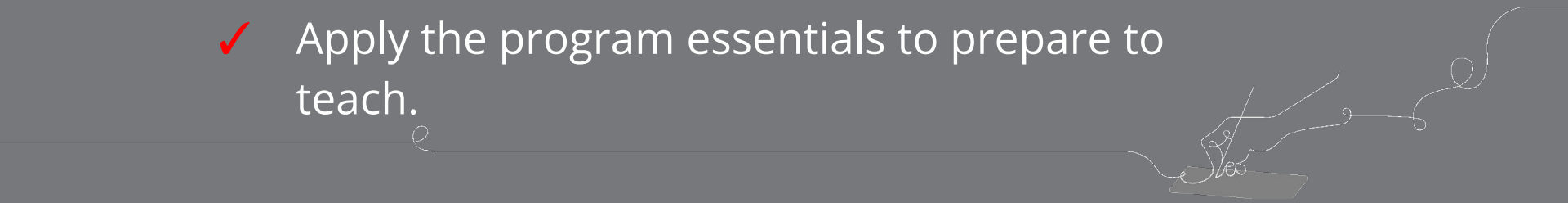
Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing

Overarching goals

By the end of this workshop, you will be able to:

- ✓ Navigate the full Amplify Science standard curriculum.
- ✓ Understand the program's phenomenon-based approach.
- ✓ Apply the program essentials to prepare to teach.



Closing reflection

Based on our work in Part 1, share:

Head: something you'll keep in mind

Heart: something you're feeling

Feet: something you're planning to do

Additional resources

Welcome, caregivers!

We hope you enjoy learning more about Amplify Science and what students are learning in science this year.

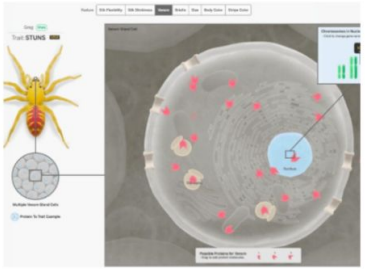
Para acceder a este sitio en español haga clic aquí.

Amplify welcomes you and your learner to the Science program for the new school year. We are very excited to provide you with exceptional learning opportunities through Science. Below are resources and helpful guides for enabling your student to have the most productive experience with our platform throughout the year.

Contact Us

TOP RATED BY EDREPORTS

Grades 6-8



Caregivers

LAUSD Microsite- https://amplify.com/lausd-science

Welcome to Amplify Science!

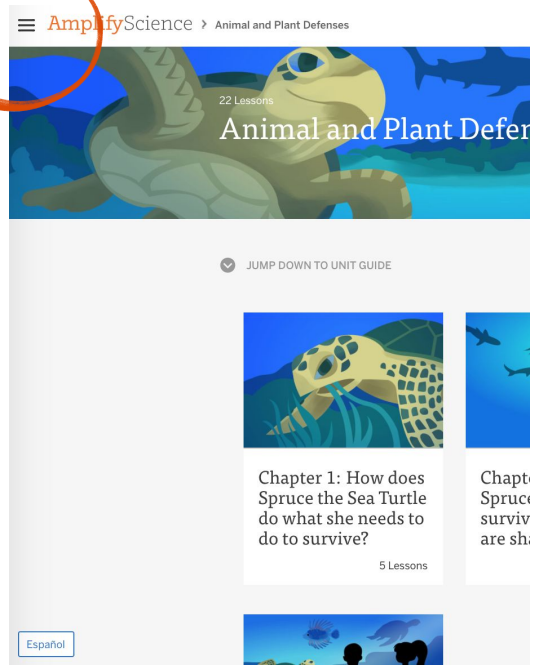
This site contains supporting resources designed for the LAUSD Amplify Science adoption for grades TK–8.

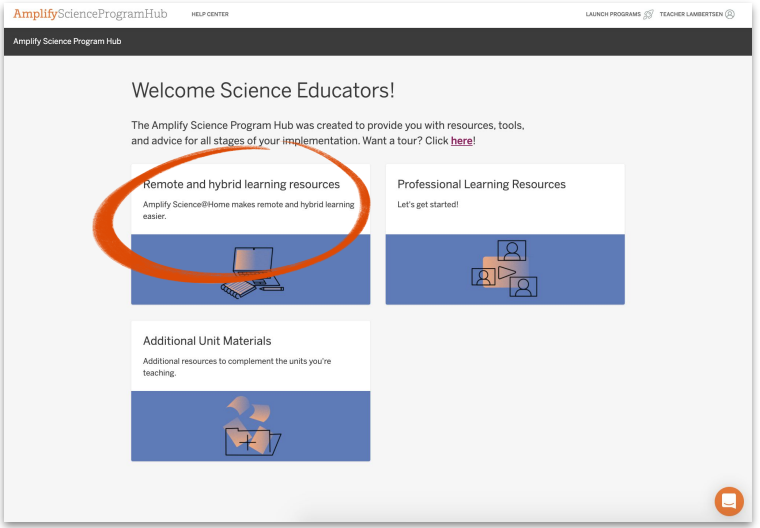
- Access the Amplify Science Program Hub (To help orient you to the new design, watch this video and view this reference guide.)
- Find out more about Amplify Science@Home
- Share the Caregiver Hub (Eng/Span) with your families
- For LAUSD ES Teachers- Amplify Science & Benchmark Advance Crosswalk
- Instructional guidance for a Responsive Relaunch of Amplify Science in 21-22

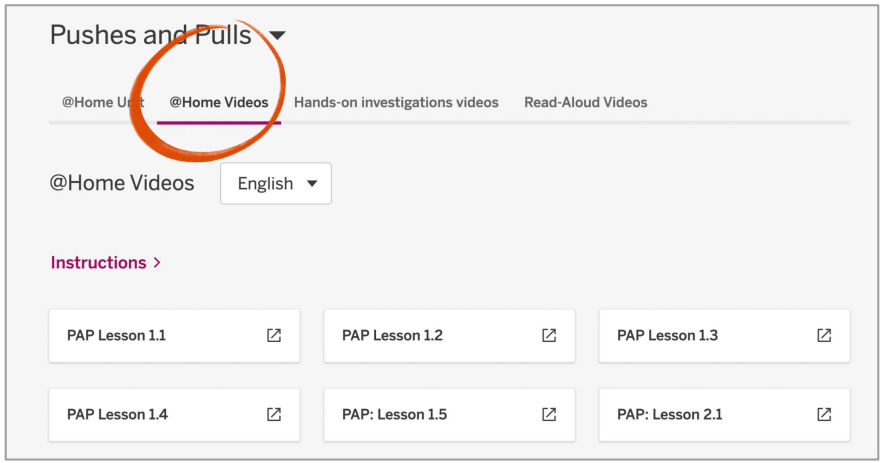
Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!

Program Hub

Use the Amplify Science Program Hub to find useful resources for implementing Amplify Science, including unit overview videos and planning tools.







Additional resources and ongoing support

Customer Care

Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-10PM EST and weekends 10AM-6PM EST.

help@amplify.com

800-823-1969

Amplify Chat

Please provide feedback on today's session!

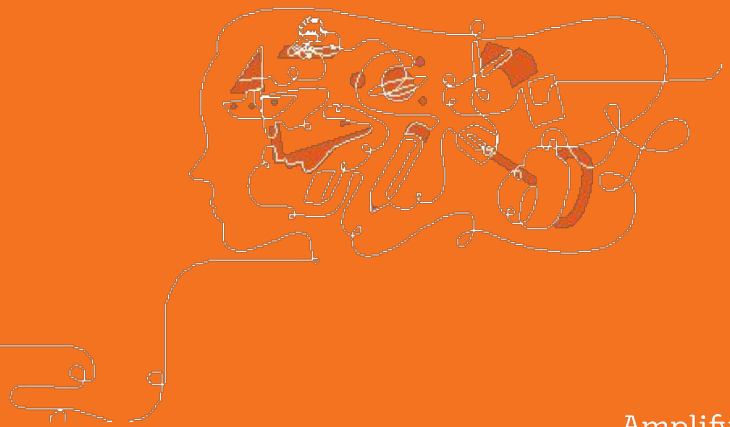
Presenter name:

Workshop title:

Part 1: Navigating Program Essentials

Part 2: Guided Planning

Modality:

Remote

End of Part 1