

Amplify Science

Unit Internalization / Guided Planning

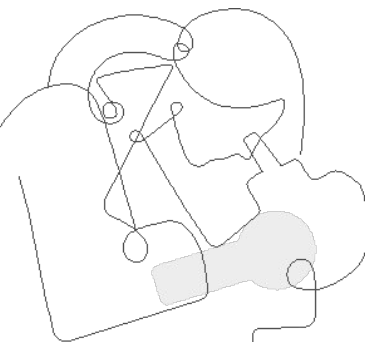
Grade 1, Unit 1: Animal and Plant Defenses

Part 1

School/District Name: LAUSD

Date: September, 2022

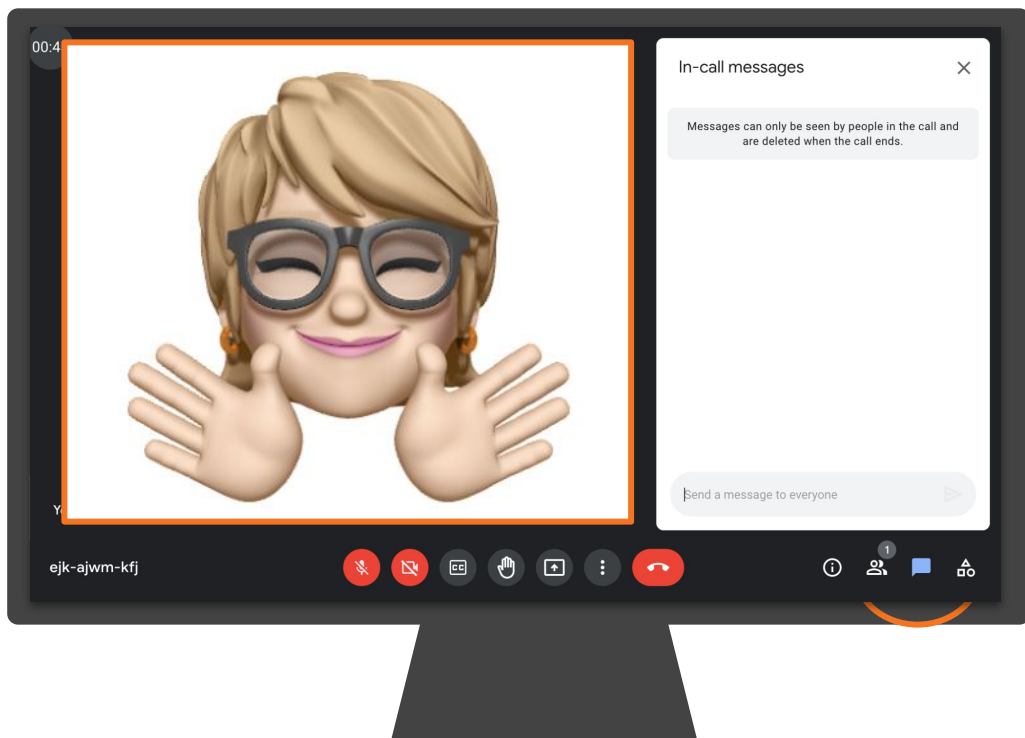
Presented by:



Ice Breaker!

Who do we have in the room today?

- **Question 1:** Which aspects of implementing the Amplify Science standard curriculum has been the most successful?
- **Question 2:** Which aspects have been the most challenging?



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.

Schoolology



[← Back to Schoolology Home Page](#)

LMS App Center

The LMS App Center provides a catalog of District-approved digital content and learning tools (including digital components of adopted textbooks) that are available for classroom teachers and students to access within the learning management system, Schoolology.

For information on District-approval policies and procedures, please visit: [udipplausd.net](#).

- To search the full list of digital learning tools, click "Submit".
- To search by Publisher Name or Textbook Title, type in a word associated to your adopted publisher, then click "Submit".
- To narrow your search with filters such as Content Area, Grade Level, or Content Type, select from the dropdown menu, then click "Submit".

To learn more about using the LMS App Center, please refer to the following [video overview](#).

Publisher Name: Starts With

Content Area: All

Grade Level: All

Content Type: All

Textbook Title: Starts With

All Amplify Products



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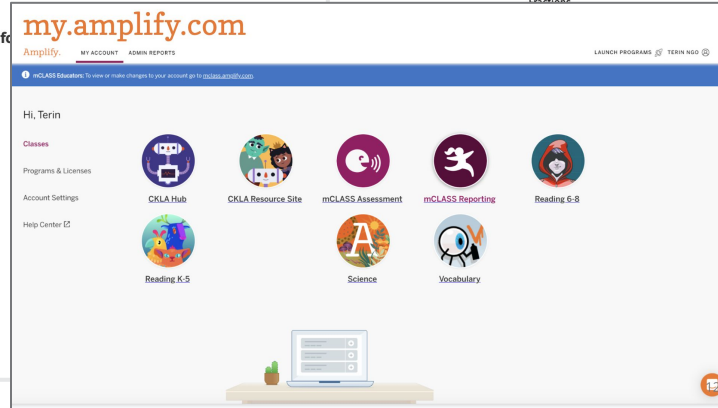
To learn more about using the LMS App Center, please refer to the following [video overview](#).

[← Search Again](#)

Amplify

Content Area: ELA
Grade Level: ES
Content Type: Supplemental
Integration Type: App (Left Navigation)
Purchase Type: District and School
[Getting Started Guide](#)
Other Info: School licenses required
mCLASS
CKLA
Amplify Reading
Amplify Science
Creative

Vendor Support Desk:
P: 800.823.9969
E: help@amplify.com
S: amplify.com/support/
Textbook Title(s):
NA



Vendor Support Desk:
P: 800.823.9969
E: help@amplify.com
S: amplify.com/support/
Textbook Title(s):
NA

op is for
only)

Join Amplify Science Schoology Group

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

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

Part 1

Overarching goals

- ❑ Explain how students engage in phenomenon based and 3D learning to construct an understanding of the science concepts introduced in the unit
- ❑ Internalize the unit and apply your new understanding to plan for the diverse needs of your classroom and students





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Unit Internalization
- Additional Resources
- Closing



Plan for the day: Part 1

- **Introduction and Framing**
- Phenomenon-based Instruction
- Unit Internalization
- Additional Resources
- Closing



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

+

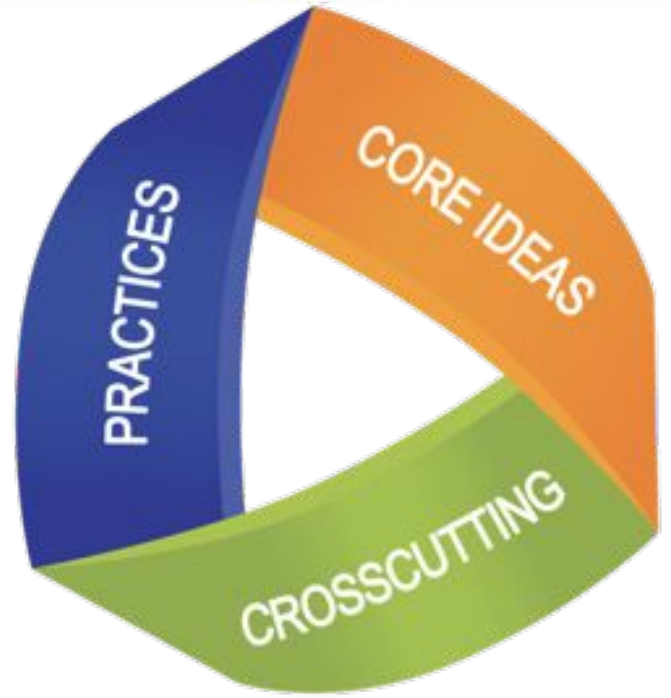
Amplify.

Amplify Science

Three dimensional learning

Evaluate your knowledge

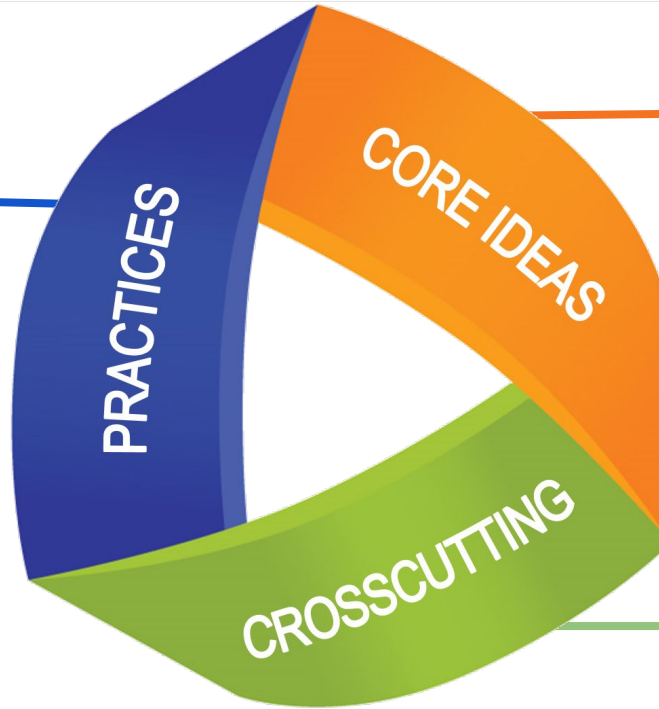
- On a scale of 0-5, how would you rate your familiarity with 3-D learning?



Figuring out Phenomena

Using 3-D teaching and learning

What scientists do
Science and
Engineering Practices



What scientists
want to know
Disciplinary Core
Ideas

How scientists
think
Crosscutting Concepts



Three-dimensional learning

Reflection

In the video, how did students engage in three-dimensional learning to think like scientists?

Lesson 3.3

Students further investigate seed dispersal by analyzing the number of droppings and the number of seeds per dropping that are transported to places where seeds can get what they need to grow (scale, proportion, and quantity).



Course curriculum structure

Grade K

- Needs of Plants and Animals
- Pushes and Pulls
- Sunlight and Weather

Grade 1

- Animal and Plant Defenses
- Light and Sound
- Spinning Earth

Grade 2

- Plant and Animal Relationships
- Properties of Materials
- Changing Landforms

Grade 3

- Balancing Forces
- Inheritance and Traits
- Environments and Survival
- Weather and Climate

Grade 4

- Energy Conversions
- Vision and Light
- Earth's Features
- Waves, Energy, and Information

Grade 5

- Patterns of Earth and Sky
- Modeling Matter
- The Earth System
- Ecosystem Restoration

Key takeaways:

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

Year at a Glance: Grade 1

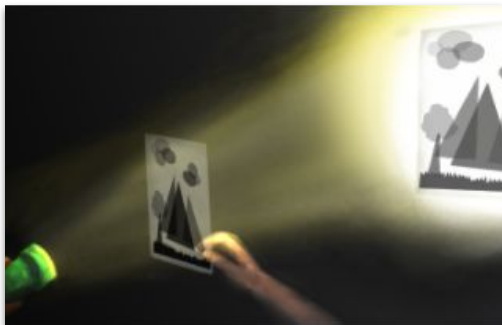


Animal and Plant
Defenses

Domain: Life Science

Unit type: Modeling

Student role: Marine
Scientist

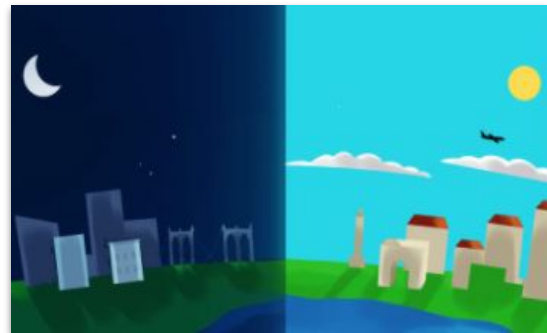


Light and Sound

Domain: Physical Science

Unit type: Engineering
Design

Student role: Light and
Sound Engineer



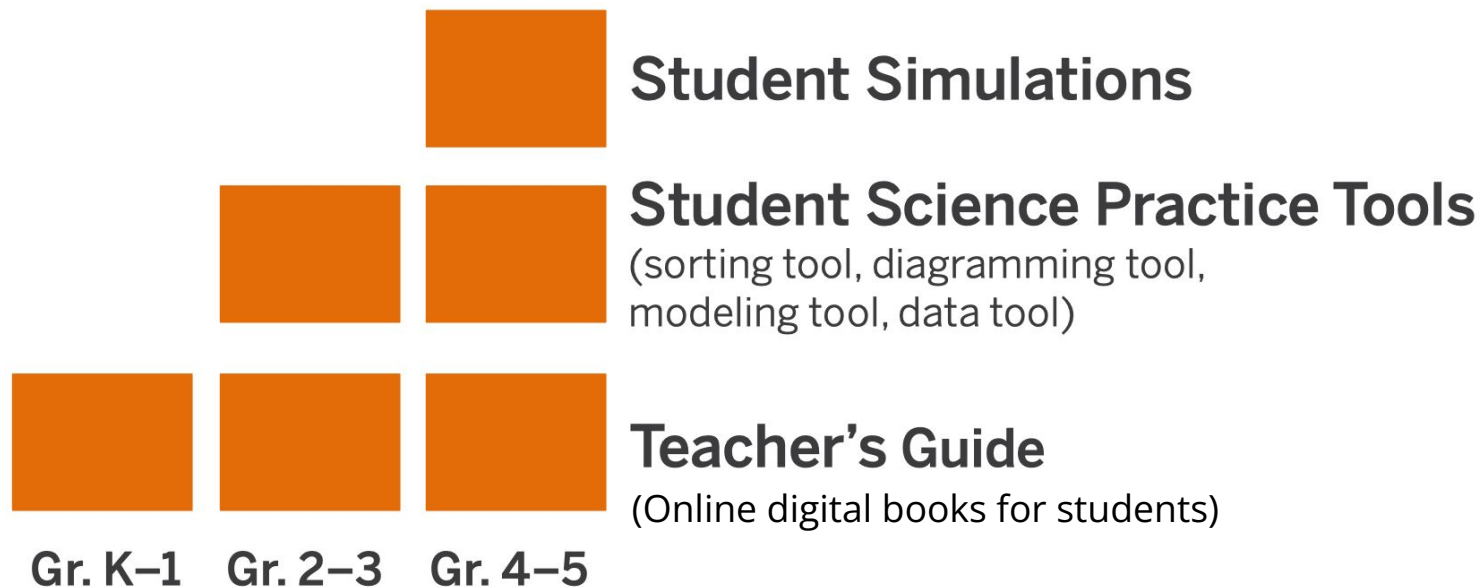
Spinning Earth

Domain: Earth and Space
Science

Unit type: Investigation

Student role: Sky Scientist

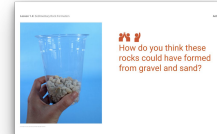
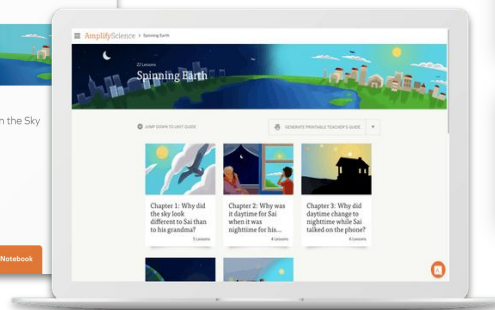
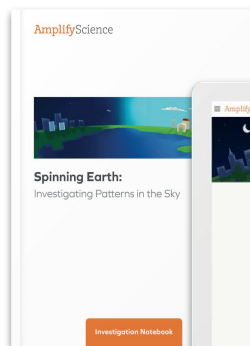
What are the digital components of Amplify Science Elementary?



K-5 Program components

Teacher materials

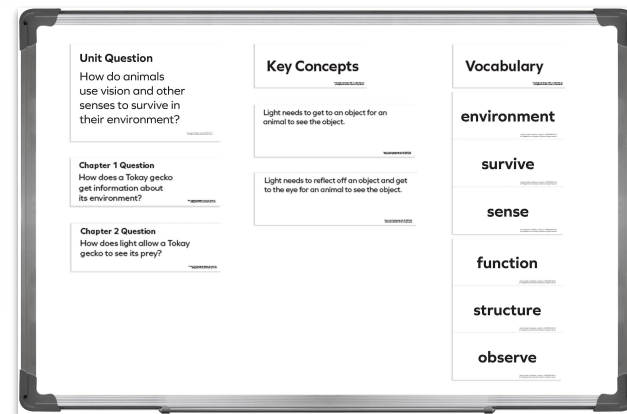
- Teacher's Guide (print and digital)
- Classroom Slides
- Classroom wall materials
- Embedded assessments
- Program Guide
- Program Hub
- Amplify Help Site



Program Hub



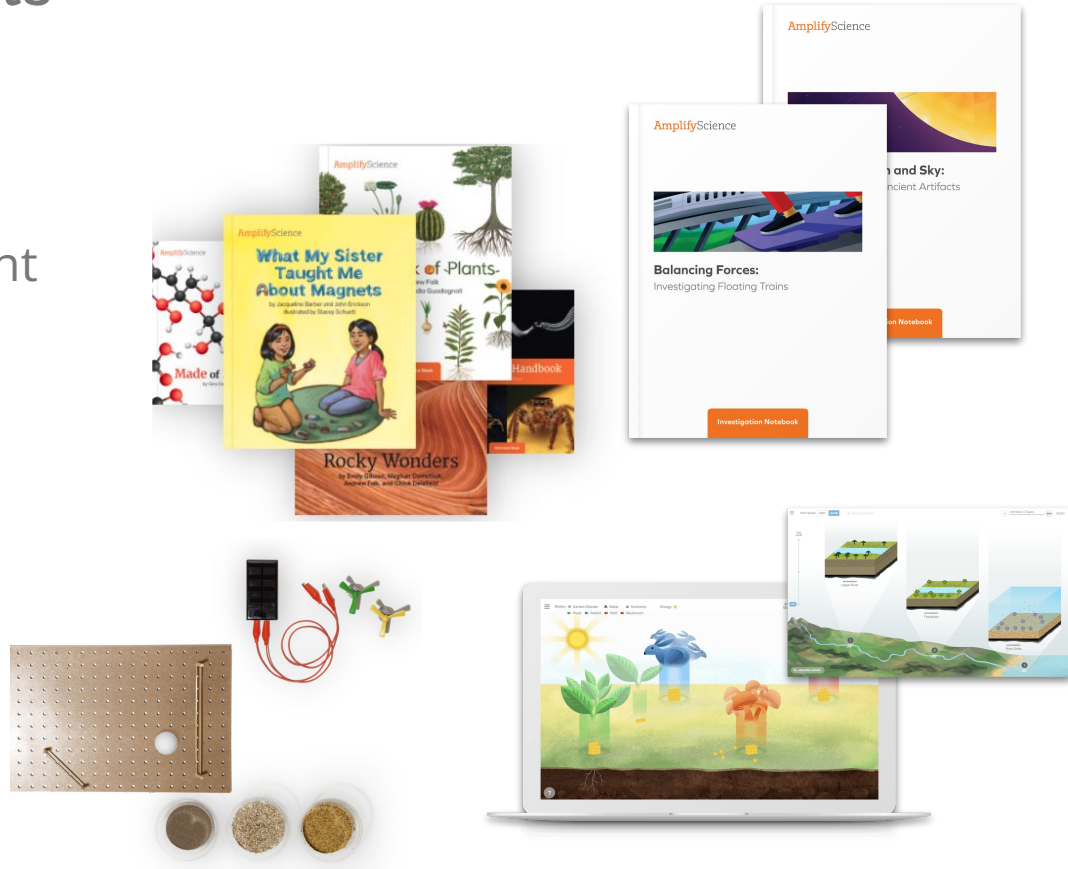
Science Program Guide



K-5 Program components

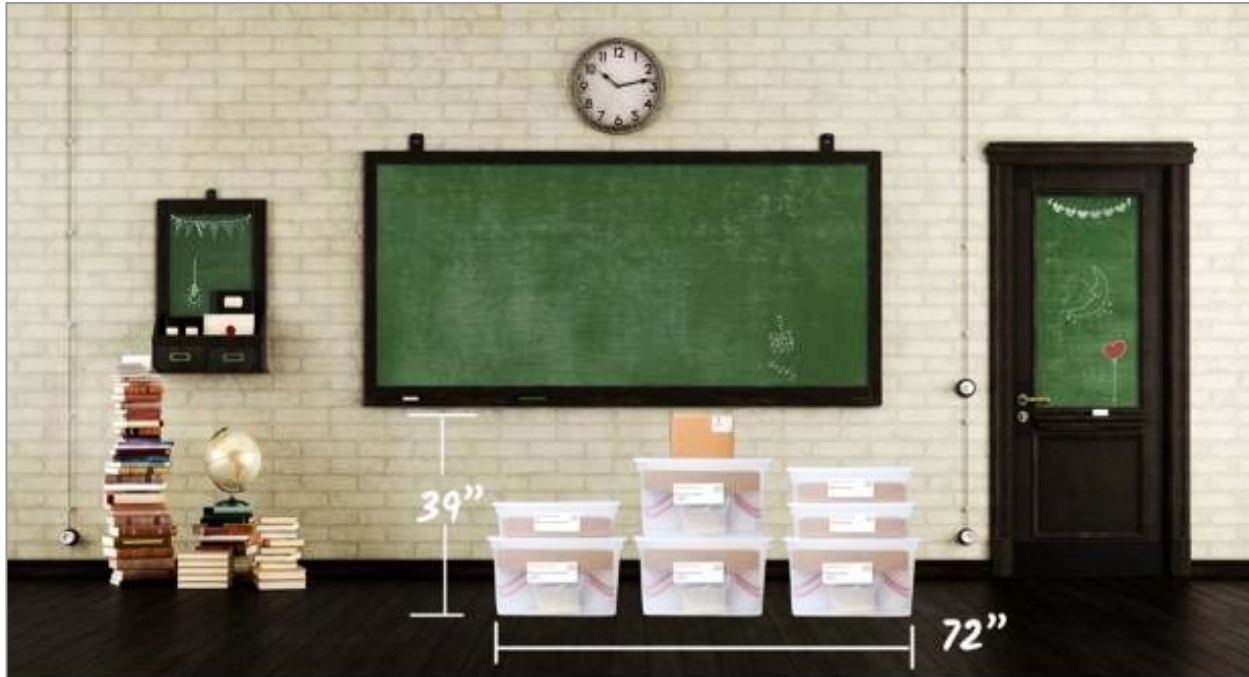
Student materials

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



Prepping Hands-On Materials for the Unit

Microsite: Unit 1, K-2 Lesson Prep Videos

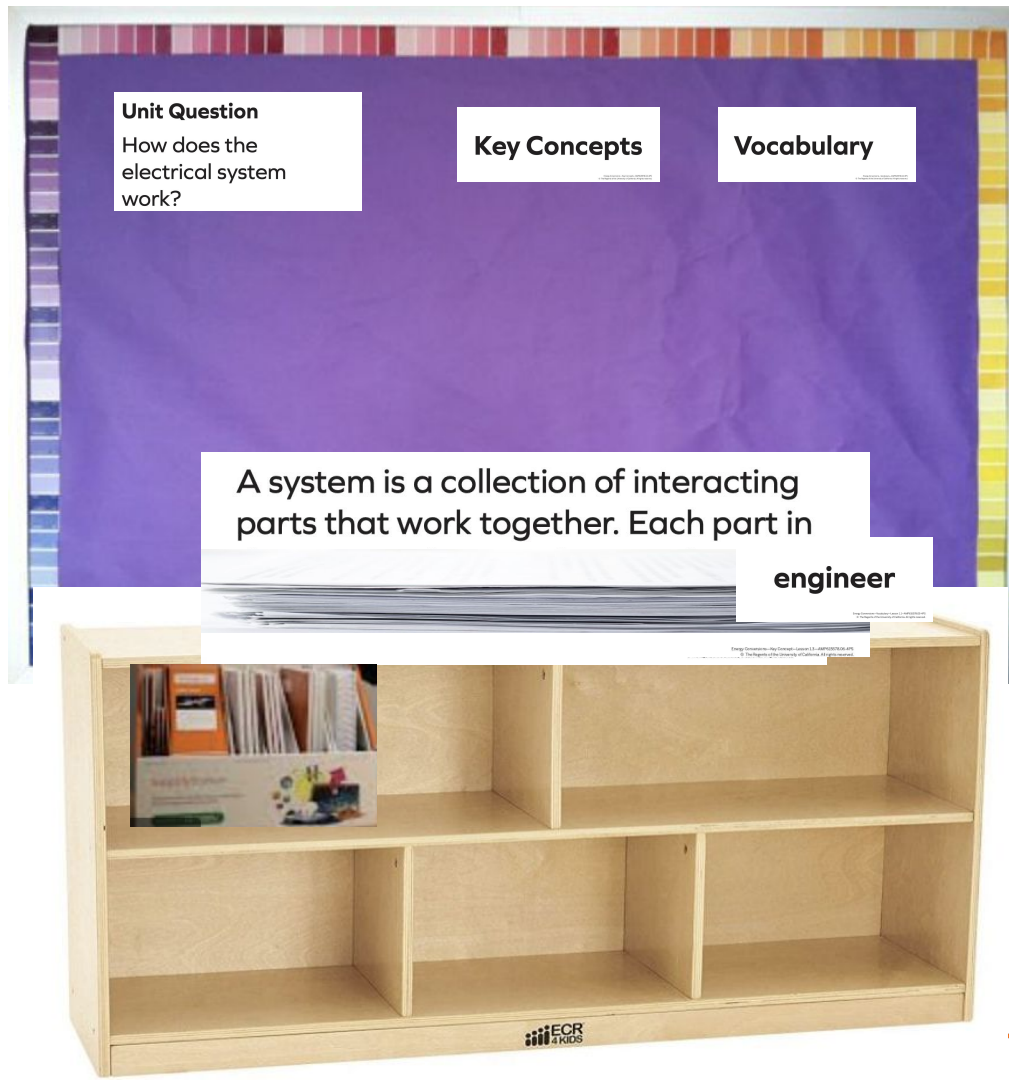


Classroom Kits

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

Unpacking the Kit

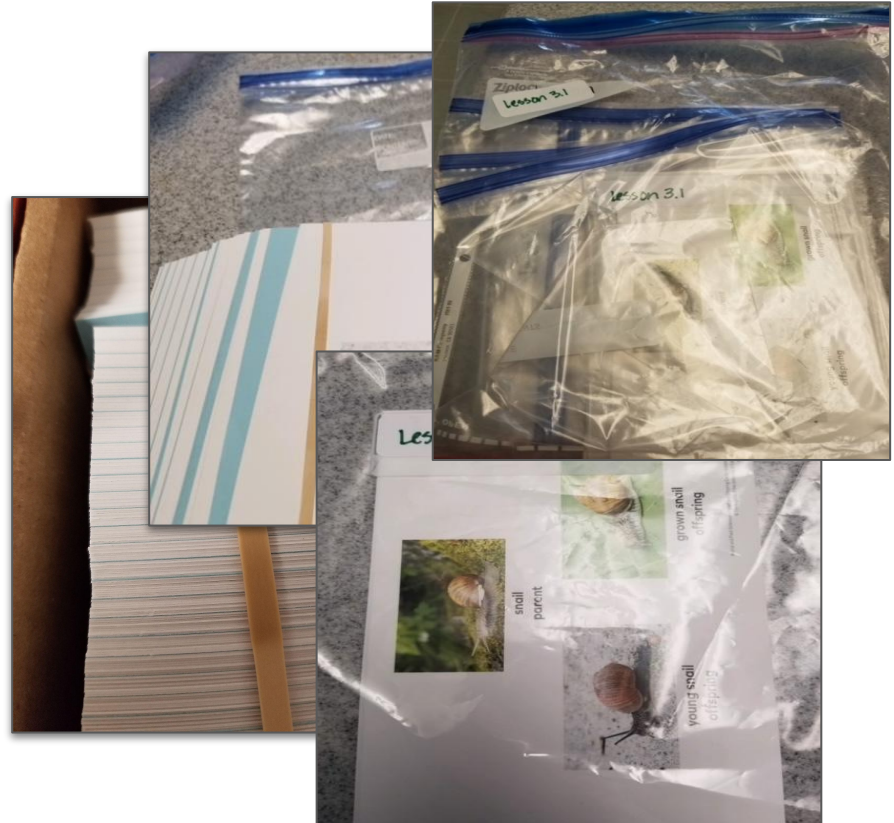
- Pull out the unit question, key concepts and vocabulary materials.
- Place them on the top of the table or bookcase below your science board
- Take books out of kit and place in the bookcase or on the table. (Always collect books after each lesson use. Return to bookcase so they are easily accessible.)



Cards for games, sorting or matching activities

Organization tips:

- Separate and place in envelopes or bags (or clip together)
- Label the envelopes or bags with the name and lesson # and activity # (ex. Lesson 2.4, Act. 1)
- Put each envelope or bag (1 set) into a bigger bag and label



Grades K and 1

Key Concepts are not printed on card stock
Lawrence Hall of Science felt the key understandings should be developed with students.

Two Suggestions:

1. Have blank sentence strips ready to use when developing the key concepts to add to the classroom wall
2. Write out key concepts on sentence strips. Label with the lesson and put them with the chapter questions. (*Note: they can be found in the lesson overview compilation*)

Lesson Overview Compilation



OPEN PRINTABLE LESSON OVERVIEW COMPILATION

How do animals and plants survive?

Chapter 1: How does Spruce the Sea Turtle do what she needs to

To survive, animals and plants need to get water, air and food.

Lesson 1.1

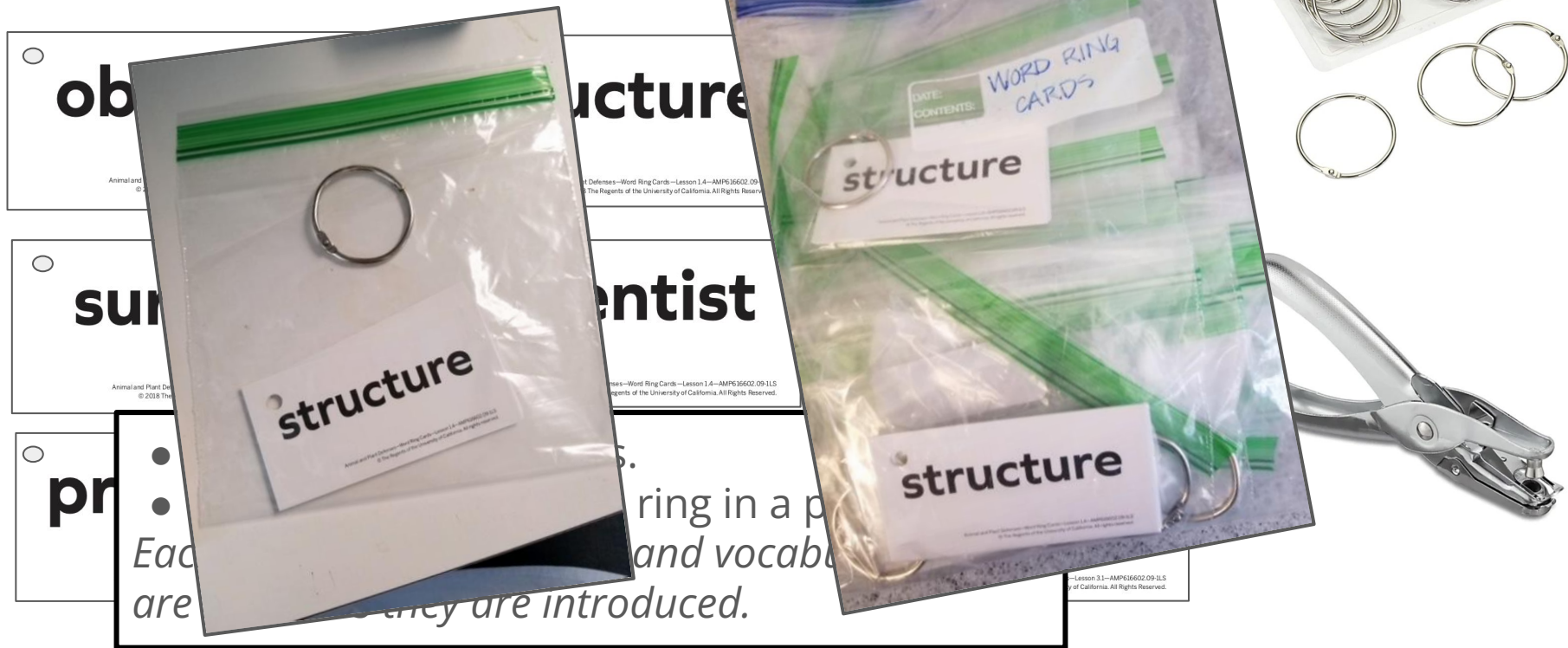
Investigation Questions

- What do animals and plants need to do to survive? (1.1)
- How do animals and plants do what they need to do to survive? (1.2, 1.3, 1.4, 1.5)

Key Concepts

- To survive, animals and plants need to get water, air, and food. (1.1)
- Animals and plants have structures that help them do what they need to do to survive. (1.3)
- To survive, animals and plants need to get water, air, and food, and to not be eaten. (1.4)

Word Relationship Cards



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!

Microsite: Unit 1, K-2 Lesson Prep Videos

Classroom kits

Program Introduction	New! Lesson Prep Videos
Learn more about Amplify Science	Unit 1
LAUSD Training Sessions- Reference Materials	Grade K- Needs of Plants and Animals >
New! Lesson Prep Videos	Grade 1- Animals and Plant Defenses >
Remote Learning Resources	Grade 2- Plant and Animal Relationships >
Onboarding: What to expect	Grade 3- Balancing Forces >
Onboarding videos	Grade 4- Energy Conversions >
Unpacking your first hands-on materials kit	Grade 5- Patterns of Earth and Sky >
Looking for help?	

Classroom Kits

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

Hands On Material Organization

Directions

1. Open the Digital Lesson Guides Only page 7 from the Unit Landing page or go the Print TE to page 31. (Chapter 1 Activities)

2. Look for the lessons with Hands On.

HANDS-ON 

3. Note in the table below.

4. Review the materials and preparation to determine if it can be prepared prior to the lesson or on the day of the lesson.

5. Use this same procedure for each Chapter. (Go to the Chapter Activities Contents)

Chapter/Lesson	Activity	Prep Prior	Prep Day of	What to do	
1.1	1	X		Prep plastic bags with labels A, B, C, D and M. Place 1 tsp of the following cinnamon, salt, flour, cornstarch in A,B,C, D. In bag M mix 1 tsp salt and 1 tsp cinnamon.	<i>This is an example from Properties of Materials Grade 2</i>

- Open Your **Lesson Guides Only**
- Start with **Chapter 1** and look for the **hands icon**
- Go into the lesson **materials and prep**



JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

Full Teacher's Guide
(Includes Unit Guide & all 22 Lesson Guides)

Generate

Lesson Guides Only
(Includes Unit Guide & all 22 Lesson Guides)

OPEN IN NEW TAB

RESET LESSON

Overview

Materials & Preparation
Differentiation
Standards
Vocabulary
Unplugged?

Overview

Through reading an informational text, students continue to explore how organisms can be similar and different. Students read the book *Blue Whales and Buttercups*, which provides many examples of the great diversity of organisms on Earth and the many ways in which they can be similar and different. Students are introduced to the sense-making strategy of asking questions and use this strategy to help them understand and engage with the book. The purpose of this lesson is to introduce students to the concept that even though organisms can be quite different, they are all related.

Chapter 3: Why isn't
lf 44 like the
on Valley Pack in
ting style and...

6 Lessons

Inheritance and Traits Lesson Guides

Chapter 1
Activities



Chapter 1 Activities

Lesson 1.1: Pre-Unit Assessment

- 1 Introducing the Unit
- 2 Writing Initial Explanations
- 3 Introducing the Investigation Notebook
- 4 Previewing the Reference Book

TEACHER-LED DISCUSSION
WRITING
TEACHER-LED DISCUSSION
STUDENT-TO-STUDENT DISCUSSION

Lesson 1.2: Blue Whales and Buttercups

- 1 Introducing Asking Questions
- 2 Partner Reading
- 3 Reflecting on Relatedness

TEACHER-LED DISCUSSION
READING
TEACHER-LED DISCUSSION

Lesson 1.3: Observing Similarities and Differences

- 1 Observing Similarities and Differences in Animals
- 2 Observing Bird Traits
- 3 Thought Swap

STUDENT-TO-STUDENT DISCUSSION
STUDENT-TO-STUDENT DISCUSSION



HANDS-ON

Lesson 1.4: Introducing Species

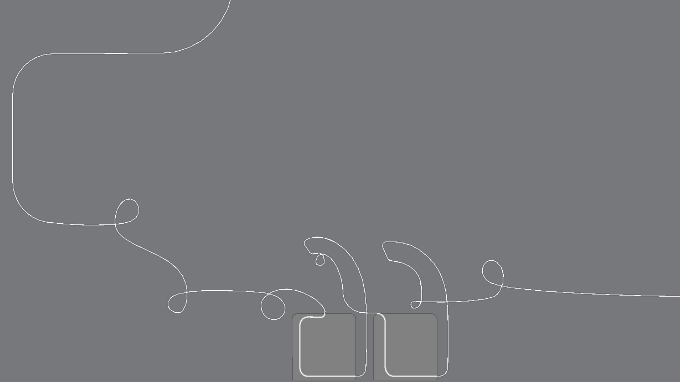
- 1 Observing Bird Sounds
- 1 Identifying Songbirds
- 2 Sorting Bear Species
- 3 Introducing the Problem Students Will Investigate

TEACHER
TEACHER-LED DISCUSSION
HANDS-ON
TEACHER-LED DISCUSSION

Completed for Animal and Plant Defenses

36

Questions?





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Unit Internalization
- Additional Resources
- 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

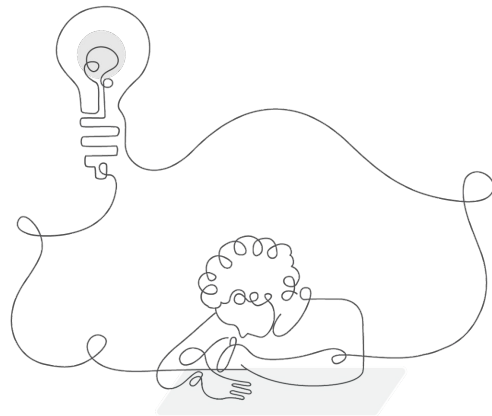


Previewing the unit

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?



Unit Question

How do animals and plants survive?

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Key Concepts

Vocabulary

Vocabulary



scientist

someone who investigates the natural world

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Key Concepts

Vocabulary

Chapter 1 Question

How does Spruce the Sea Turtle do what she needs to do to survive?

scientist



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.



We are aquarium scientists.



What kind of **questions**
do you have **about**
Spruce living in the
ocean?

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.

Animal and Plant Defenses phenomenon



Amplify Science

Anchoring phenomenon

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

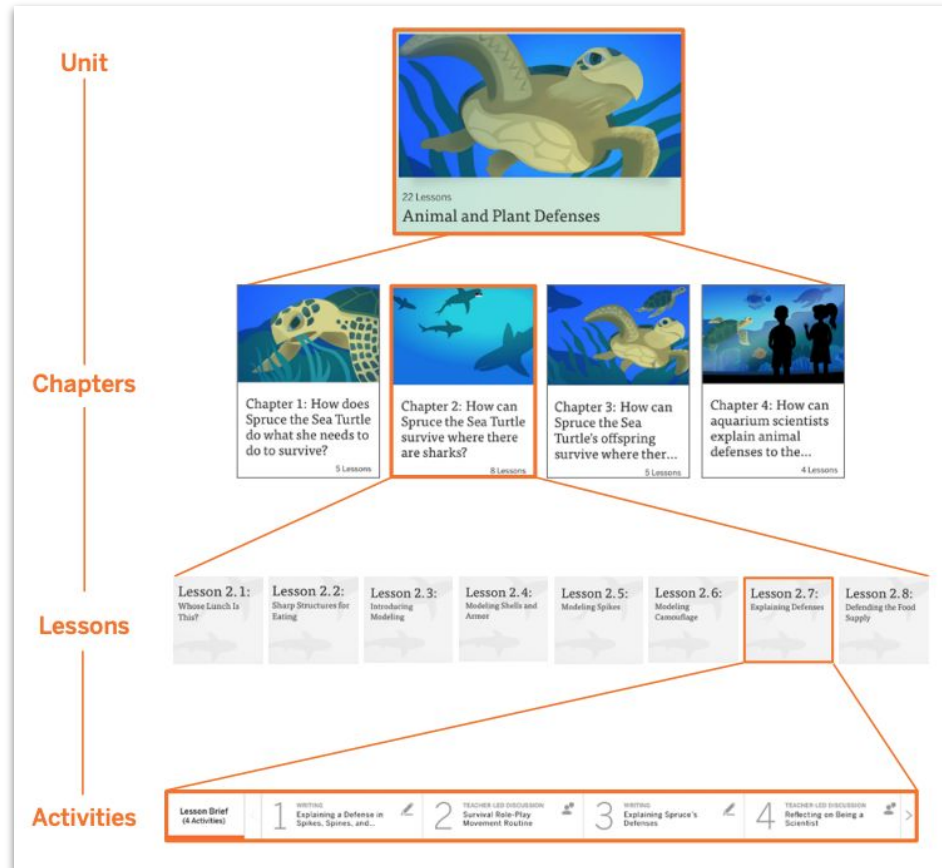
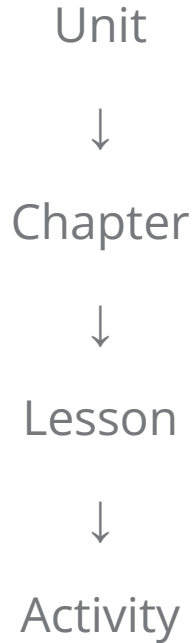




Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Unit Internalization
- Additional Resources
- Closing


Unit structure



Let's Go Live!

22 Lessons

Animal and Plant Defenses

 Printable Teacher Guide ▾

Unit Overview

Chapters

Printable Resources

Planning for the Unit ▾

Teacher References ▾

Offline Preparation

Unit Overview


What's in This Unit?

Earth is inhabited by a staggering variety of animals. Each of these kinds of living things continue to exist because of the nearly endless variation we observe among them. They are getting food, water, and oxygen, and avoiding predators in ways that enable living things to survive.

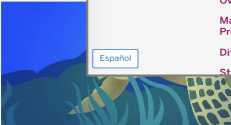
[Read more >](#)

Chapters

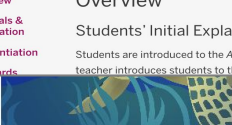
Chapter 1: How does Spruce the...



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

Navigation summary



1. CLICK the caret to select your grade-level.
2. Select your first unit.
 - a. You are now on the Unit Landing Page.
3. Expand the **Planning for the unit** menu.
 - a. Or scroll down below the lesson buttons.

Unit Level resources

Collection of resources to support planning and day-to-day instruction in the unit:

- Printable Resources
- “Planning for the Unit” documents
- Teacher References

The screenshot displays the Amplify website interface for the 'Energy Conversions' unit. The top navigation bar includes 'Amplify', 'CURRICULUM', 'CLASSWORK', 'REPORTING', 'PROGRAMS & APPS', and 'NATIONALSCIENCE TEACHER'. The left sidebar lists navigation options: 'Unit Overview' (selected), 'Chapters', 'Printable Resources', 'Planning for the Unit', 'Teacher References', and 'Offline Preparation'. The main content area is titled 'Unit Overview' and includes a section 'What's in This Unit?' with a paragraph about the electrical system and a 'Read more' link. Below this is a 'Chapters' section for 'Chapter 1: What happened to the electrical system the night of the blackout?'. It features six lesson cards: Lesson 1.1 Pre-Unit Assessment, Lesson 1.2 Introducing Systems, Lesson 1.3 Exploring Systems, Lesson 1.4 Electrical Energy, Lesson 1.5 Forms of Energy, and Lesson 1.6 Writing an Argument About the Blackout. The bottom left shows language options for English and Español, and the bottom right has a chat icon.

Key Unit Documents for Unit Planning

Animal and Plant Defenses
22 Lessons
Printable Teacher Guide

Unit Overview
Chapters
Printable Resources
Planning for the Unit
Teacher References
Offline Preparation

Unit Overview
Chapters
Printable Resources
Planning for the Unit
Unit Map
Progress Build
Getting Ready to Teach
Materials and Preparation
Science Background
Standards at a Glance
Teacher References
Lesson Overview
Compilation
Standards and Goals
3-D Statements
Assessment System
Embedded Formative Assessments
Books in This Unit
Opportunities for Unit Extensions
Offline Preparation

Printable Resources
3-D Assessment Objectives
Copymaster Compilation
Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences, and Cultural Backgrounds
Multi-Language Glossary
Print Materials (8.5" x 11")
Coherence Flowcharts
Crosscutting Concept Tracker
Investigation Notebook
NGSS Information for Parents and Guardians
Print Materials (11" x 17")

Unit Map
How can a sea turtle survive in the ocean after being released by an aquarium?
Working in their role as marine scientists, students apply their understanding of plant and animal defense structures as they explain to aquarium visitors how a sea turtle or other sea animals at the aquarium could defend themselves from ocean predators once they are released back into the wild.
Read more

Progress Build
A Progress Build describes the way in which students' explanations of the central phenomenon should develop and deepen over the course of a unit. It is an important tool in understanding the design of the unit and in supporting students' learning. A Progress Build organizes the sequence of instruction, defines the focus of the assessments, and grounds inferences about students' understanding of the content, specifically at each of the Critical Juncture Assessments found throughout the unit. A Critical Juncture Assessment provides information to help guide decisions related to the instruction designed to address specific

Pre-Unit Assessment
Tortoise Parts
Animal and Plant Structures

Key Unit Documents for Unit Planning

The screenshot displays the Amplify website interface for the 'Animal and Plant Defenses' unit. The top banner features an illustration of a sea turtle and the text '22 Lessons' and 'Animal and Plant Defenses'. A 'Printable Teacher Guide' button is visible. The left sidebar contains navigation links: 'Unit Overview', 'Chapters', 'Printable Resources', 'Planning for the Unit', 'Teacher References', and 'Offline Preparation'. The main content area is divided into sections: 'Unit Overview' (with a 'Chapters' link), 'Printable Resources' (listing various documents like '3-D Assessment Objectives', 'Coherence Flowcharts', etc.), 'Unit Map' (with a question about sea turtle survival), and 'Progress Build' (describing the unit's structure). The bottom navigation bar includes 'Pre-Unit Assessment', 'Tortoise Parts', and 'Animal and Plant Structures'. Green arrows highlight specific links and sections.

22 Lessons

Animal and Plant Defenses

Printable Teacher Guide

Unit Overview

Chapters

Printable Resources

Planning for the Unit

Teacher References

Offline Preparation

Amplify. CURRICULUM CLASSWORK REPORTING

Science California > Animal and Plant Defenses

PROGRAMS & APPS CALIFORNIASCI26 TEACHER

Printable Resources

- 3-D Assessment Objectives
- Copymaster Compilation
- Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences, and Cultural Backgrounds
- Multi-Language Glossary
- Print Materials (8.5" x 11")
- Coherence Flowcharts
- Crosscutting Concept Tracker
- Investigation Notebook
- NGSS Information for Parents and Guardians
- Print Materials (11" x 17")

Unit Map

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Read more >

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Pre-Unit Assessment Tortoise Parts Animal and Plant Structures

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	

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?

How can a sea turtle survive in the ocean after being released by an aquarium?

Student Role:

Marine Scientists

Unit Question:

How do animals and plants survive?

Relationship between the Unit Phenomenon and Unit Question:

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



Questions?



Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Unit Internalization
- **Additional Resources**
- Closing

Additional resources

Welcome, caregivers!

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

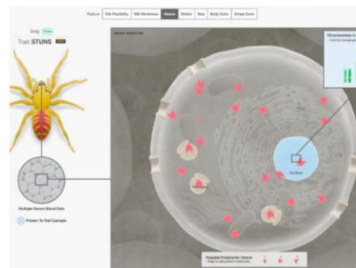
[Para acceder a este sitio en español haga clic aquí.](#)

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](#)



Grades 6-8



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.

The screenshot shows the Amplify Science Program Hub interface. The top navigation bar includes 'CURRICULUM', 'CLASSWORK', 'REPORTING', and 'PROGRAMS & APPS'. The 'PROGRAMS & APPS' menu is circled in orange. Below the navigation bar, the main content area features a large illustration of a sea turtle and the title 'Animal and Plant Defenses'. A 'Printable Teacher Guide' button is visible. On the left, a sidebar lists 'Unit Overview', 'Chapters', 'Printable Resources', 'Planning for the Unit', 'Teacher References', and 'Offline Preparation'. The main content area displays the 'Unit Overview' for 'Animal and Plant Defenses', including a 'What's in This Unit?' section with a paragraph about survival and a 'Read more' link. Below this, the 'Chapters' section lists 'Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?'. Three lesson cards are shown: 'LESSON 1.1 Pre-Unit Assessment', 'LESSON 1.2 Tortoise Parts', and 'LESSON 1.3 Animal and Plant Structures'.

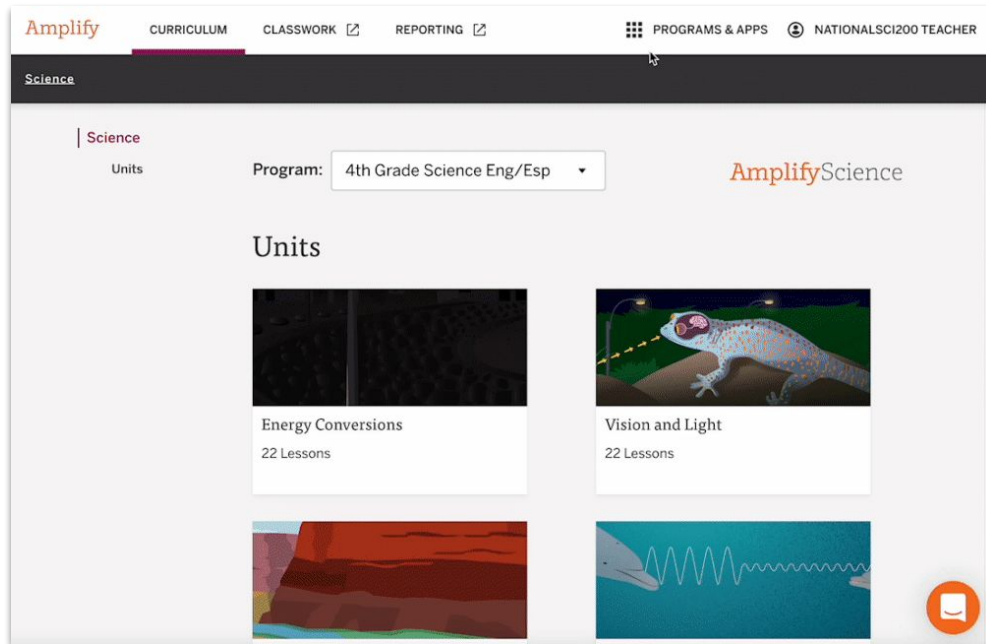
The screenshot shows the 'Welcome Science Educators!' page of the Amplify Science Program Hub. The page includes a welcome message and three main resource categories: 'Remote and hybrid learning resources', 'Professional Learning Resources', and 'Additional Unit Materials'. The 'Remote and hybrid learning resources' section is circled in orange. The page also features a 'Click here!' link and a 'Let's get started!' button.

The screenshot shows the Amplify Science Program Hub interface for '4th Grade Science Eng/Esp'. The top navigation bar includes 'CURRICULUM', 'CLASSWORK', 'REPORTING', and 'PROGRAMS & APPS'. The 'PROGRAMS & APPS' menu is circled in orange. Below the navigation bar, the main content area features a large illustration of a sea turtle and the title '4th Grade Science Eng/Esp'. A 'Printable Teacher Guide' button is visible. On the left, a sidebar lists 'Unit Overview', 'Chapters', 'Printable Resources', 'Planning for the Unit', 'Teacher References', and 'Offline Preparation'. The main content area displays the 'Unit Overview' for '4th Grade Science Eng/Esp', including a 'What's in This Unit?' section with a paragraph about survival and a 'Read more' link. Below this, the 'Chapters' section lists 'Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?'. Three lesson cards are shown: 'LESSON 1.1 Pre-Unit Assessment', 'LESSON 1.2 Tortoise Parts', and 'LESSON 1.3 Animal and Plant Structures'.

Explore the Program Hub

Familiarize yourself with the Program Hub.

Be ready to share one resource you've found that you'll use while planning and teaching.





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Unit Internalization
- Additional Resources
- Closing

Overarching goals

- ✓ Explain how students engage in phenomenon based and 3D learning to construct an understanding of the science concepts introduced in the unit
- ✓ Internalize the unit and apply your new understanding to plan for the diverse needs of your classroom and students



Closing reflection

Based on our work in Part 1, share:

Head: something you'll keep in mind

Heart: something you're feeling

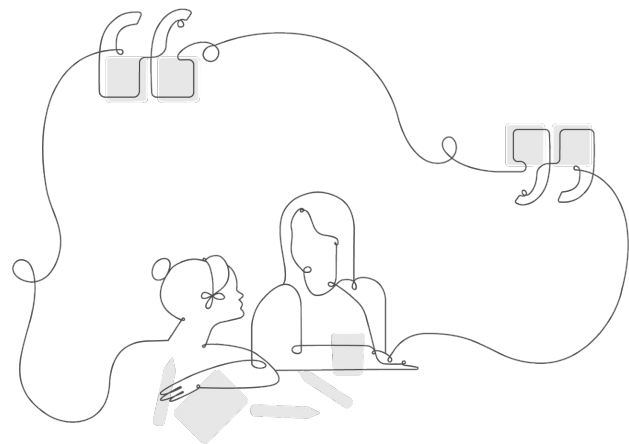
Feet: something you're planning to do

Onsite Upcoming Professional Development!

Part 3: Unit 1 - Supporting English Learners

- October 15th (Alta California ES, NW)
- October 29th (Ochoa Learning Center, East)

In this session, participants explore strategies to support English learners' ability to do, talk, read, write, visualize, and construct arguments like scientists. Participants will identify the supports and strategies embedded in Unit 1 by engaging in model activities followed by independent planning.



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



Welcome to Amplify Science!

or use Demo Account

1. Go to **learning.amplify.com**
2. Select **Log in with Amplify**
3. If you're already logged in with other Google accounts, click **Use another account**
4. Enter teacher demo account credentials
 - UN: californiasci60@pd.tryamplify.net
 - PW: AmplifyNumber1
5. Explore as we wait to begin

Do Now: Log in through your Schoology account

Welcome to **Amplify**

G

Log In with Google

C

Log In with Clever

A.

Log In with Amplify



SSO login

Amplify Science

Unit Internalization / Guided Planning

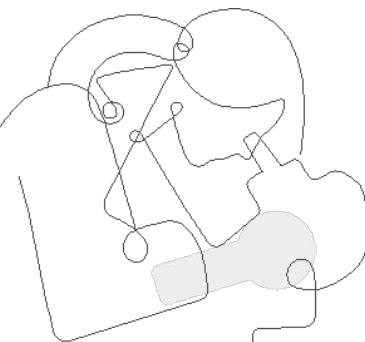
Grade 1, Unit 1: Animal and Plant Defenses

Part 2

School/District Name: LAUSD

Date: September, 2022

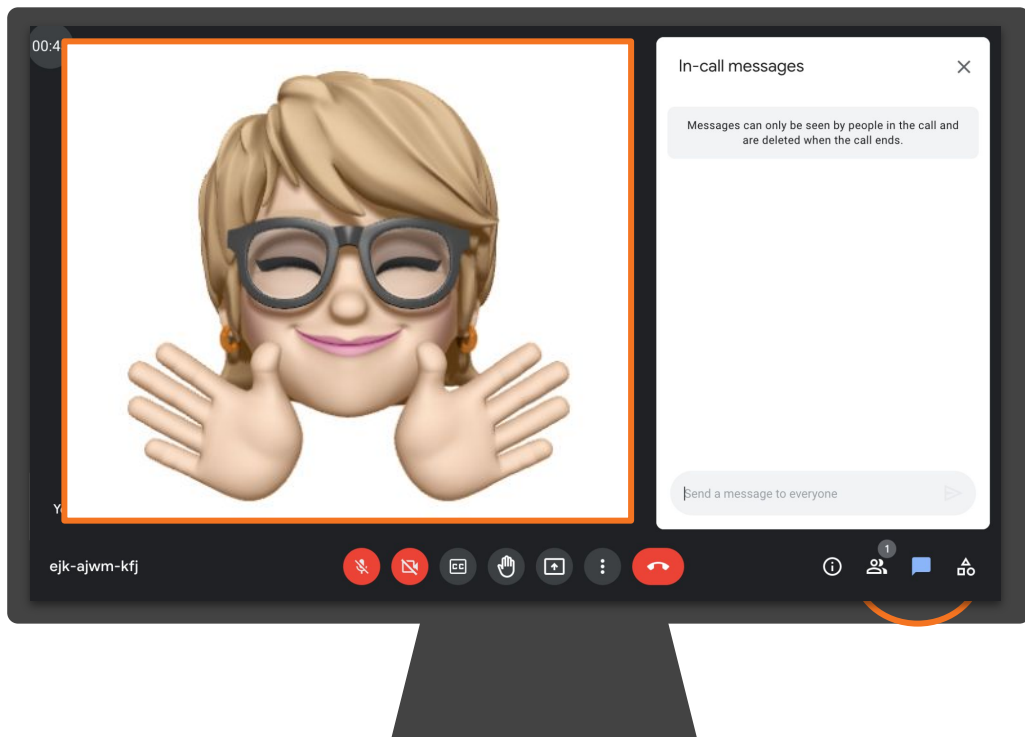
Presented by: Jolene Hori



Ice Breaker!

Who do we have in the room today?

- **Question 1:** Which aspects of implementing the Amplify Science standard curriculum has been the most successful?
- **Question 2:** Which aspects have been the most challenging?



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.

Schoolology



[← Back to Schoolology Home Page](#)

LMS App Center

The LMS App Center provides a catalog of District-approved digital content and learning tools (including digital components of adopted textbooks) that are available for classroom teachers and students to access within the learning management system, Schoolology.

For information on District-approval policies and procedures, please visit: [udipp.lausd.net](#).

- To search the full list of digital learning tools, click "Submit".
- To search by Publisher Name or Textbook Title, type in a word associated to your adopted publisher, then click "Submit".
- To narrow your search with filters such as Content Area, Grade Level, or Content Type, select from the dropdown menu, then click "Submit".

To learn more about using the LMS App Center, please refer to the following video overview.

Publisher Name: Starts With

Content Area: All

Grade Level: All

Content Type: All

Textbook Title: Starts With

All Amplify Products



LMS App Center

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To learn more about using the LMS App Center, please refer to the following video overview.

[← Search Again](#)

Amplify

Content Area: ELA
Grade Level: ES
Content Type: Supplemental
Integration Type: App (Left Navigation)
Purchase Type: District and School
[Getting Started Guide](#)
Other Info: School licenses required
mCLASS
CKLA
Amplify Reading
Amplify Science
Creative

Vendor Support Desk:
P: 800.823.9969
E: help@amplify.com
S: amplify.com/support/
Textbook Title(s):
NA



Vendor Support Desk:
P: 800.823.9969
E: help@amplify.com
S: amplify.com/support/
Textbook Title(s):
NA

op is for
only)

Join Amplify Science Schoology Group

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

Navigation Temperature Check

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

1 = Extremely Uncomfortable

2 = Uncomfortable

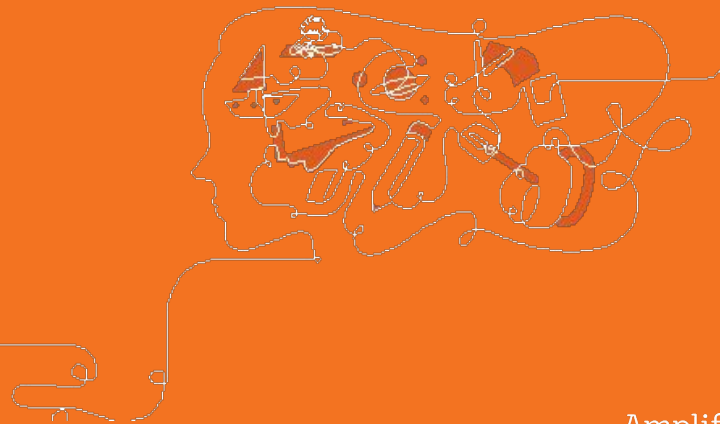
3 = Mild

4 = Comfortable

5 = Extremely Comfortable

Part 2:

Guided Lesson Planning

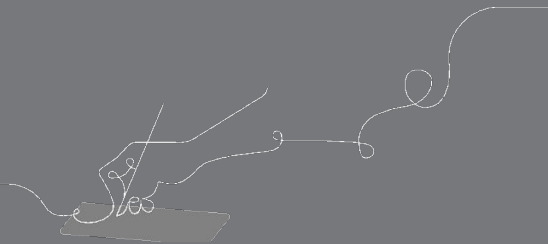


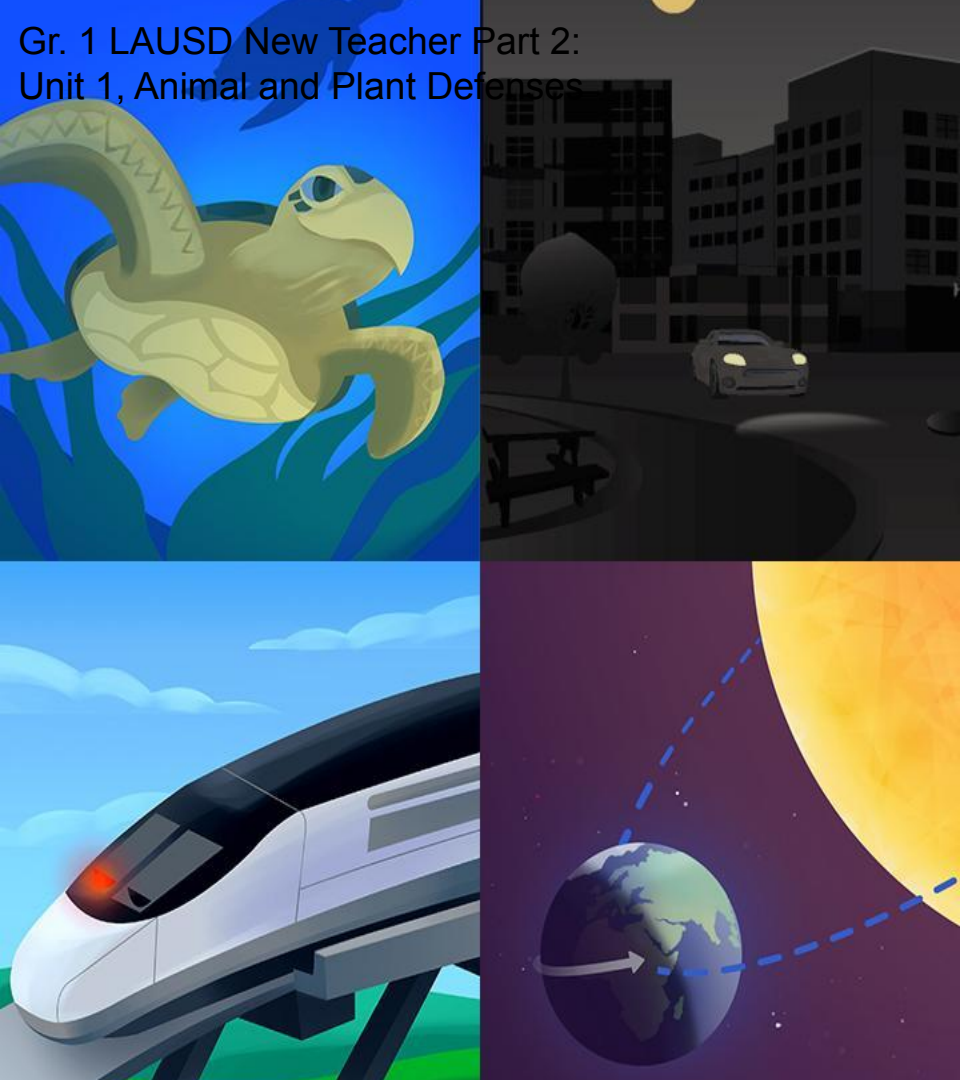
Overarching goals

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

- ❑ Describe what teaching and learning look like in Amplify Science.
- ❑ Prepare to teach using Amplify Science resources.

e

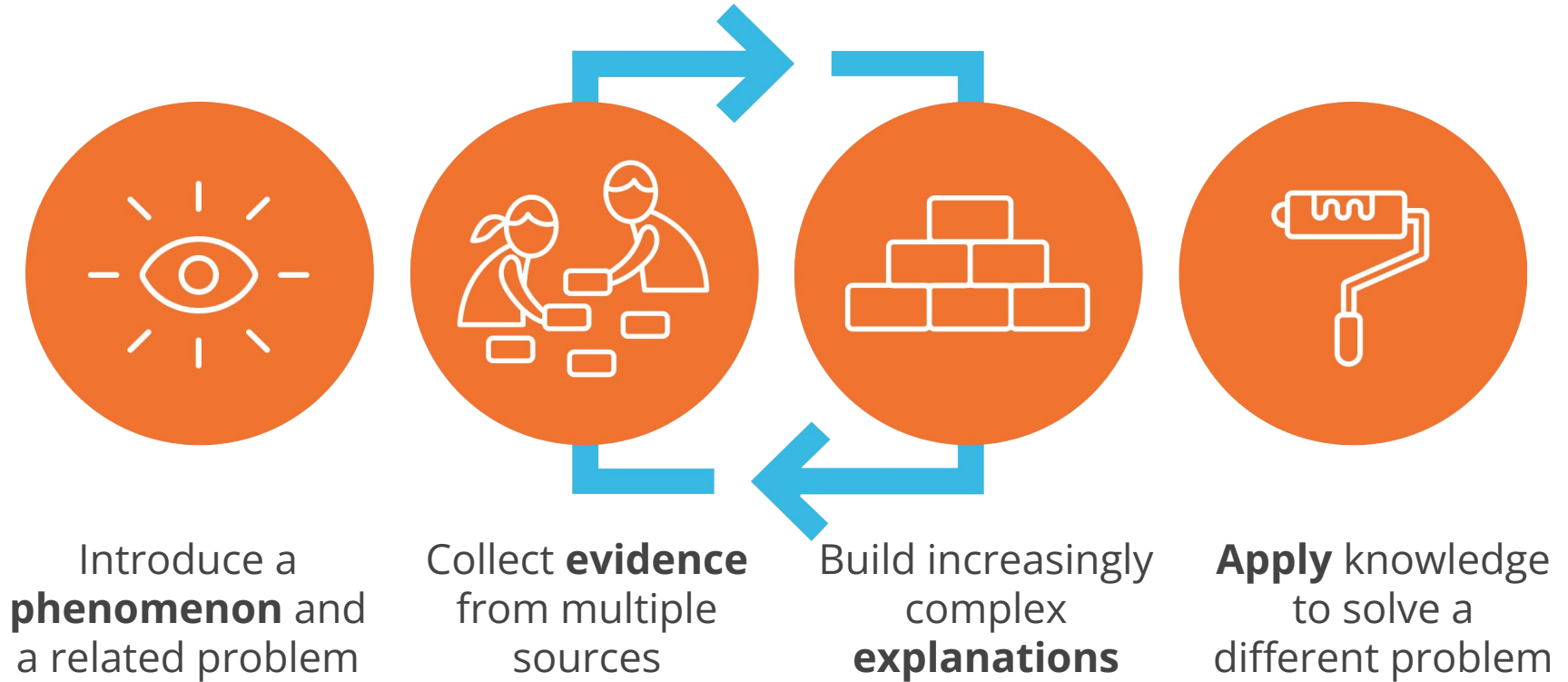




Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

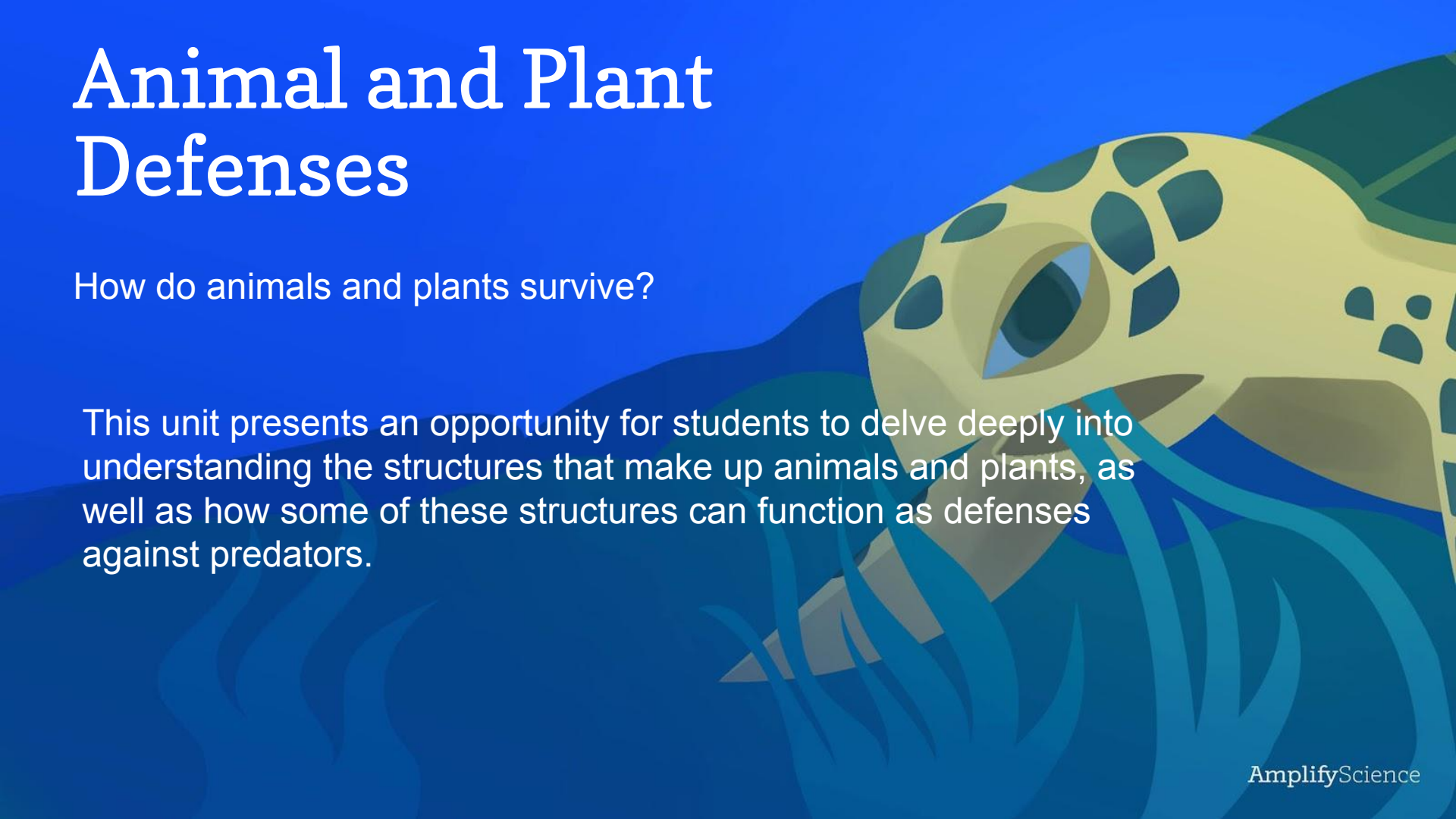
Amplify Science Approach



Animal and Plant Defenses

How do animals and plants survive?

This unit presents an opportunity for students to delve deeply into understanding the structures that make up animals and plants, as well as how some of these structures can function as defenses against predators.



Animal and Plant Defenses

Problem: How can a sea turtle survive in the ocean after being released by an aquarium?

Role: Marine Scientists

Students investigate how Spruce the turtle can survive in the ocean. They then investigate a question about Spruce's offspring: This context, which serves as the anchor phenomenon for the unit, 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.

Coherent storylines



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

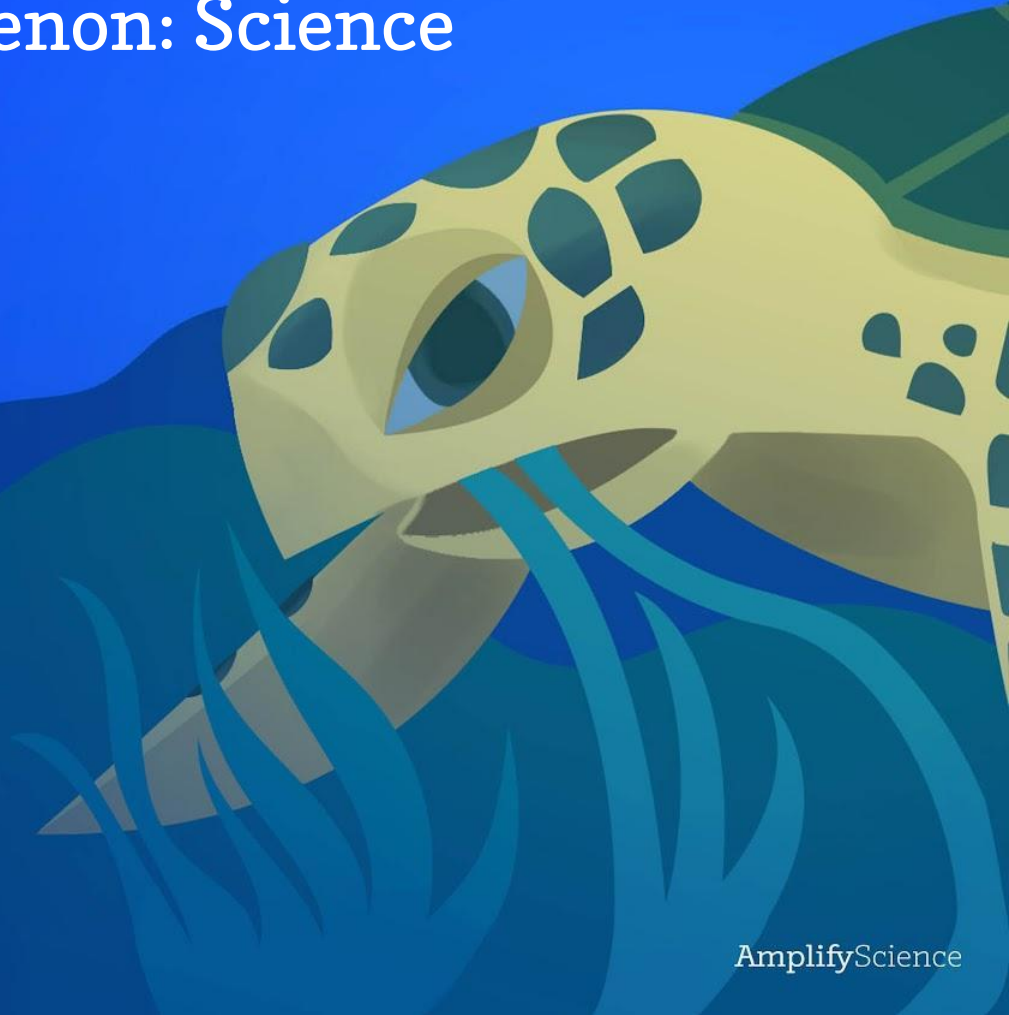


Chapter 3: How can Spruce the Sea Turtle's offspring survive where ther...

5 Lessons

Explaining the phenomenon: Science Concepts

What **science concepts** do you think students need to understand in order to **explain the phenomenon?**



Progress Build

Animal and Plant Defenses

Prior knowledge (preconceptions): It is assumed students know that animals and plants are living things and can die if they do not get what they need.




Beginning the Unit

The first lesson of every Unit is a pre-unit assessment.

[Unit Overview](#)
[Chapters](#)
[Printable Resources](#)
[Planning for the Unit](#) ▾
[Teacher References](#) ▾
[Offline Preparation](#)

Unit Overview




What's in This Unit?

Earth is inhabited by a staggering variety of animals and plants, with incredible variation in size, shape, color and parts. *How does each of these kinds of living things continue to survive? How do their offspring survive? What does their survival have to do with the nearly endless variation we observe among living things?* All living things must meet their basic survival needs, including getting food, water, and oxygen, and avoiding being eaten by other animals. The body parts (structures) of animals and plants function in ways that enable living things to meet their survival needs. Understanding how structures help organisms and


[Read more](#) >

Chapters


Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive? ⓘ




LESSON 1.1
Pre-Unit Assessment




LESSON 1.2
Tortoise Parts



LESSON 1.3
Animal and Plant
Structures

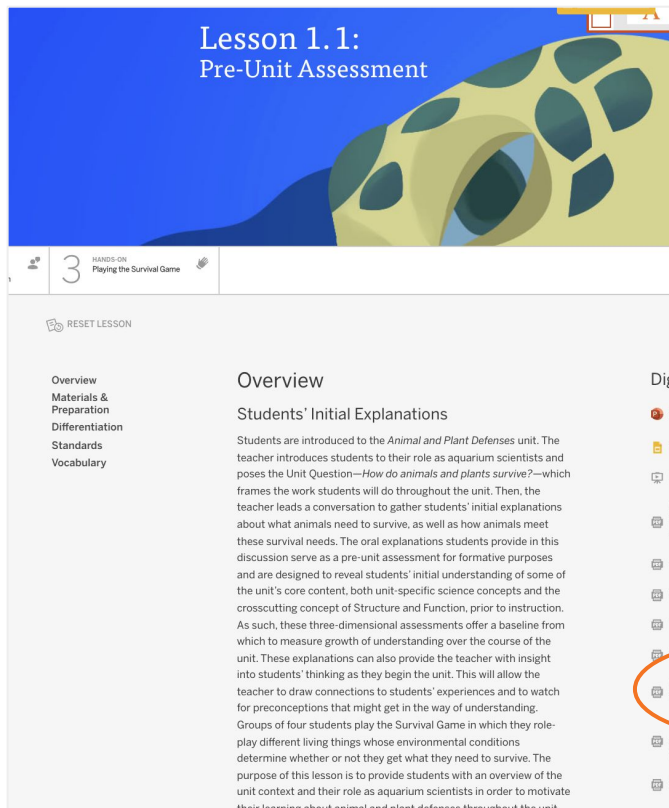


LESSON 1.4
Surviving by Not Being
Eaten



LESSON 1.5
Explaining Sea Turtle
Survival

Animal and Plant Defenses - Family Connection



Lesson 1.1:
Pre-Unit Assessment

3 HANDS-ON
Playing the Survival Game

RESET LESSON

Overview
Materials & Preparation
Differentiation
Standards
Vocabulary

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 poses the Unit Question—*How do animals and plants survive?*—which frames the work students will do throughout the unit. Then, the teacher leads a conversation to gather students' initial explanations about what animals need to survive, as well as how animals meet these survival needs. The oral explanations students provide in this discussion serve as a pre-unit assessment for formative purposes and are designed to reveal students' initial understanding of some of the unit's core content, both unit-specific science concepts and the crosscutting concept of Structure and Function, prior to instruction. As such, these three-dimensional assessments offer a baseline from which to measure growth of understanding over the course of the unit. These explanations can also provide the teacher with insight into students' thinking as they begin the unit. This will allow the teacher to draw connections to students' experiences and to watch for preconceptions that might get in the way of understanding. Groups of four students play the Survival Game in which they role-play different living things whose environmental conditions determine whether or not they get what they need to survive. The purpose of this lesson is to provide students with an overview of the unit context and their role as aquarium scientists in order to motivate their learning about animal and plant defenses throughout the unit.

***Animal and Plant Defenses* Family Connections Letter**

Dear Families,

In science class, we are working as aquarium scientists helping an aquarium director explain to visitors how a sea turtle can survive when she is released back into the ocean. We'll be working to answer the question, *How do animals and plants survive?*

Sharing some of your own ideas, connections, expertise, or stories related to what we will be learning about can help prepare students for their work in science class. It can help students see that what we study in science is connected to their lives, families, and communities.

Use the following questions to think about your personal connections to students' science learning, then share them with your student.


- What does our work in science make you think of?
- Do you have any memories, stories, or experiences about something related to what we will be investigating?
- What have you heard or learned about these topics?
- What do you wonder?

Beginning the Unit

Model lesson 1.2

[Unit Overview](#)
[Chapters](#)
[Printable Resources](#)
[Planning for the Unit](#) ▾
[Teacher References](#) ▾
[Offline Preparation](#)

Unit Overview




What's in This Unit?

Earth is inhabited by a staggering variety of animals and plants, with incredible variation in size, shape, color and parts. *How does each of these kinds of living things continue to survive? How do their offspring survive? What does their survival have to do with the nearly endless variation we observe among living things?* All living things must meet their basic survival needs, including getting food, water, and oxygen, and avoiding being eaten by other animals. The body parts (structures) of animals and plants function in ways that enable living things to meet their survival needs. Understanding how structures help organisms and


[Read more](#) >

Chapters


Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive? ⓘ




LESSON 1.1
Pre-Unit Assessment




LESSON 1.2
Tortoise Parts



LESSON 1.3
Animal and Plant Structures



LESSON 1.4
Surviving by Not Being Eaten



LESSON 1.5
Explaining Sea Turtle Survival

Activity 1

Reading: Tortoise Parts





We have been working as
aquarium scientists.



We played a game to figure out what animals and plants need to survive.



What did we learn that animals and plants **need** to survive?



Spruce the Sea Turtle is an **animal**.

Just like other living things, she needs to get **air, water, and food** to survive.

Investigation Question:

How do animals and plants do what they need to do to survive?

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Chapter 1 Question

How does Spruce the Sea Turtle do what she needs to do to survive?

Investigation Question

How do animals and plants do what they need to do to survive?

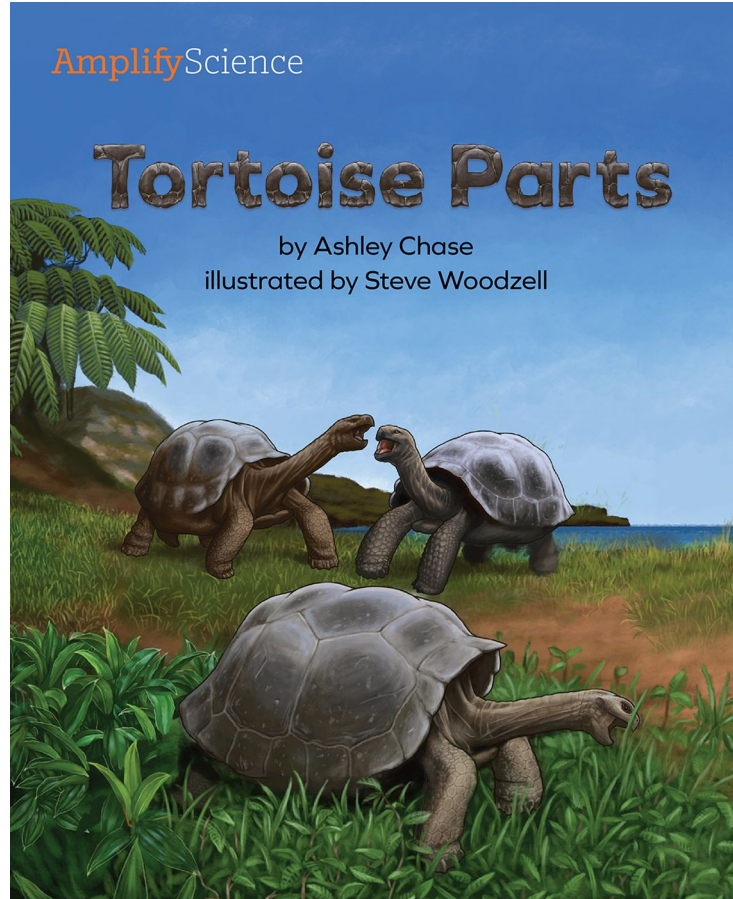
Key Concepts

To survive, animals and plants need to get water, air, and food.

Vocabulary

scientist

survive



Today we will read a book about one kind of animal called a tortoise.



What do you notice on the **cover** of the book?

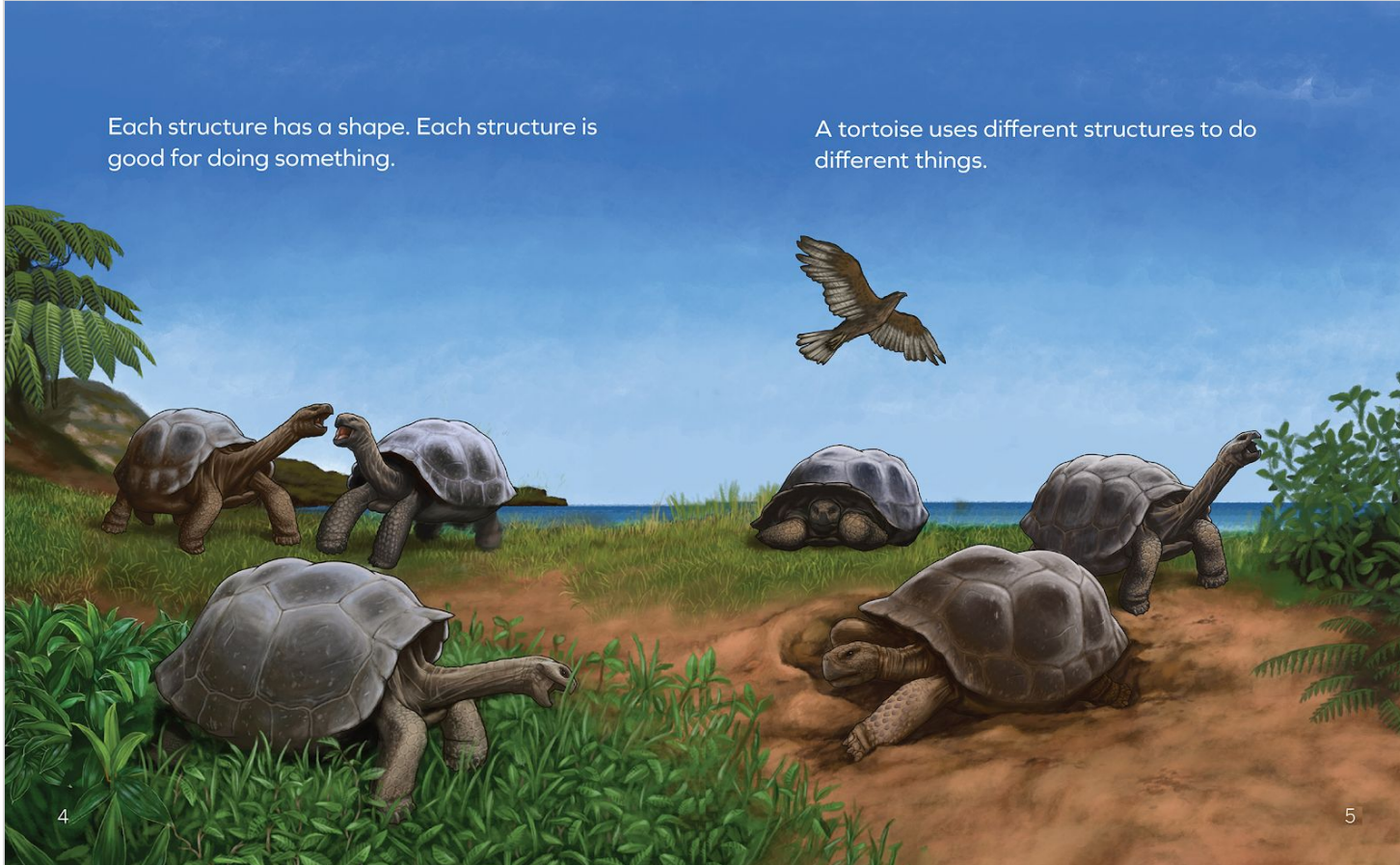
Look at the body of a tortoise. (The word *tortoise* sounds like "TOR-tuss.")



You will see lots of different parts. These parts are called **structures**.

Each structure has a shape. Each structure is good for doing something.

A tortoise uses different structures to do different things.



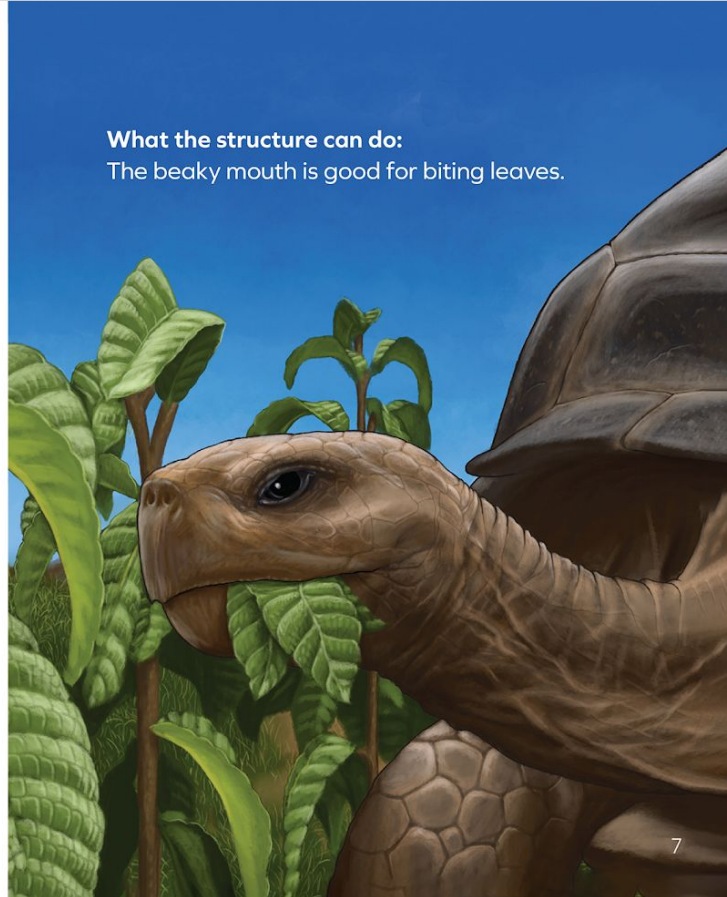
Structure:

A tortoise has a beaky mouth.



What the structure can do:

The beaky mouth is good for biting leaves.



Let's stop and **visualize** the mouth on a tortoise.

When you visualize, you make a picture or movie in your mind.





Close your eyes and **visualize** the tortoise using its beaky mouth to eat leaves.

Structure:

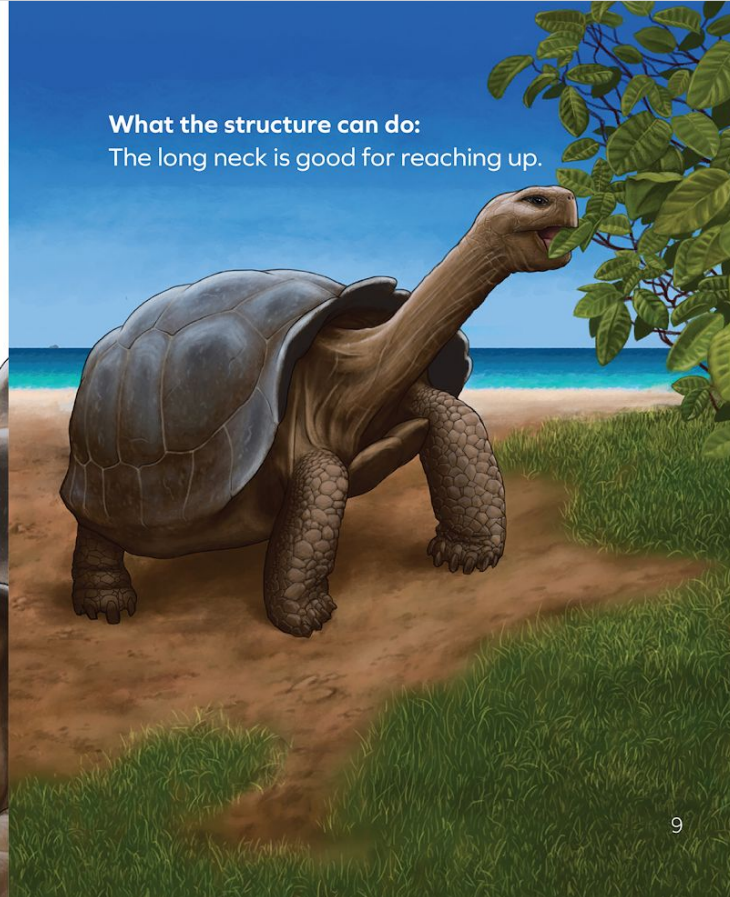
A tortoise has a long neck.

long neck →

8

What the structure can do:

The long neck is good for reaching up.



9

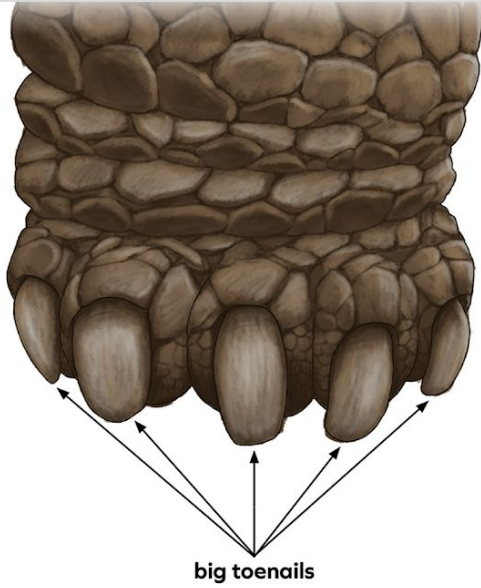


Close your eyes and visualize the tortoise using its long neck to reach up to get leaves.



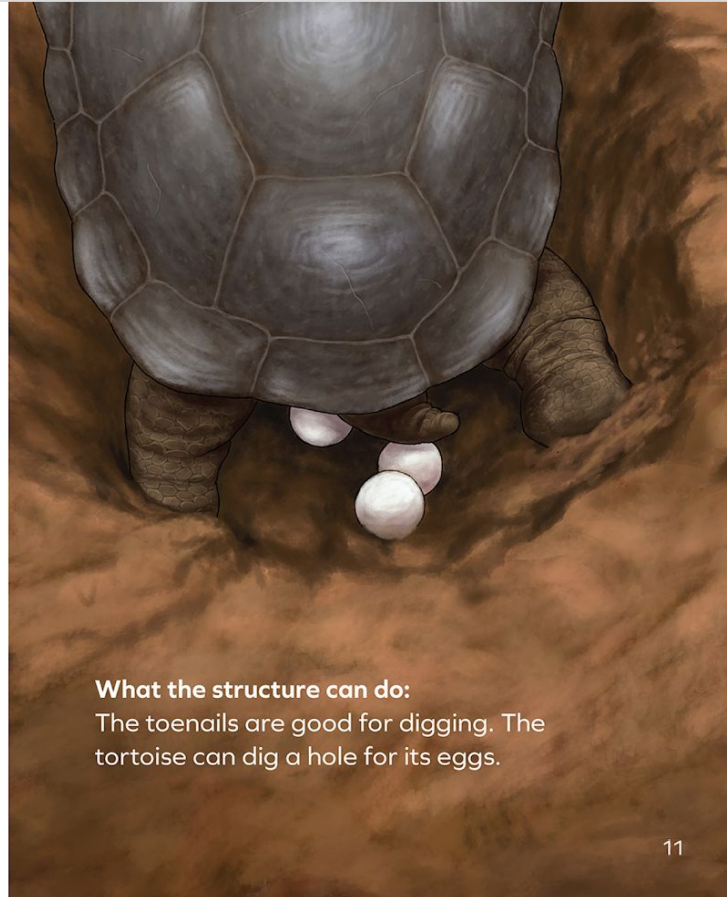
What did you see when you visualized the tortoise using its long neck?





Structure:

A tortoise has big toenails on each foot.

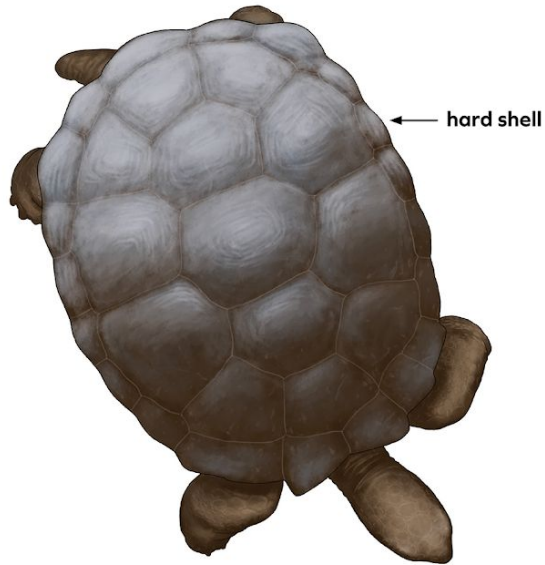


What the structure can do:

The toenails are good for digging. The tortoise can dig a hole for its eggs.

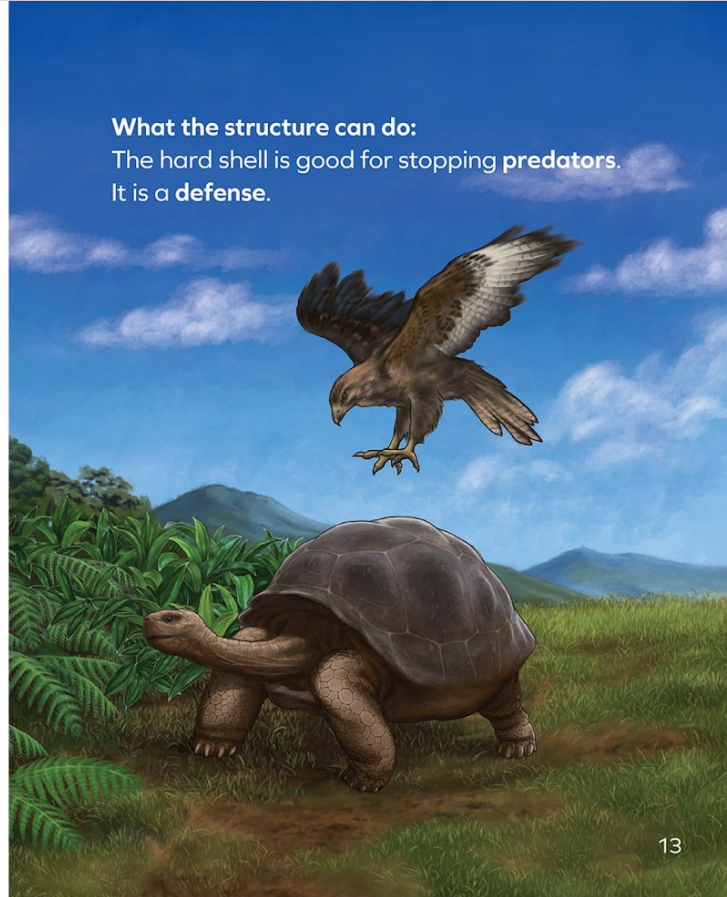
Structure:

A tortoise has a hard shell.



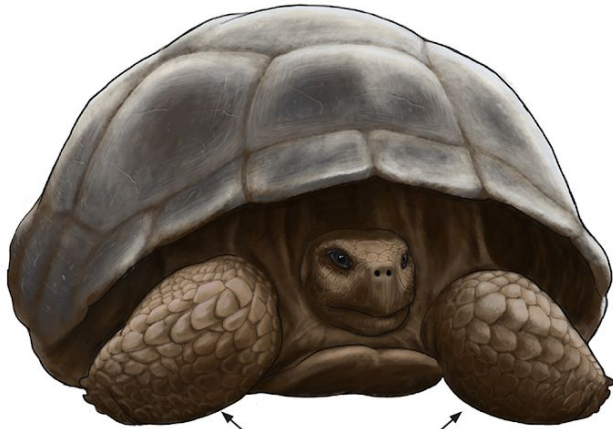
What the structure can do:

The hard shell is good for stopping **predators**.
It is a **defense**.



Structure:

A tortoise has legs that can pull under its shell.



legs that can pull under

What the structure can do:

Legs that can pull under are good for staying safe. They are a defense.



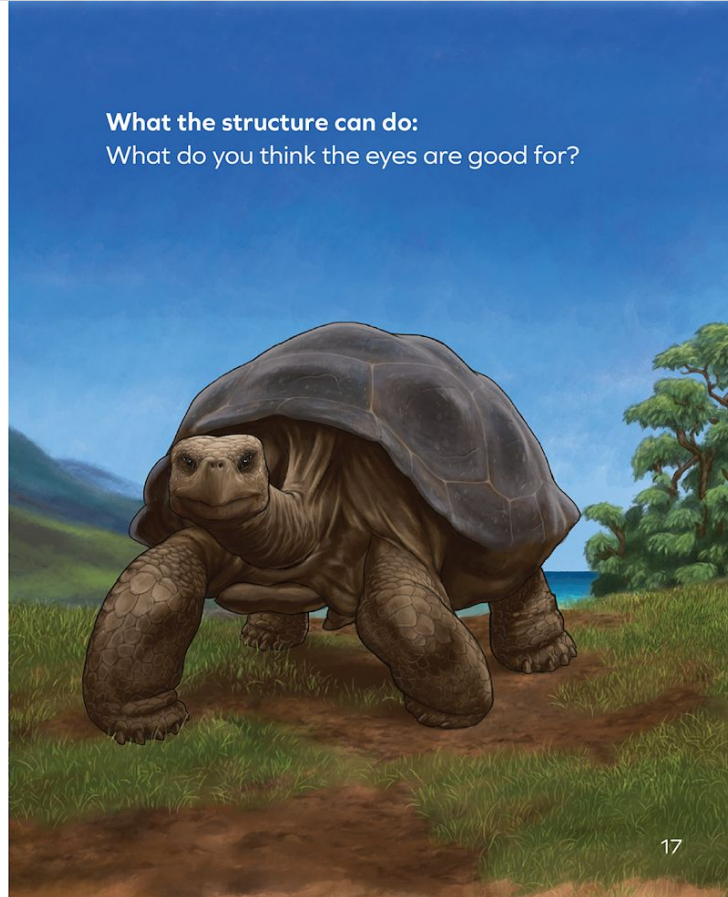
Structure:

A tortoise has eyes.

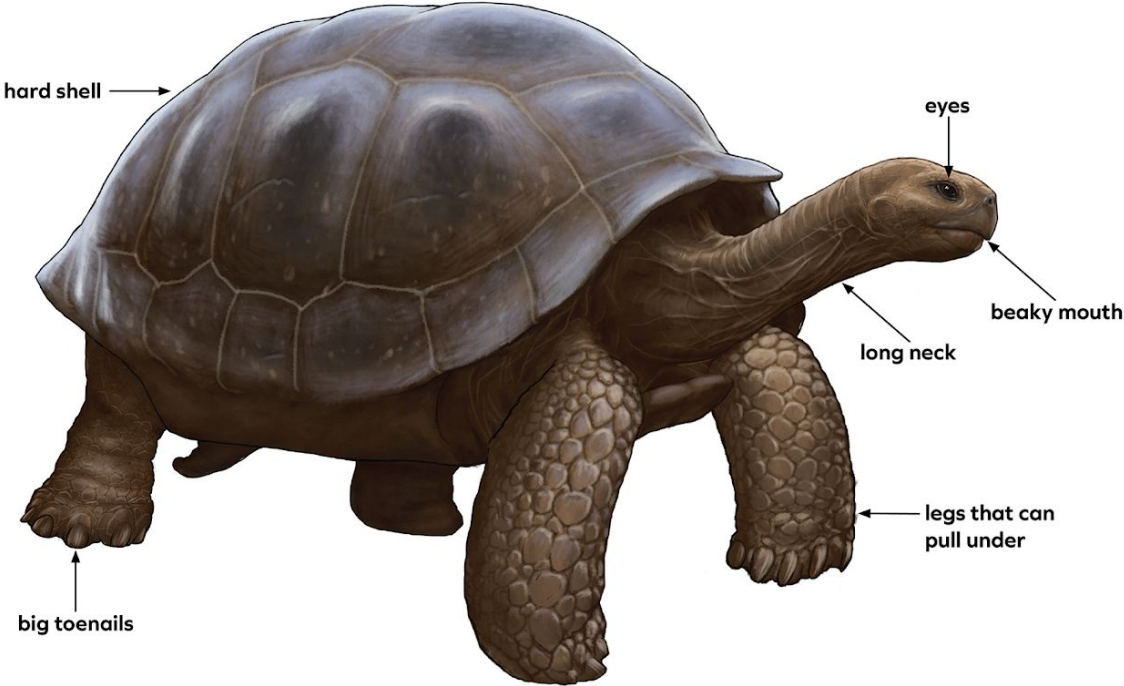


What the structure can do:

What do you think the eyes are good for?



Tortoise Parts



Vocabulary



structure

a part of an object or a living thing that does something

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Chapter 1 Question

How does Spruce the Sea Turtle do what she needs to do to survive?

Investigation Question

How do animals and plants do what they need to do to survive?

Key Concepts

To survive, animals and plants need to get water, air, and food.

Vocabulary

scientist

survive

structure

Activity 2

Observing Structures Used to Eat





Just like tortoises,
humans need to get
water, air, and food to
survive.

Now we will **investigate**
how humans get the food
we need to survive.

Vocabulary



observe

to use any of the five senses (sight, hearing, smell, taste, touch) to learn more about something

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Chapter 1 Question

How does Spruce the Sea Turtle do what she needs to do to survive?

Investigation Question

How do animals and plants do what they need to do to survive?

Key Concepts

To survive, animals and plants need to get water, air, and food.

Vocabulary

scientist

survive

structure

observe



I'll show you how I might
use my senses of sight,
touch, and hearing to
observe a pencil.



You will take turns
observing each other
eating a carrot.

Watch how your partner
gets the carrot and eats
the carrot.

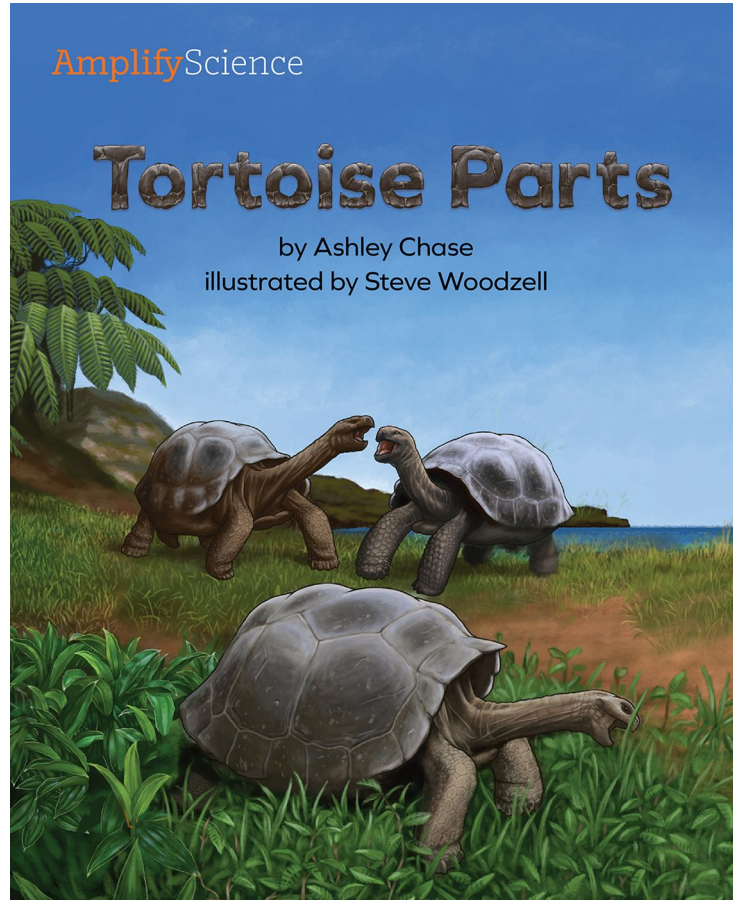
Activity 3

Discussing Observations and Structures





What did you observe when the person in the video was eating a carrot?



You just observed someone using **structures** on their body to eat.

We read about how a tortoise uses **structures** on its body to do what it needs to do to survive.



What is **the same** about how you and a tortoise do what you need to do to survive?



What is **different** about how you and a tortoise do what you need to do to survive?

What Scientists Do

To answer questions, scientists . . .

We are scientists.

This chart will help us think about the things that **scientists do** when they work.

What Scientists Do

To answer questions, scientists . . .



When scientists wonder about something in the world around them, **they ask a question.**

Investigation Question:

How do animals and plants do what they need to do to survive?

Animal and Plant Defenses Classroom Wall

Unit Question

How do animals and plants survive?

Chapter 1 Question

How does Spruce the Sea Turtle do what she needs to do to survive?

Investigation Question

How do animals and plants do what they need to do to survive?

Key Concepts

To survive, animals and plants need to get water, air, and food.

Vocabulary

scientist

survive

structure

observe

What Scientists Do

To answer questions, scientists . . .



Today we learned that
scientists observe.

Let's add that to our
chart.

What Scientists Do

To answer questions, scientists . . .

observe



How did we **observe** like scientists today?

End of Lesson



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

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Plan for the day

- Introduction and framing
- Navigation and planning
- Teaching and learning in an Amplify Science lesson
- **Instructional approach reflection**
- Additional program resources
- Closing

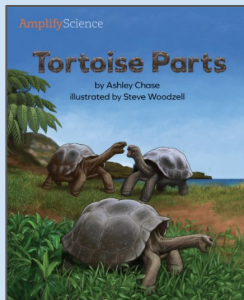
Gathering evidence

Animal and Plant Defenses Lesson 1.2

Chapter Question: How does Spruce the Sea Turtle do what she needs to do to survive?



Investigation Question: How do animals and plants do what they need to do to survive?

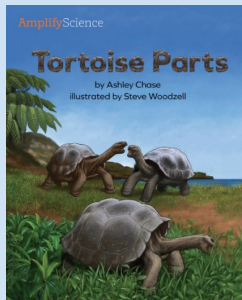


Evidence sources work together

Reading *Tortoise Parts* and observing carrot eating

How do these activities **work together** to support understanding of how animals and plants do what they need to do to survive?

Investigation Question: How do animals and plants do what they need to do to survive?

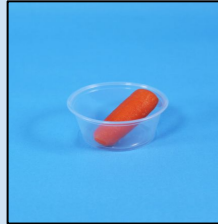
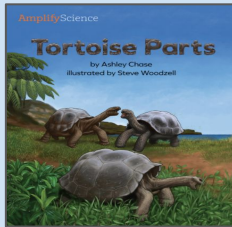


Gathering evidence

Animal and Plant Defenses Lesson 1.2

Chapter Question: How does Spruce the Sea Turtle do what she needs to do to survive?

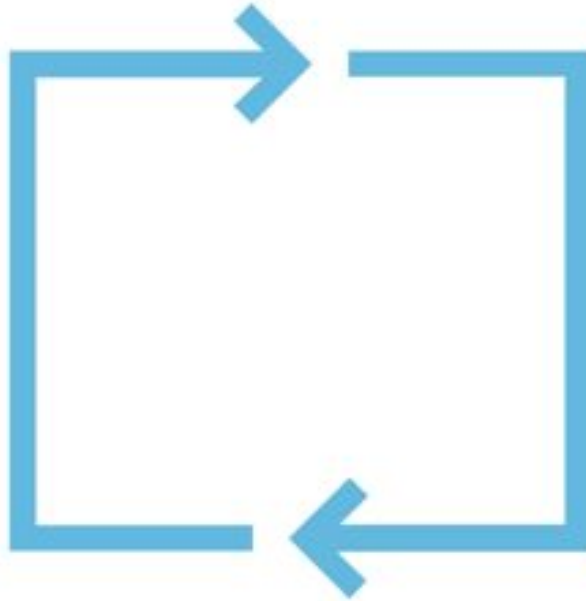
Investigation Question: How do animals and plants do what they need to do to survive?



What have students figured out so far?

Multimodal learning

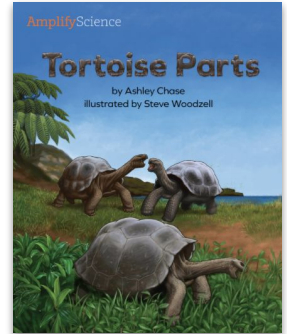
Gathering evidence over multiple lessons



**Do,
Talk,
Read,
Write,
Visualize**

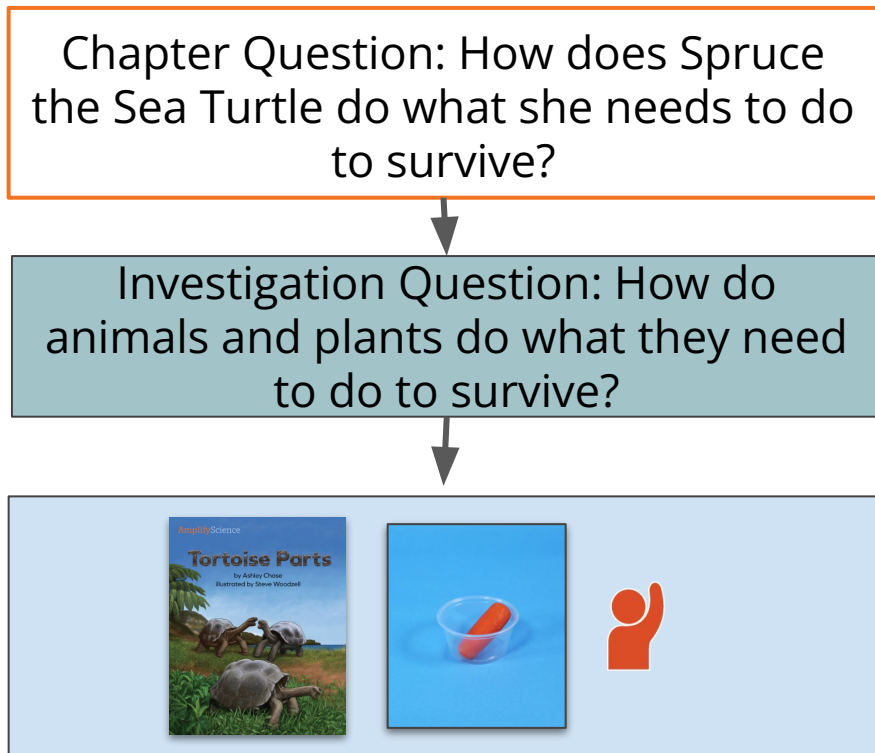
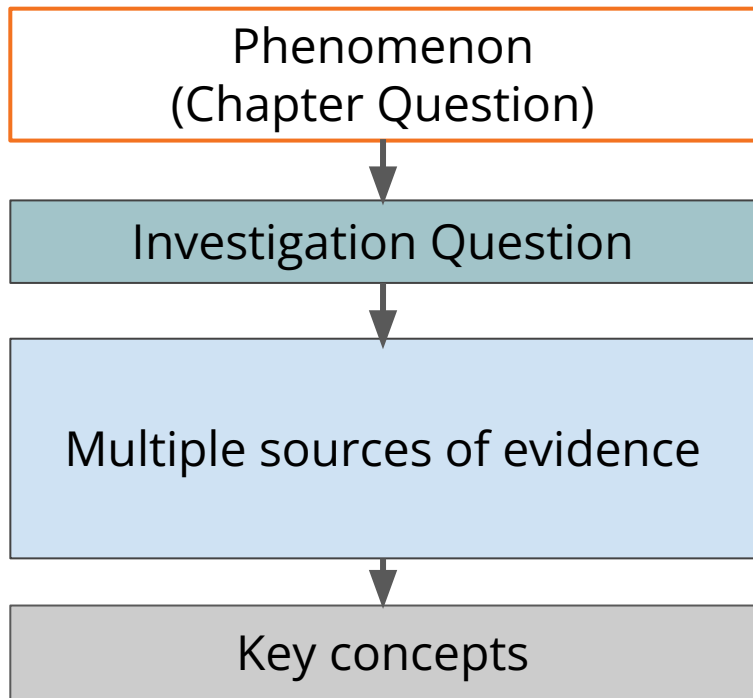
Evidence sources work together

Teacher tip: Every evidence source plays an important role in student learning. Be sure to teach every activity in order!



Coherence Flowchart

A diagram of student learning



Coherence Flowchart

Animal and Plant Defenses Lesson 1.2-1.3

Chapter Question: How does Spruce the Sea Turtle do what she needs to do to survive?



Investigation Question: How do animals and plants do what they need to do to survive?



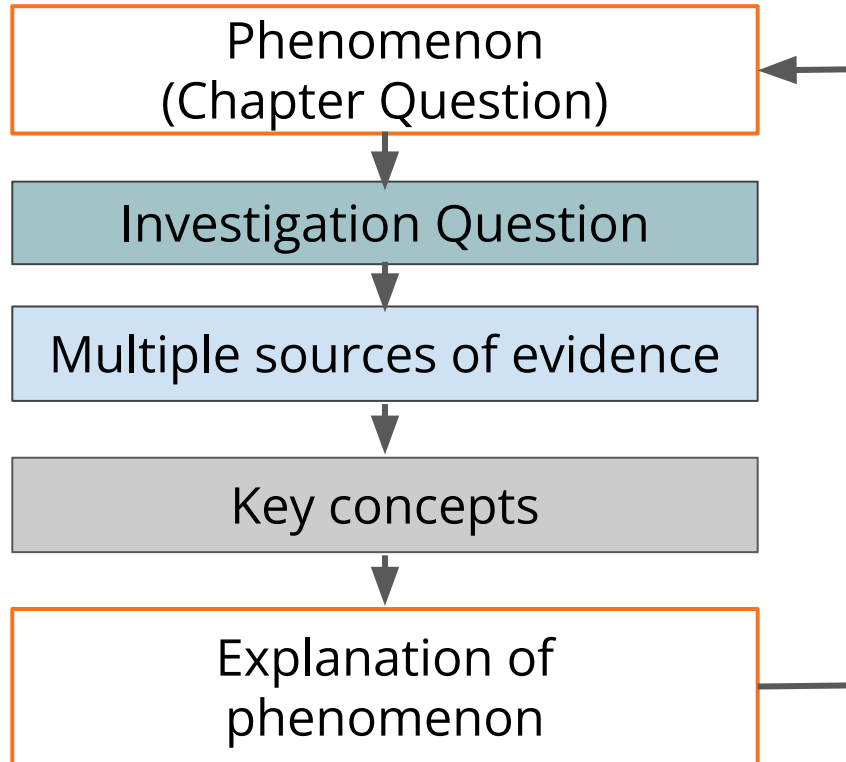
Evidence: Read *Tortoise Parts* (1.2)
Evidence: Observe students eating (1.2)
Evidence: Describe structures in *Tortoise Parts* (1.3)
Evidence: Watch videos of plant and animal structures (1.3)
Evidence: Read *Spikes, Spines, and Shells* (1.3)



Key concept: Animals and plants have structures that help them do what they need to do to survive. (1.3)

Coherence Flowchart

A diagram of student learning



Coherence Flowchart

Animal and Plant Defenses Lesson 1.2-1.3

Chapter Question: How does Spruce the Sea Turtle do what she needs to do to survive?



Investigation Question: How do animals and plants do what they need to do to survive?

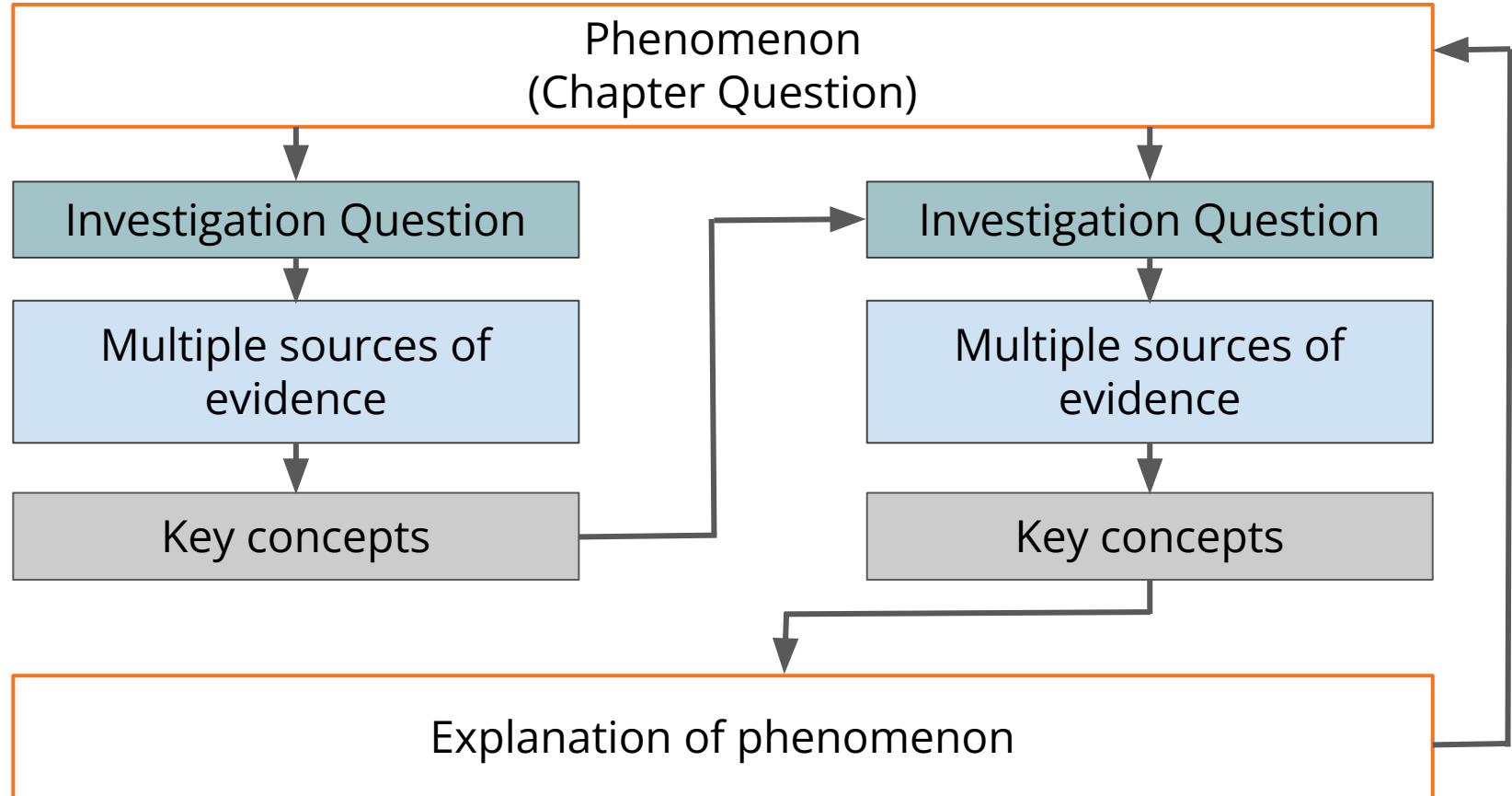


Evidence: Read *Tortoise Parts* (1.2)
Evidence: Observe students eating (1.2)
Evidence: Describe structures in *Tortoise Parts* (1.3)
Evidence: Watch videos of plant and animal structures (1.3)
Evidence: Read *Spikes, Spines, and Shells* (1.3)



Key concept: Animals and plants have structures that help them do what they need to do to survive. (1.3)

Coherence Flowchart



Unit Anchor Phenomenon

Problem students work to solve

Chapter-level Anchor Phenomenon
Chapter 1 Question
Investigative Phenomena
Investigation Questions
Evidence sources and reflection opportunities
Key concepts
Application of key concepts to problem
Explanation that students can make to answer the Chapter 1 Question

Animal and Plant Defenses: Spikes, Shells, and Camouflage

Spruce the Sea Turtle and her offspring survive in the ocean.
How can a sea turtle survive in the ocean after being released by an aquarium?

Spruce the Sea Turtle survives in the ocean.
How does Spruce the Sea Turtle do what she needs to do to survive?

Sometimes plants and animals survive.
What do animals and plants need to do to survive? (1.1)

- Play the Survival Game (1.1)

- To survive, animals and plants need to get water, air, and food. (1.1)

Plants and animals get water, air, and food.
How do animals and plants do what they need to do to survive? (1.2, 1.3, 1.4, 1.5)

- Read *Tortoise Parts* (1.2)
- Observe students eating (1.2)
- Describe structures in *Tortoise Parts* (1.3)
- Watch videos of plant and animal structures (1.3)
- Read *Spikes, Spines, and Shells* (1.3)
- Revisit the Survival Game (1.4)
- Write about how animals do what they need to do to survive. (1.4)

- Animals and plants have structures that help them do what they need to do to survive. (1.3)
- To survive, animals and plants need to get water, air, and food, and to not be eaten. (1.4)

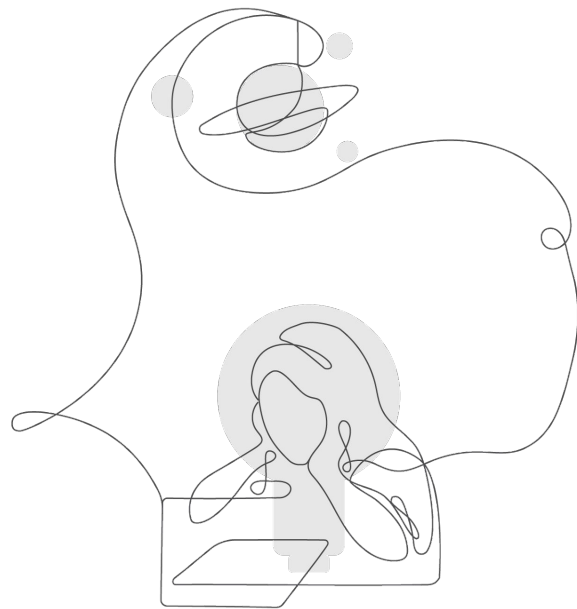
- Gather evidence about sea turtle structures and explain how they use those structures to survive (1.5)
- Write about how Spruce does what she needs to do to survive in the ocean (1.5)

Sea turtles have body parts that help them get food, air, and water. In the ocean, there are predators that might try to eat the sea turtle. To survive in the ocean, she needs to avoid being eaten by predators.

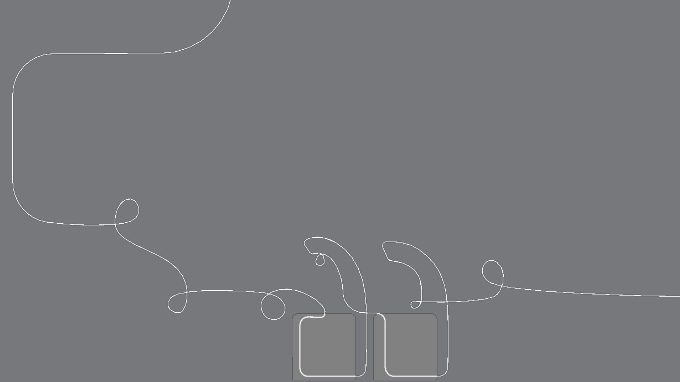
Explore the Coherence Flowchart

Skim the Chapter 1 Coherence Flowchart.

Think about how you might use the Coherence Flowchart to summarize learning throughout Chapter 1.



Questions?





Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

Navigate to a lesson page

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



4 Easy Steps to Teaching a lesson

DIRECTIONS:

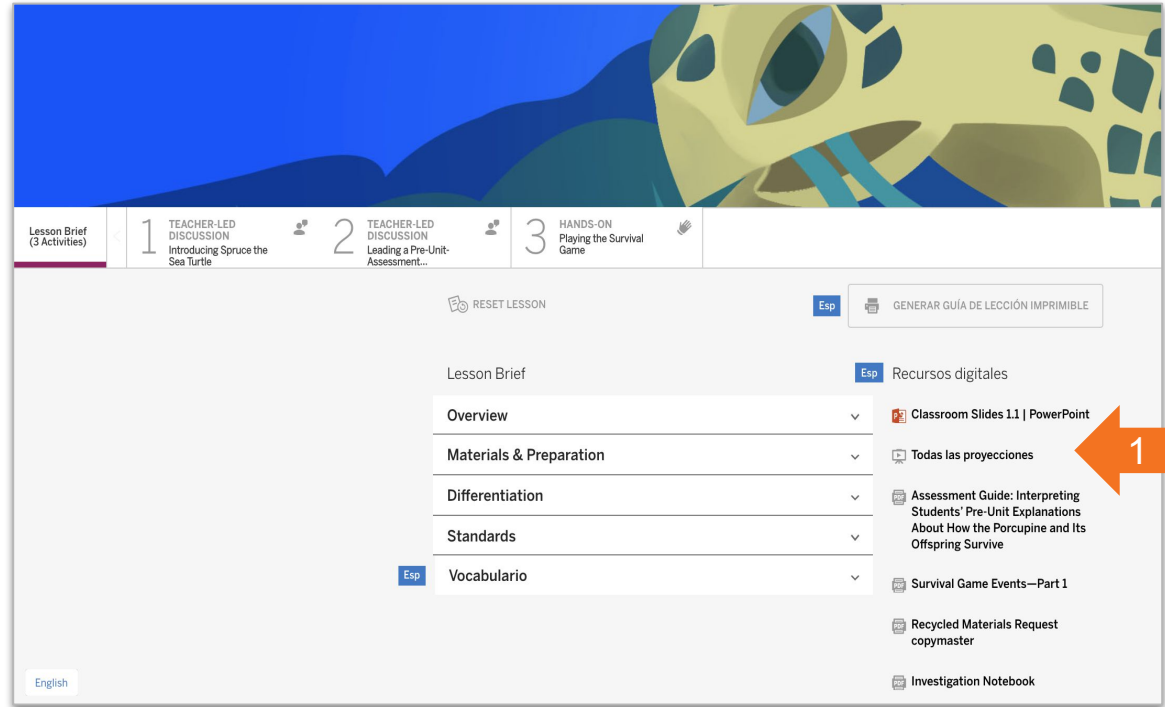
1. Download the **Classroom Slides** for **Lesson 1.1** and review them.
2. Read the **Overview**.
3. Explore the **Materials & Preparation** document.
4. Read the **Differentiation** document.

The screenshot shows the Lesson 1.1 interface. At the top, there is a navigation bar with three main sections: 'Lesson Brief (3 Activities)', 'TEACHER-LED DISCUSSION' (with sub-items 'Introducing Spruce the Sea Turtle' and 'Leading a Pre-Unit Assessment...'), and 'HANDS-ON' (with sub-item 'Playing the Survival Game'). Below this, there is a 'RESET LESSON' button and a language selector set to 'Esp'. A button 'GENERAR GUÍA DE LECCIÓN IMPRIMIBLE' is also visible. The main content area is divided into two columns. The left column contains a list of documents: 'Lesson Brief', 'Overview', 'Materials & Preparation', 'Differentiation', 'Standards', and 'Vocabulario'. The right column, titled 'Recursos digitales', contains a list of digital resources: 'Classroom Slides 1.1 | PowerPoint', 'Todas las proyecciones', 'Assessment Guide: Interpreting Students' Pre-Unit Explanations About How the Porcupine and Its Offspring Survive', 'Survival Game Events—Part 1', 'Recycled Materials Request copymaster', and 'Investigation Notebook'. Four orange arrows with numbers 1 through 4 point to specific elements: Arrow 1 points to 'Classroom Slides 1.1 | PowerPoint', Arrow 2 points to 'Overview', Arrow 3 points to 'Materials & Preparation', and Arrow 4 points to 'Differentiation'. A language selector at the bottom left is set to 'English'.

4 Easy Steps to Teaching a lesson

DIRECTIONS:

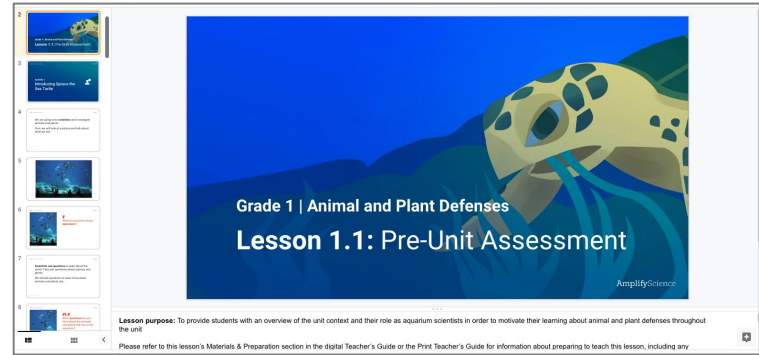
1. Download the **Classroom Slides** for **Lesson 1.1** and review them.
2. Read the **Overview**.
3. Explore the **Materials & Preparation** document.
4. Read the **Differentiation** document.



Preparing to teach

Classroom Slides

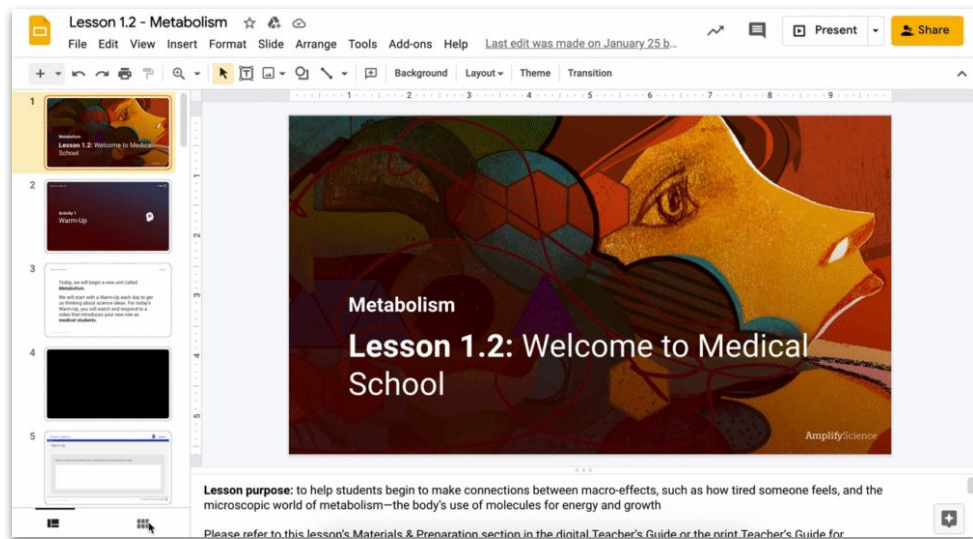
1. Open the **Classroom Slides** under the **Digital Resources**.
2. Read through the Classroom Slides including the **presenter notes** to gain a better understanding of the lesson.
3. **Consider:**
 - Why do some slides have scripting in black while others have scripting in orange?
 - What features of the Classroom Slides will support you in teaching this lesson?



Using Classroom Slides as a planning tool

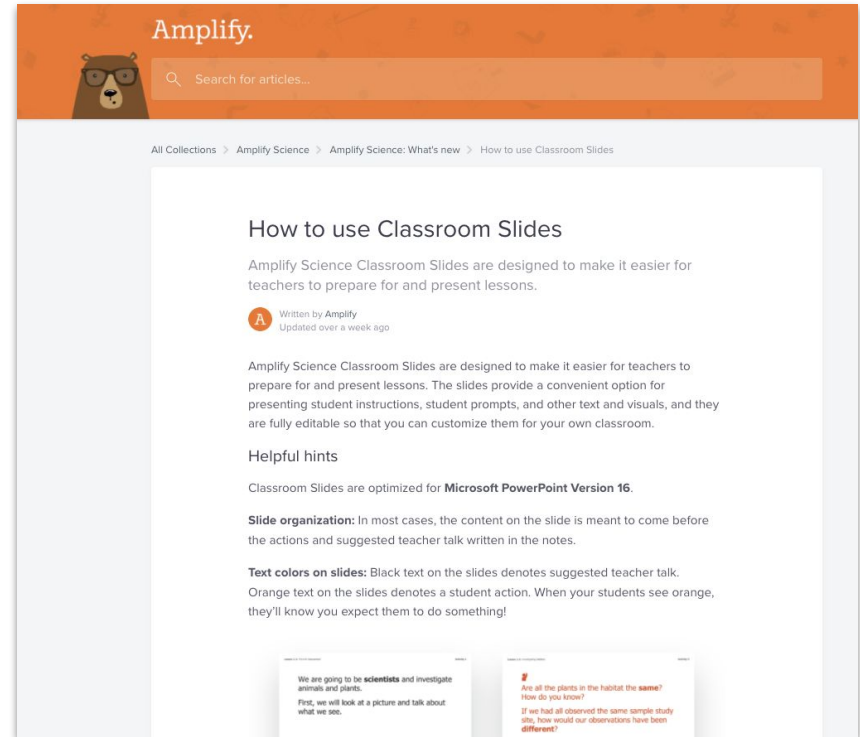
Teacher tip: Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

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



Teaching with Classroom Slides

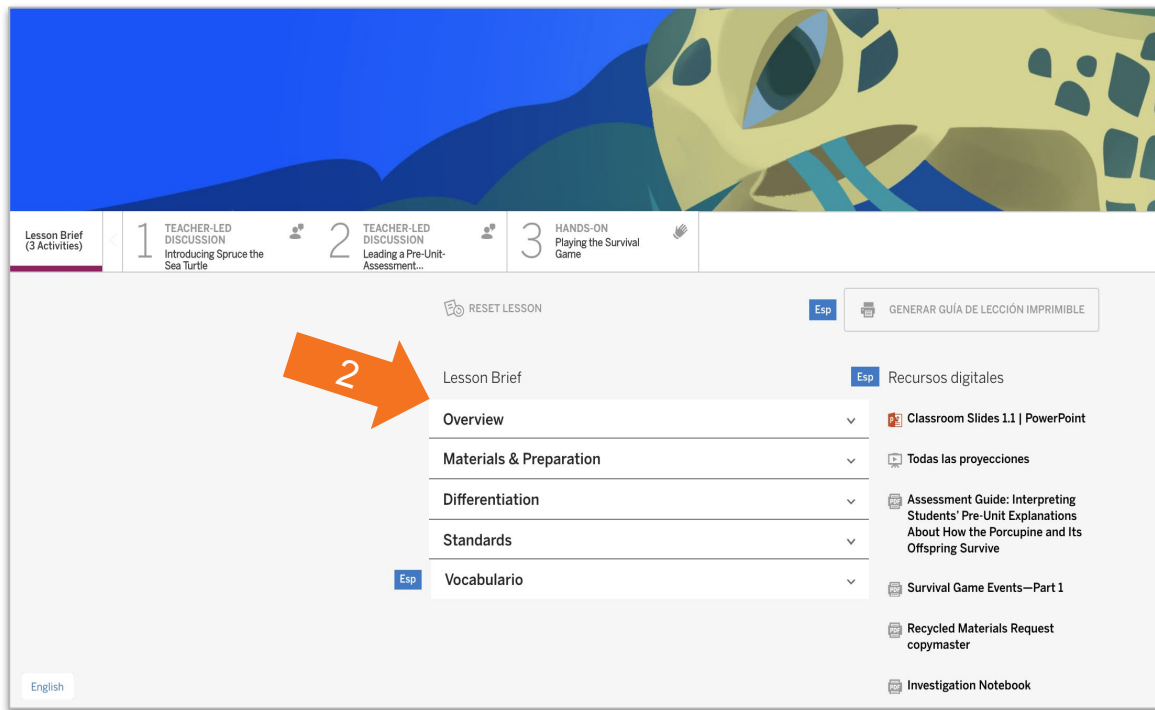
This detailed guide on the Amplify Science Help Site includes tips for teaching with Classroom Slides and information about the different symbols and activity types you'll find in the slide deck.



4 Easy Steps to Teaching a lesson

DIRECTIONS:

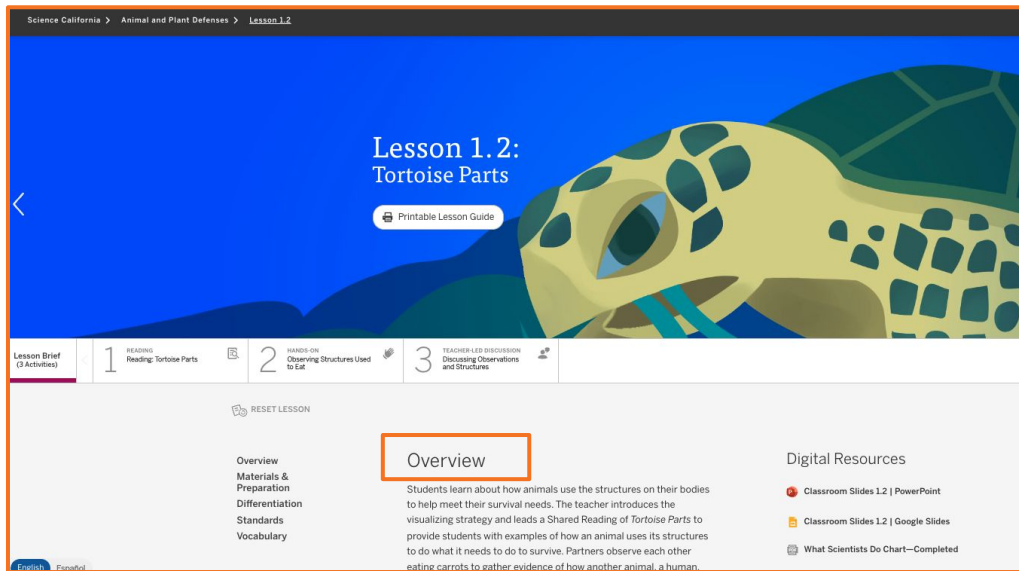
1. Download the **Classroom Slides** for **Lesson 1.1** and review them.
2. Read the **Overview**.
3. Explore the **Materials & Preparation** document.
4. Read the **Differentiation** document.



Preparing to teach

The Overview

- Read through the lesson overview.
- Find the purpose of the lesson.



The screenshot shows the Science California website interface for Lesson 1.2: Tortoise Parts. The header includes the navigation path: Science California > Animal and Plant Defenses > Lesson 1.2. The main title is "Lesson 1.2: Tortoise Parts" with a "Printable Lesson Guide" button. Below the title is a navigation bar with three tabs: "Lesson Brief (3 Activities)", "1 READING: Reading: Tortoise Parts", and "2 HANDS-ON: Observing Structures Used to Eat". The "Overview" tab is selected and highlighted with an orange box. The content area shows the "Overview" section, which includes a description of the lesson and a list of digital resources. The "Digital Resources" section lists "Classroom Slides 1.2 | PowerPoint", "Classroom Slides 1.2 | Google Slides", and "What Scientists Do Chart—Completed".

Science California > Animal and Plant Defenses > Lesson 1.2

Lesson 1.2: Tortoise Parts

Printable Lesson Guide

Lesson Brief (3 Activities) 1 READING: Reading: Tortoise Parts 2 HANDS-ON: Observing Structures Used to Eat 3 TEACHER-LED DISCUSSION: Discussing Observations and Structures

RESET LESSON

Overview

Students learn about how animals use the structures on their bodies to help meet their survival needs. The teacher introduces the visualizing strategy and leads a Shared Reading of *Tortoise Parts* to provide students with examples of how an animal uses its structures to do what it needs to do to survive. Partners observe each other eating carrots to gather evidence of how another animal, a human,

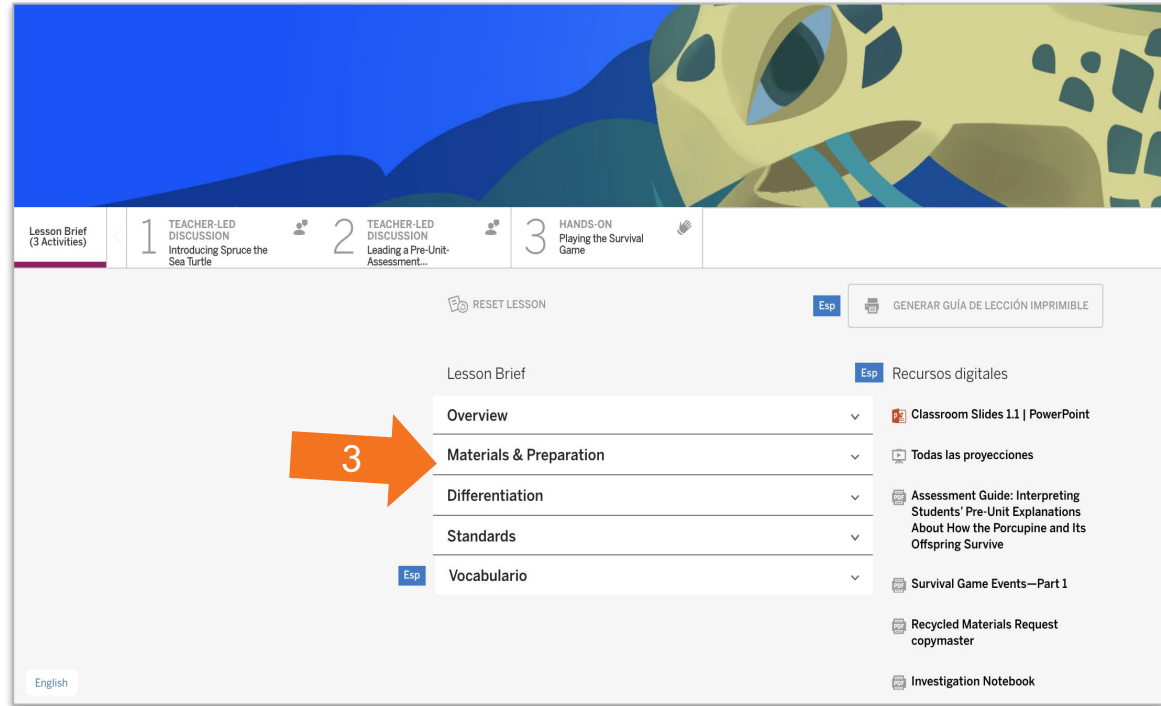
Digital Resources

- Classroom Slides 1.2 | PowerPoint
- Classroom Slides 1.2 | Google Slides
- What Scientists Do Chart—Completed

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.



Preparing to teach

Materials and Prep

Review the materials needed for:

- The Classroom Wall
- For the Class
- For each pair of students (if applicable)
- Preparation

Materials & Preparation

Materials

For the Classroom Wall

- 2 vocabulary cards: *observe, structure*

For the Class

- *Tortoise Parts* big book
- 1 index card (4" x 6")*
- 1 sheet of paper (8.5" x 11")*
- pencil with eraser*
- 1 sheet of chart paper*
- marker*
- masking tape*

For Each Student

- 1 small plastic cup, 2 oz.
- 1 baby carrot*

*teacher provided

Preparation

Before the Day of the Lesson

1. Gather the following materials for the classroom wall:

- 2 vocabulary cards: *observe, structure*

2. Locate the following materials (in your *Animal and Plant Defenses kit*). You will also need to locate a white, unlined 4" x 6" index card.

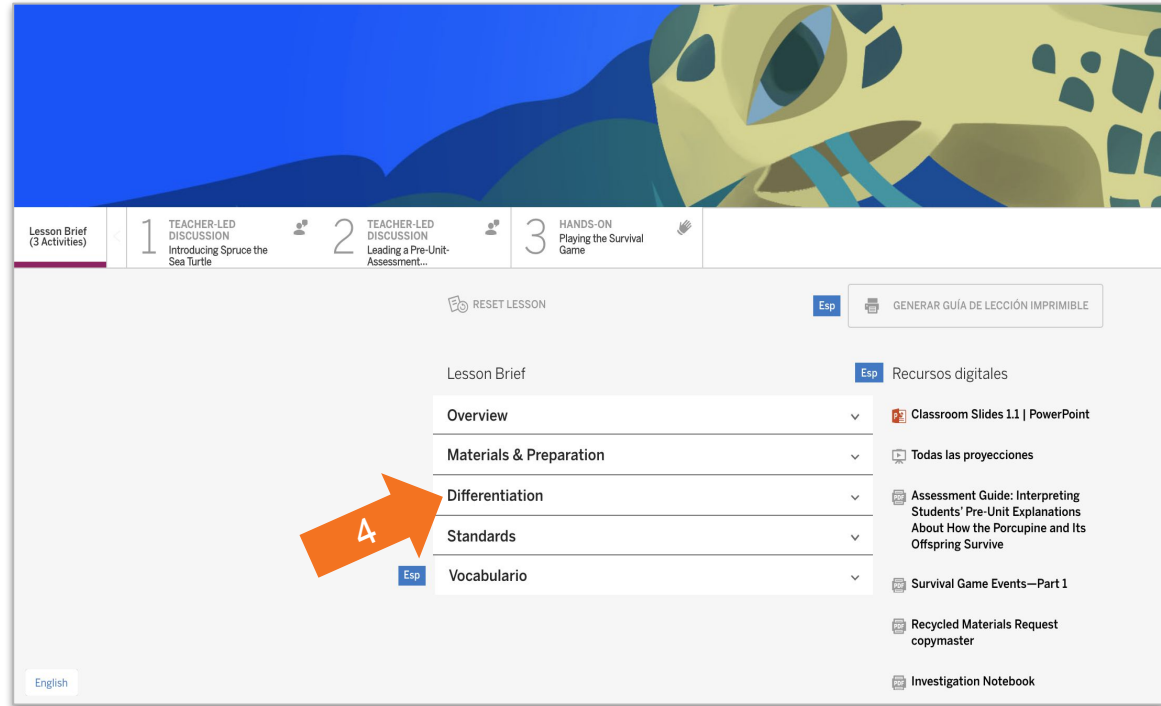
- small plastic cup, 2 oz.
- *Tortoise Parts* big book

3. Prepare for the Carrot Eating activity. In Activity 2 of this

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.



Preparing to Teach

Lesson-specific differentiation

- Embedded supports
- Potential challenges
- Strategies for:
 - English Learners
 - Students who need more support
 - Students who need more challenge

Differentiation

Embedded Supports for Diverse Learners

Gradual release of responsibility. In this lesson, students are introduced to the strategy of visualizing. Explicitly modeling how you evaluate you picture what is described in a book or imagine how something shown in a photograph or illustration would look as it moves prepares students to use this strategy more independently later in the unit. As the unit proceeds, students will practice visualizing with less teacher modeling and explicit support.

Shared Reading. Engaging in Shared Reading provides more support for reading and understanding at the beginning of the unit as students build their vocabulary and scientific knowledge. The book *Tortoise Parts* was designed to support a rich Shared Reading experience, during which you will guide students in reading, visualizing, and making sense of the text. *Tortoise Parts* has a repetitive sentence structure and text layout that may help students read some of the text along with you.

What Scientists Do chart. In this lesson, students are introduced to the What Scientists Do chart. By creating this chart with the class, you will model a way to organize information. The chart uses simple illustrations, which the teacher draws, to connect new concepts about the role of scientists to key vocabulary words (e.g., the word *observe* in this lesson). This chart records new information in an organized manner and provides an ongoing and accessible visual reference for students. The end result is a class reference tool that helps solidify new terms and related concepts in students' minds.

Multimodal instruction. Students gather evidence about how animals use body parts to meet their needs (particularly, their need for food) from text and photographs in a book, by eating a carrot, by observing their partner eat a carrot, and by discussing. Having experience with key ideas in many modalities gives students multiple opportunities to make sense of the concepts, as well as provides students who learn in different ways with different entry points.

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.

The screenshot shows a lesson planning interface with a header featuring a sea turtle illustration. Below the header is a navigation bar with three main sections: 'Lesson Brief (3 Activities)', 'TEACHER-LED DISCUSSION', and 'HANDS-ON'. The 'Lesson Brief' section is highlighted. Below this, there is a 'RESET LESSON' button and a language selector set to 'Esp'. A list of lesson components is shown, including 'Lesson Brief', 'Overview', 'Materials & Preparation', 'Differentiation', 'Standards', and 'Vocabulario'. Four orange arrows with numbers 1 through 4 point to specific elements: Arrow 1 points to 'Classroom Slides 1.1 | PowerPoint' in the 'Recursos digitales' section; Arrow 2 points to 'Overview'; Arrow 3 points to 'Materials & Preparation'; and Arrow 4 points to 'Differentiation'. Other visible elements include a 'GENERAR GUÍA DE LECCIÓN IMPRIMIBLE' button and a list of additional resources like 'Todas las proyecciones', 'Assessment Guide: Interpreting Students' Pre-Unit Explanations About How the Porcupine and Its Offspring Survive', 'Survival Game Events—Part 1', 'Recycled Materials Request copymaster', and 'Investigation Notebook'.

Lesson ____		Activity Overview		From the Lesson at a glance in the overview
What is the purpose of this lesson?		Activity 1 (##min)		
	From the lesson overview			
What will students learn?		Activity 2 (##min)		
3-D Statement (identify SEP, CCC, and DCI):	From the lesson standards	Activity 3 (##min)		
Student Resources:	From the lesson materials and preparation	Activity 4 (##min)		
Assessment Opportunities:	From the lesson at a glance in the overview or classroom slides	Activity 5 (##min)		

Directions for Planning Time

(Make your own copy first before planning)

1. Make a copy of this planning slide.
2. Download the classroom slides for the lesson you would like to plan
3. Insert the planning slide at the front of the classroom slide deck
4. Navigate at the lesson level to answer the questions on this slide
5. Make edits directly on your side deck to meet the needs of your students

Digital Resources



Classroom Slides 1.1 | PowerPoint

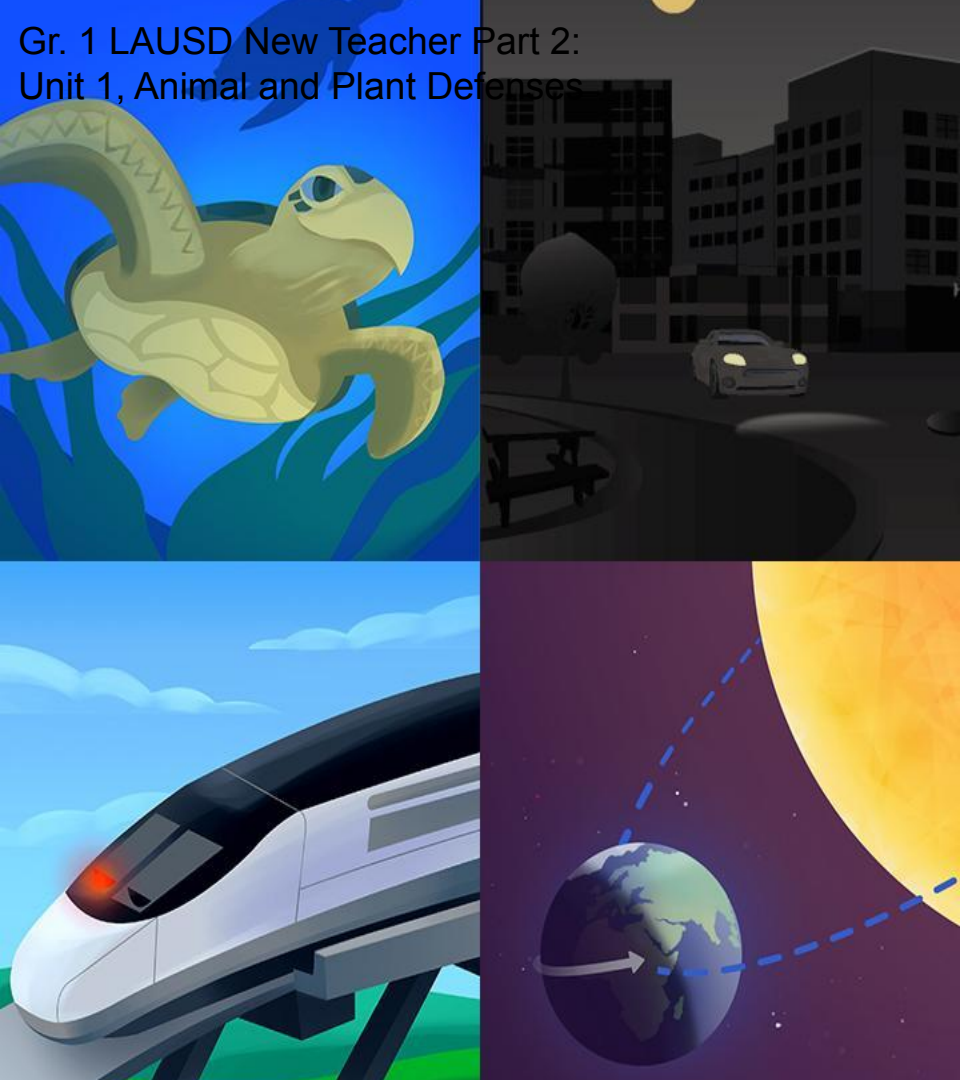


Classroom Slides 1.1 | Google Slides

Lesson _1.2_		Activity Overview
<p>What is the purpose of this lesson?</p> <p>The purpose of this lesson is to lay the foundation for students to understand that living things have body parts that help them meet their survival needs</p>	<p>Activity 1 (20 min)</p>	<p>Reading: Tortoise Parts</p>
<p>What will students learn?</p> <p>Visualizing how something happens can help scientists understand pictures and words as they read. Observing animals and plants helps scientists understand how living things survive. Animals have structures with functions that help them get and eat their food. Scientists start with questions and conduct investigations to find answers.</p>	<p>Activity 2 (15 min)</p>	<p>Observing Structures Used to Eat</p>
<p>3-D Statement (identify SEP, CCC, and DCI):</p> <p>Students read the book <i>Tortoise Parts</i> and observe one another eating carrots in order to obtain and evaluate information about structures (body parts) that animals use to meet specific survival needs (structure and function).</p>	<p>Activity 3 (10 min)</p>	<p>Discussing Observations and Structures</p>
<p>Student Resources:</p> <p>1 small plastic cup, 2 oz</p> <p>1 baby carrot*</p>	<p>Activity 4 (xx min)</p>	
<p>Assessment Opportunities:</p> <p>Activity 1</p>	<p>Activity 5 (xx min)</p>	

Questions?





Plan for the day: Part 2

- Part 1 Review
- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

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



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.

Amplify CURRICULUM CLASSWORK REPORTING PROGRAMS & APPS NATIONAL SCIENCE TEACHER

Science California > Animal and Plant Defenses

22 Lessons

Animal and Plant Defenses

Printable Teacher Guide

Unit Overview

Chapters

Printable Resources

Planning for the Unit

Teacher References

Offline Preparation

Unit Overview

What's in This Unit?

Earth is inhabited by a staggering variety of animals and plants, with incredible variation in size, shape, color and parts. How does each of these kinds of living things continue to survive? How do their offspring survive? What does their survival have to do with the nearly endless variation we observe among living things? All living things must meet their basic survival needs, including getting food, water, and oxygen, and avoiding being eaten by other animals. The body parts (structures) of animals and plants function to allow them to survive. Being able to meet their survival needs is critical to their survival. Understanding how these structures work is critical to their survival.

Read more >

Chapters

Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?

LESSON 1.1 Pre-Unit Assessment

LESSON 1.2 Tortoise Parts

LESSON 1.3 Animal and Plant Structures

Amplify Science Program Hub

Welcome Science Educators!

The Amplify Science Program Hub was created to provide you with resources, tools, and advice to support your implementation. Want a tour? Click [here!](#)

Remote and hybrid learning resources

Amplify Science@Home makes remote and hybrid learning easier.

Professional Learning Resources

Let's get started!

Additional Unit Materials

Additional resources to complement the units you're teaching.

Amplify CURRICULUM CLASSWORK REPORTING PROGRAMS & APPS NATIONAL SCIENCE TEACHER

Science

Science

Units

Program: 4th Grade Science Eng/Esp

Amplify Science

Units

Energy Conversions

22 Lessons

Vision and Light

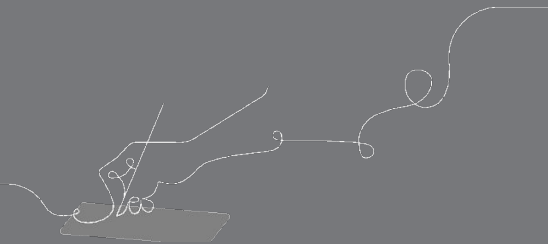
22 Lessons

Overarching goals

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

- ✓ Describe what teaching and learning look like in Amplify Science.
- ✓ Prepare to teach using Amplify Science resources.

e



Closing reflection

Based on our work today in Part 2, share:

Head: something you'll keep in mind

Heart: something you're feeling

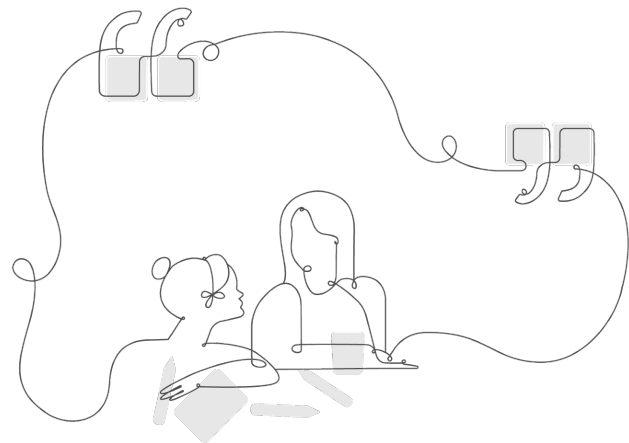
Feet: something you're planning to do

Onsite Upcoming Professional Development!

Part 3: Unit 1 - Supporting English Learners

- October 15th (Alta California ES, NW)
- October 29th (Ochoa Learning Center, East)

In this session, participants explore strategies to support English learners' ability to do, talk, read, write, visualize, and construct arguments like scientists. Participants will identify the supports and strategies embedded in Unit 1 by engaging in model activities followed by independent planning.



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!

Type:

Strengthen

Session title:

Unit Internalization / Guided Planning

(Part 2)

Professional Learning Specialist name:

Insert name

(insert email, if you would like)