Amplify Science

Standard Curriculum Relaunch / Guided Planning

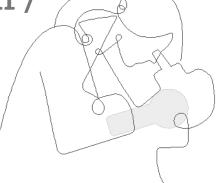
Grade 3, Unit 2: Inheritance and Traits

Part 1

School/District Name: LAUSD

Date: November, 2021

Presented by:

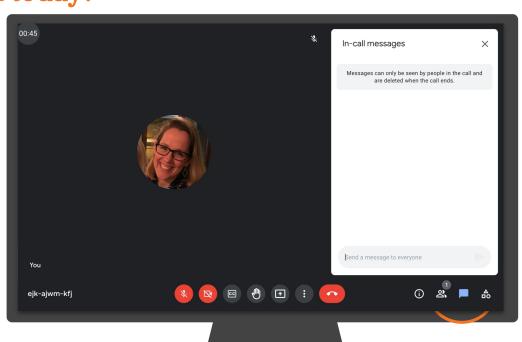




Ice Breaker!

Who do we have in the room today?

- Question 1: Which aspects
 of implementing the
 Standard Amplify Science
 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

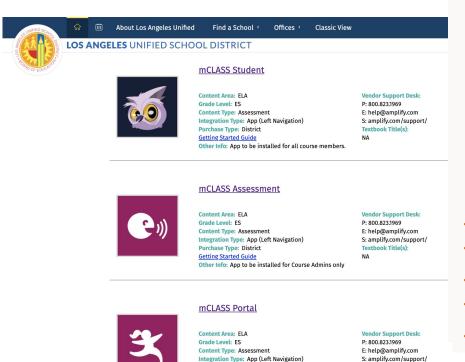
Norms: Establishing a culture of learners

- 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.

9



Last year's Amplify apps.

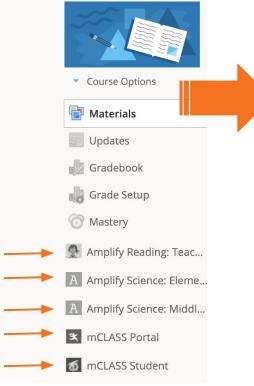


Purchase Type: District

Other Info: App to be installed for Course Admins only

Getting Started Guide

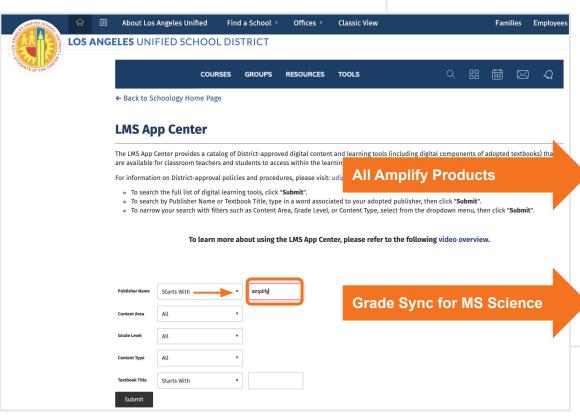
Textbook Title(s):







This year's app(s).



LMS App Center

Classic View

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, Schoology.

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.

←Search Again

Amplify

Fractions



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

Other Info: School licenses require
mCLASS
CKLA
Amplify Reading
Amplify Science

Vendor Support Desk: P: 800.823.1969 E: help@amplify.com

S: amplify.com/support/ Textbook Title(s): NA

Amplify Classwork



Content Area: ELA
Grade Level: ES
Content Type: Supplemental
Integration Type: App (Left Navigation)
Purchase Type: District and School
Getting Started Guide

Purchase Type: District and School
Getting Started Guide
Other Info: School licenses required. This app is for
teacher use only (install for Course Admins only)

Vendor Support Desk: P: 800.823.1969

E: help@amplify.com S: amplify.com/support/ Textbook Title(s):

NA

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MY ACCOUNT ADMIN REPORTS

LAUNCH PROGRAMS Ø TERIN NGO



i 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



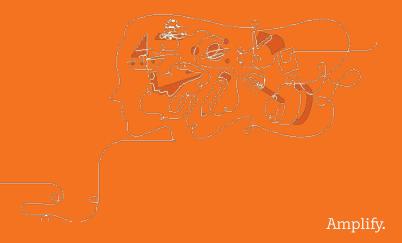


Join Amplify Science Schoology Group

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

Part 1:

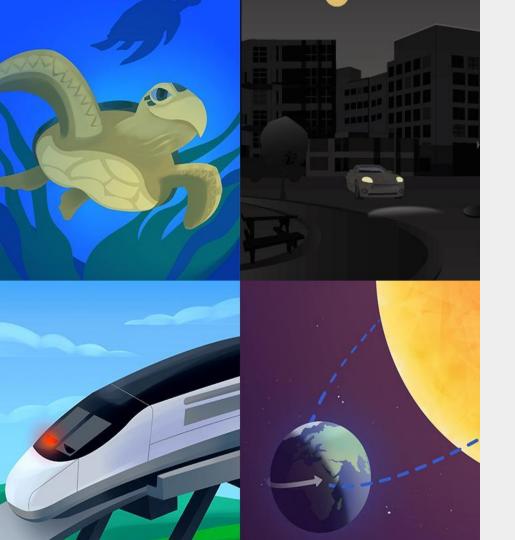
Amplify Science Standard Curriculum Relaunch



Overarching goals

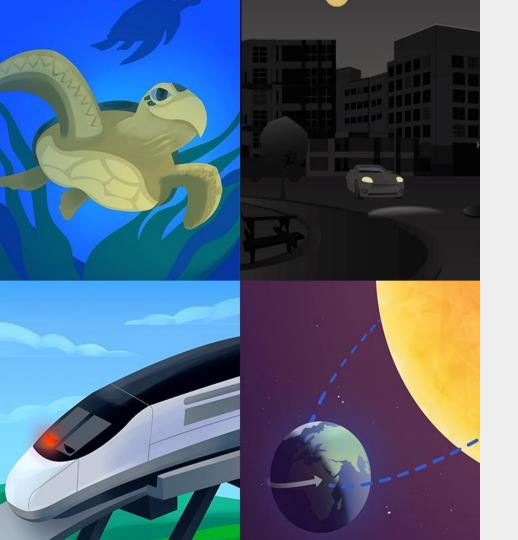
By the end of this workshop, you will be able to:

- 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

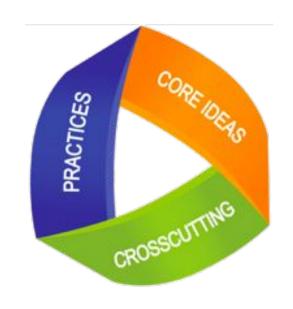
- Introduction and Framing
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- Program Essentials
- Closing



+ 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

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 2-5 are 60 minutes long

Year at a Glance: Grade 3







Unit type: Modeling

Student role: Engineers



Inheritance and Traits

Domain: Life Science



Student role: Wildlife biologists



Environments and Survival

Domain: Life Science

Unit type: Engineering Design

Student role:

Biomimicry engineers



Weather and Climate

Domain: Earth and Space Science

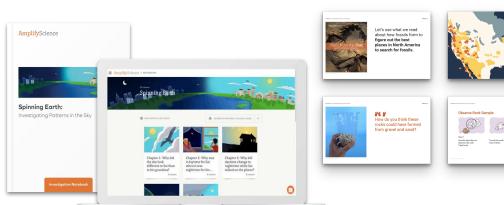
Unit type: Argumentation

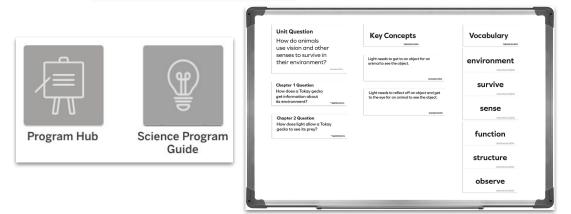
Student role: Meteorologists

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



K-5 Program components

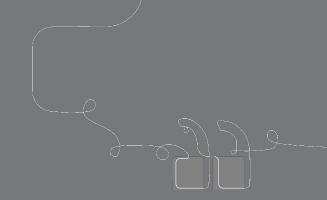
Classroom kits

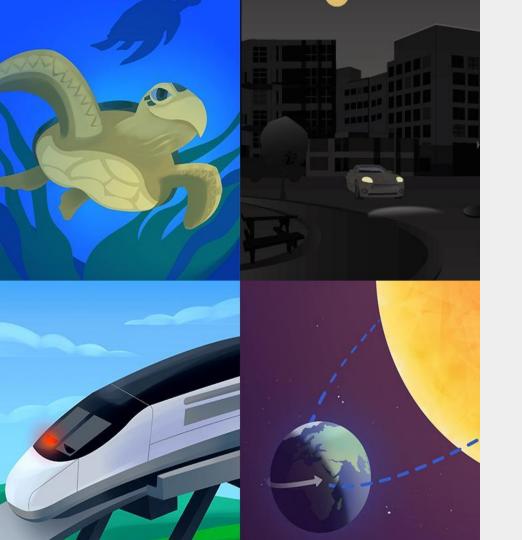


Classroom kits

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.

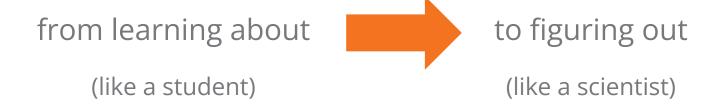
Next Generation Science Standards

How might learning be different?

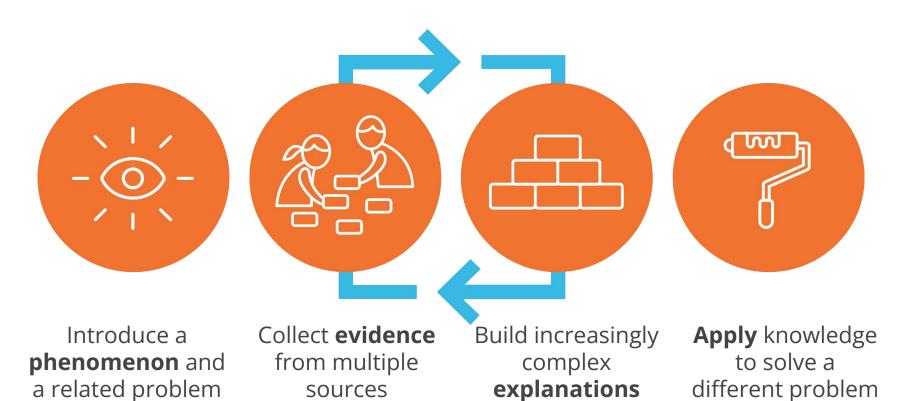
Topic-based	Phenomenon-based
Chemical reactions	There's a reddish-brown substance in a town's tap water.
Electric circuits	A flashlight won't turn on, even though it used to work.
Natural selection	A population of newts has become more poisonous over time.

Comparing topics and phenomena

A shift in science instruction



Amplify Science Approach

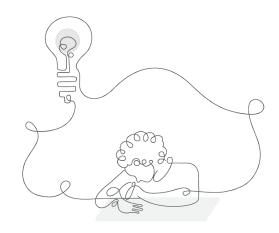


Previewing the unit

Introducing the phenomenon

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

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



Lesson 1.1: Pre-Unit Assessment

Activity 1



We're about to begin a new science unit.

You will take on the role of wildlife biologists. You will investigate many of the things that scientists like wildlife biologists do.

Lesson 1.1: Pre-Unit Assessment









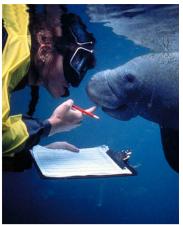
Take a moment to look at these pictures of wildlife biologists.



What do you think wildlife biologists study?

Lesson 1.1: Pre-Unit Assessment









Let's look at more pictures of wildlife biologists.



Where do you think wildlife biologists work?

Lesson 1.1: Pre-Unit Assessment

Activity 1



As wildlife biologists, you will study **wolves** in Graystone National Park.

There is a mystery about one particular wolf that you will work to solve.

Amplify Science

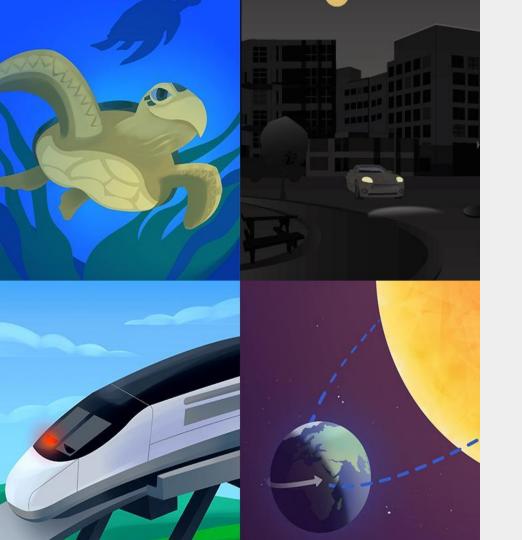
Anchoring phenomenon

- 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

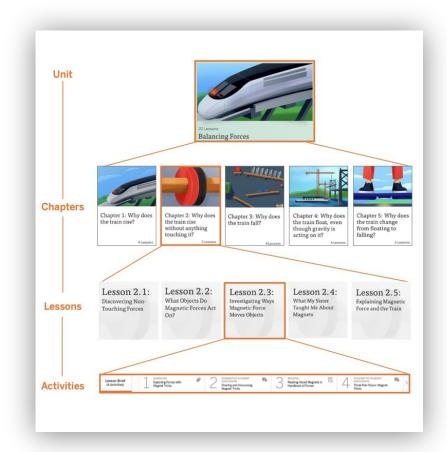
Unit

Chapter

Lesson

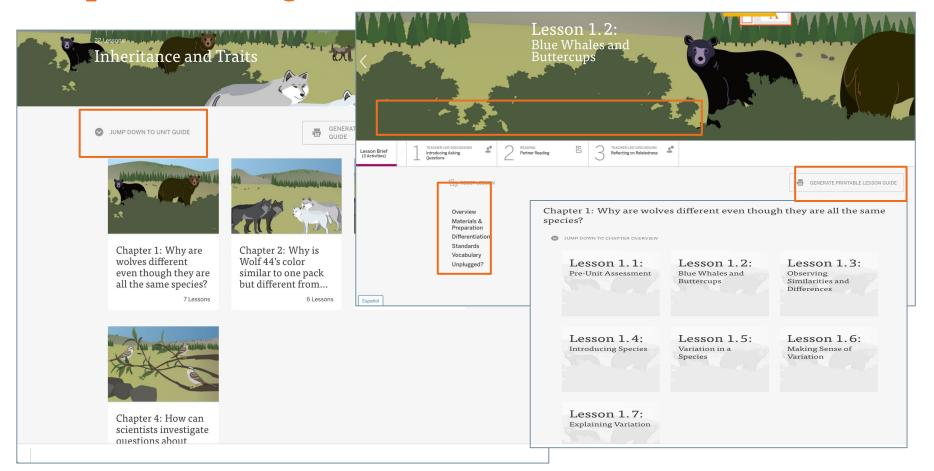
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Activity



Let's Go Live! Lesson 1.2: Blue Whales and Buttercups inheritance and Traits GENERATE PRIN READING Partner Reading TEACHER-LED DISCUSSION Reflecting on Relatedness JUMP DOWN TO UNIT GUIDE Lesson Brief (3 Activities) Introducing Asking GUIDE GENERATE PRINTABLE LESSON GUIDE ES RESET LESSON **Digital Resources** Overview Overview Materials & Preparation Through reading an informational text, students continue to explore Classroom Slides 1.2 | PowerPoint Differentiation Chapter 1: Why are wolves different even though they are all the same Standards species? Vocabulary Unplugged? Chapter 1: Why are Chapter 2: Why is Cha JUMP DOWN TO CHAPTER OVERVIEW wolves different Wo Wolf 44's color even though they are similar to one pack Bis Lesson 1.2: Lesson 1.3: Lesson 1.1: all the same species? but different from... Pre-Unit Assessment Blue Whales and Observing Buttercups Similarities and 7 Lessons 6 Lessons 6 Lessons Differences Lesson 1.4: Lesson 1.5: Lesson 1.6: **Introducing Species** Variation in a Making Sense of Variation Species Chapter 4: How can scientists investigate Lesson 1.7: questions about **Explaining Variation**

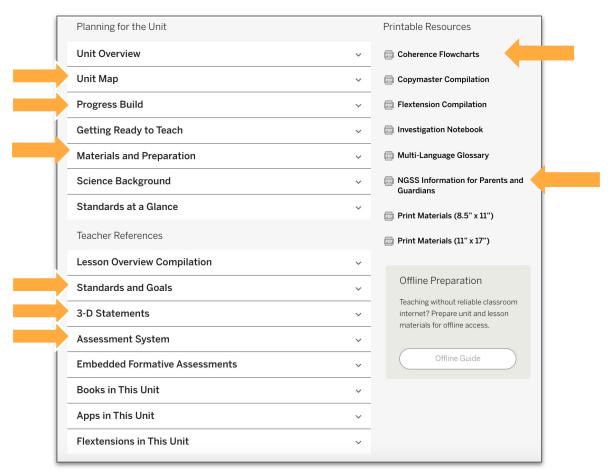
Explore the Program Essentials



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*

Key Unit Guide Documents for Planning



Inheritance and Traits		
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:	
Unit Question:	Relationship between the Unit Phenomenon and Unit Question:	
By the end of the unit, students figure out		
How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?		

Unit Title: Inheritance and Traits	
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:
Suggested resource: • Unit Overview / Unit Map	Relationship between the Unit Phenomenon and Unit Question:
How do students engage with three-dimensional learning to figure out the p	henomenon/real-world problem in your unit?

Unit Title: Inheritance and Traits 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 Student Role: What is the origin of the traits of Wolf 44 - a wolf that appears to be different from the rest of Wildlife Biologists the pack? Unit Ouestion: Relationship between the Unit Phenomenon and Unit **Ouestion: Suggested resource:** • Unit Overview / Unit Map How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?

Unit Title: Inheritance and Traits Overview [Resources: Unit Overview, Teacher's Guide, Coherence Flowchart, Unit Map, 3-D Statements] Student Role: What is the phenomenon/real-world problem students are investigating in vour unit? What is the origin of the traits of Wolf 44 - a Wildlife Biologists wolf that appears to be different from the rest of the pack? Unit Question: Relationship between the Unit Phenomenon and Unit Ouestion: **Suggested resource:** Lesson Overview Compilation / non/real-world problem in your unit? **Unit Overview**

Unit Title:

Inheritance and Traits

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?

What is the origin of the traits of Wolf 44 - a wolf that appears to be different from the rest of the pack?

Student Role:

Wildlife Biologists

Unit Question:

How do organisms get their traits?

Relationship between the Unit Phenomenon and Unit OBYTEXPLOYING SIMILARITIES AND VARIATIONS IN the traits of many different organisms, students are able to draw conclusions of how Wolf 44 got its traits,

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

Suggested resource:

Lesson Overview
 Compilation/ Unit Overview

phenomenon/real-world problem in your unit?

Unit Title:

Inheritance and Traits

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?

What is the origin of the traits of Wolf 44 - a wolf that appears to be different from the rest of the pack?

Unit Question:

How do organisms get their traits?

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

Wildlife Biologists

Student Role:

Relationship between the Unit Phenomenon and Unit

By exploring similarities and variations in the traits of many different organisms, students are able to draw conclusions of how VVolf 44 got its traits,

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

Suggested resource:

Unit Map

Try to summarize what the students figure out at the end of the unit.

Unit Title:

Inheritance and Traits

Overview

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

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Unit Ouestion:

How do organisms get their traits?

Student Role:

Wildlife Biologists

Relationship between the Unit Phenomenon and Unit By exploring similarities and variations in the traits of many different organisms, students are able to draw conclusions of how Wolf 44 got its traits.

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

Organisms get their traits from parents. Traits can also be determined by the environment. Sometimes traits can be determined by both. Inheritance and the environment

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

Suggested resource:

Unit Map

Try to summarize what the students figure out at the end of the unit.

Unit Title:
Inheritance and Traits

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

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What is the origin of the traits of Wolf 44 - a wolf that appears to be different from the rest of the pack?

Wildlife Biologists

Student Role:

Unit Question:

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Inheritance and Traits

Overview

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

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Wildlife Biologists

Student Role:

Unit Question:

How do

By the end of th

Organism

environm

Suggested resource:

3D Statements

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

Students investigate the variation between similar organisms and how traits that depict parents and offspring are determined.

Relationship between the Unit Phenomenon and Unit

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Organisms get their traits from parents. Traits can also be determined by the environment. Sometimes traits can be determined by both. Inheritance and the environment.

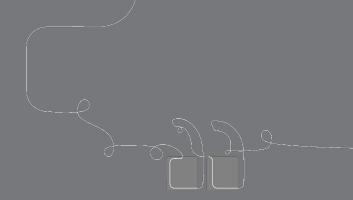
How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?

Students investigate the variation between similar organisms and how traits that depict parents and offspring are determined.

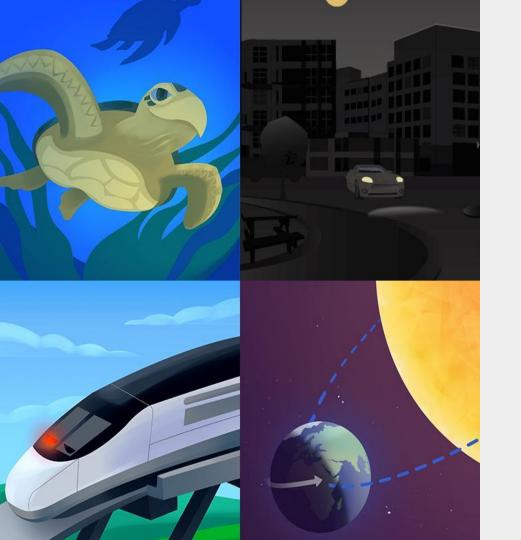
Navigation Temperature Check

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

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







Caregivers

LAUSD Micrositehttps://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

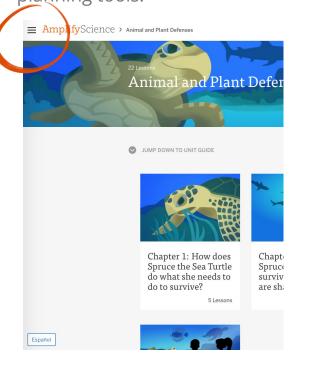
Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



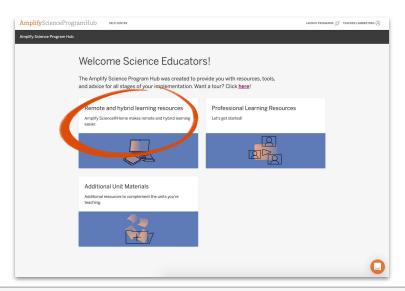


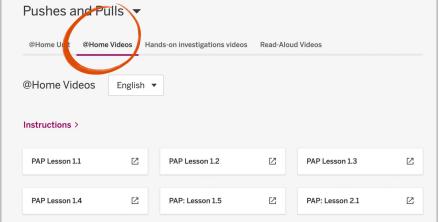
Program Hub

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! surveymonkey.com/r/InitialAmplifySciPL

Presenter name:

Workshop title:

Part 1: Relaunching the Standard Curriculum

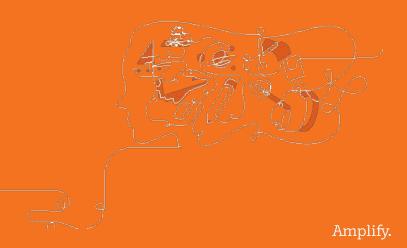
Part 2: Guided Planning (Planning for a Lesson)

Modality:

Remote

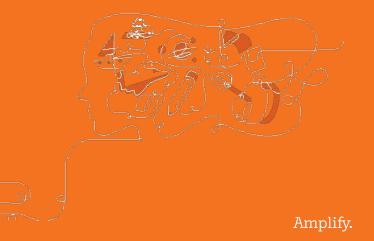


End of Part 1



Break

10:00 - 10:30



Amplify Science

Standard Curriculum Relaunch / Guided Planning

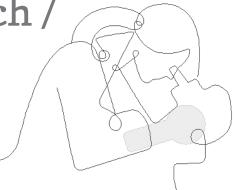
Grade 3: Inheritance and Traits

Part 2

School/District Name: LAUSD

Date:,

Presented by:



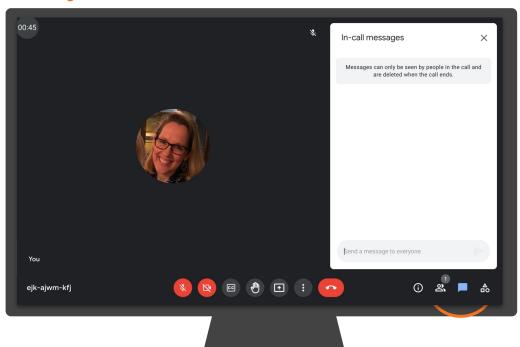


PLPG

Ice Breaker!

Who do we have in the room today?

 Question: Now that we have gone through Part 1, which aspects of Amplify Science do you feel more comfortable with or have a greater understanding of?



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.

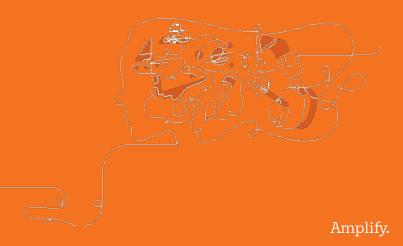
We share your goal of inspiring all students to think deeply, creatively, and for themselves.

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.

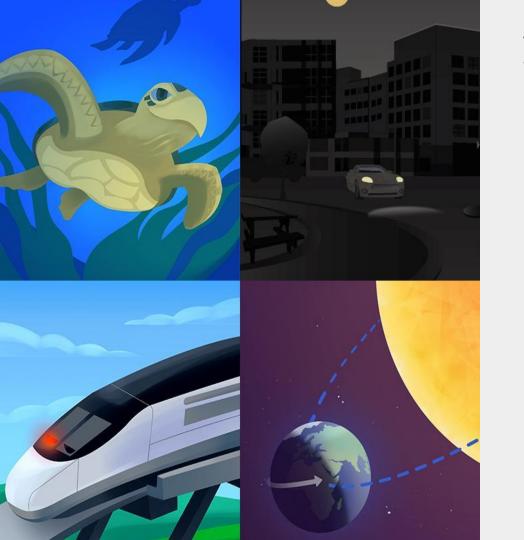
Part 2: Guided Planning (for a lesson)



Overarching goals

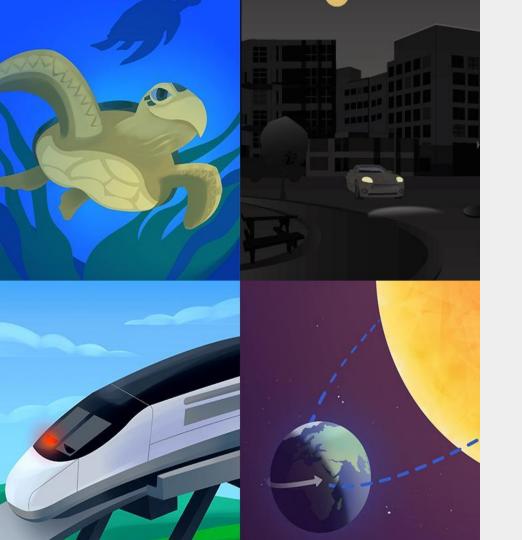
By the end of this workshop, you will be able to:

- Navigate the Amplify Science curriculum.
- Describe what teaching and learning look like in Amplify Science.
- Apply the program essentials to prepare to teach.



Plan for the day: Part 2

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

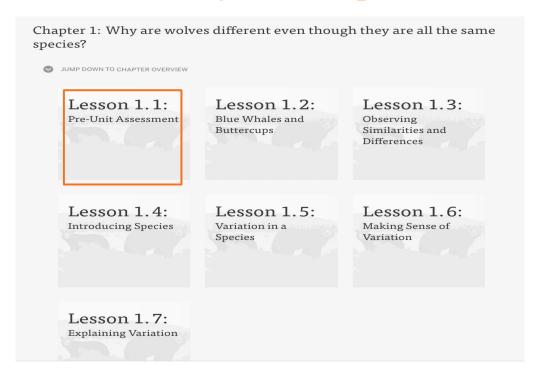


Plan for the day: Part 2

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

Beginning the Unit

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

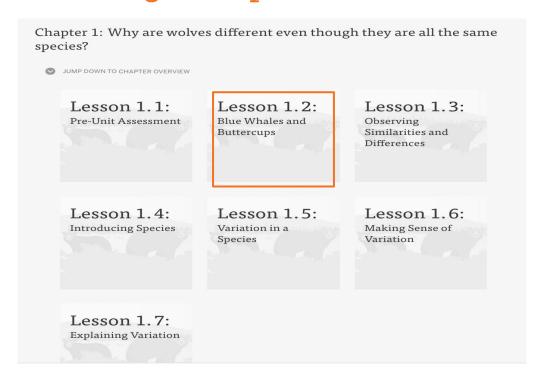


Inheritance and Traits Family Connection



Beginning the Unit

We will be looking at Chapter 1, Lesson 2 for our model lesson.

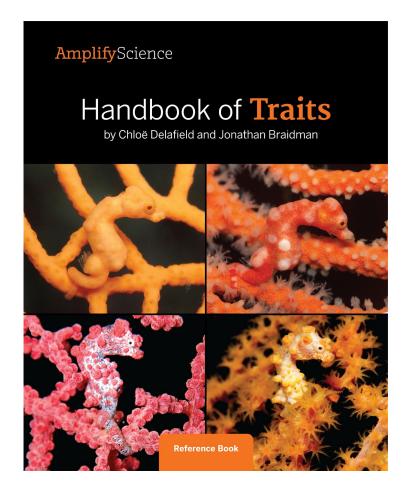






Activity 1 Introducing Asking Questions





We read about a lot of different organisms in *Handbook of Traits*.



What **new ideas** do you have **about organisms** based on reading the book?

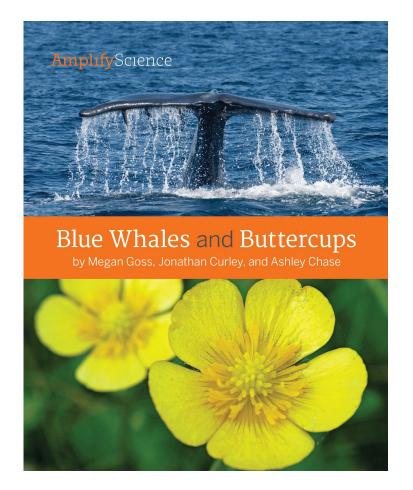
Remember that we are investigating this question:

What are some ways that organisms can be similar or different?

Vocabulary

organism

a living thing, such as a plant or an animal



The book title names two organisms: blue whales and buttercups.



What do you know about these organisms?

How are they similar or different?

When you wonder about something, you can ask questions.

Readers ask themselves questions to make sure they understand the text and to wonder about the ideas they are reading about.

Asking Questions

Reading	
• Is the question on topic?	
 Is there information in the book to help me answer the question? 	
 What else could I do to investigate the question? 	

The Asking Questions chart will help you ask questions as you investigate.

Let's look at the three questions on the chart together.

Asking Questions

Reading Is the question on topic? Is there information in the book to help me answer the question? · What else could I do to investigate the question?

The questions we ask should be **on topic**.

Remember, we are investigating organisms, so the questions we ask during reading should be related to organisms.

Asking Questions

Reading • Is the question on topic? Ts there information in the book to help me answer the question? · What else could I do to investigate the question?

Asking questions about what you are reading and then finding information in the book that helps answer those questions is one good way to learn new ideas.

Asking Questions

Reading • Is the question on topic? · Is there information in the book to help me answer the question? What else could I do to investigate the question?

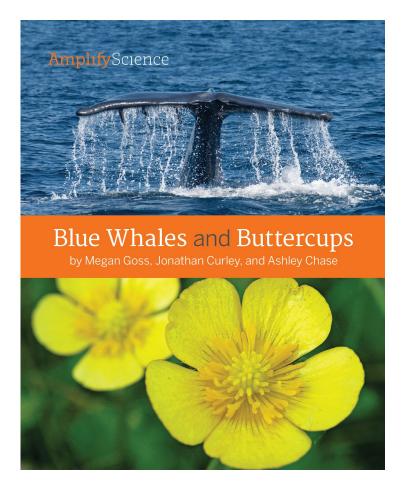
Today we are reading, but scientists also investigate in other ways.



What are some other ways to investigate questions besides finding information in a book?

Activity 2 Partner Reading





We will practice **asking questions** as we read Blue Whales and Buttercups.

Name:	Date:	

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
	Page:	
	Page:	
	Page:	

Turn to page 5 in your notebooks.

As you read, you will ask questions and record your questions.

Let's try one example together.

How Organisms Are Different

There are so many different kinds of animals, plants, and other **organisms** on Earth. There are polar bears, redwood trees, and nine-armed sea stars. Scientists put organisms into groups called **species**.

Earth has more species than you might expect. Even types of organisms that might seem like one species are often divided into different species. For example, there are actually many different species of whales. There are blue whales, humpback whales, gray whales, and more. Millions of different species of organisms live on Earth.











Organisms can have very different **traits**. A trait is anything you can **observe** about an organism, including the way it looks or acts. Some animals have fur, and others have feathers. Some plants have flowers, and others do not. Some animals protect themselves by running fast, and others protect themselves by biting. We call these differences **variation**. Let's look at some examples of variation.

Name:	Date:

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
Do organisms that look similar have variation?	Page:	
	Page:	
	Page:	

What I read on page 5 makes me wonder: Do organisms that look similar have variation?

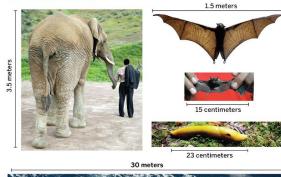
Let's **record our question** on the notebook page.

Organisms Grow to Different Sizes

You can find lots of variation in the sizes of different organisms. **Compared** to people, elephants are huge. Still, it would take about 20 big elephants to match the weight of just one blue whale. The biggest trees weigh more than 40 blue whales!

You can find huge size variation even between organisms in similar species. For example, the largest species of bat is about 10 times bigger than the smallest species of bat.

1 meter = 100 centimeters





Blue whales are the largest animals in the world.



This is a close-up

of the sharp point

of a pin. Imagine

how tiny the mite

sitting on it is!







These are tiny plantlike organisms that float in the ocean. They are too small to see without a microscope.



This tree is one of the largest living things on Earth.

Difference in size is not the only kind of variation among organisms on Earth. . . .

6 7

Name:	Date:

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- 2. If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
Do organisms that look similar have variation?	Page: 6 Bats look similar but have variation. The bats are different sizes.	
	Page:	
	Page:	

I read on page 6 that bats can be very different sizes. Bats look similar, but they have variation.

That helps answer our question. Let's record the page where we found it.

Name:	Date:	

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- 2. If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
Do organisms that look similar have variation?	Page: 6 Bats look similar but have variation. The bats are different sizes.	
	Page:	
	Page:	

Inheritance and Traits—Lesson 1.2

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What are other ways we could investigate this question?

Organisms Get Around in Different Ways All animals move, but different animals often move very differently. Animals may walk, run, fly, swim, or slide. Plants don't move around the way animals do, but their seeds get from place to place in different ways. We can see lots of variation in the many ways that different organisms get around. olumn 1. record your nber from the cuss these ideas vour questions. ner ways to estigate my Inheritance and Traits—Lesson 1.2

Turn to page 8 of *Blue Whales and Buttercups*.



As you **read** the rest of the book together, **record your own questions and answers** in your notebooks.

Name:	Date:	

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- 2. If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
	Page:	
	Page:	
	Page:	



What **questions** did you have as you read?

Where did you find information to help answer your questions?

Name:	Date:	

Asking Questions When Reading: Blue Whales and Buttercups

Directions:

- 1. As you read the book, record questions you have in Column 1.
- 2. If you find the answers to your questions as you read, record your answers in Column 2. Be sure to include the page number from the book where you found the information so you can discuss these ideas with the class.
- 3. In Column 3, record other ways you could investigate your questions.

Question	Information from the book that helps answer my question	Other ways to investigate my question
	Page:	
	Page:	
	Page:	

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What are some other ways to investigate the questions we had as we read?



Activity 3
Reflecting on Relatedness



Scientists who study organisms often ask: Which other organisms is this organism closely related to?

Scientists get some of their ideas by **observing and comparing the traits** of the organisms.

How Organisms Are Similar

Different species are **related** to one another. Scientists who study a species often ask: Which other species is this species closely related to? To show how closely related different species are, scientists use many kinds of **evidence**. They get some of their evidence by observing the traits of species. They compare those traits. When two species have similar traits, it may be evidence that they are related.

Still, different species may have similar traits without being closely related. For example, a red bird and a red flower both have the trait of being red. This does not mean that they are closely related! Scientists look at lots of evidence before they say which species are closely related.



wolf



There is a lot of evidence that these animals are all closely related to one another. Can you observe any traits they have in common?

fox

wild dog

Let's examine the photos and the caption on page 14 of the book.



Why might scientists think these organisms are closely related?



Look at the two organisms below. Which one is more closely related to the red bird above?





Scientists put related organisms into groups. One group is plants. Plants make their own food using sunlight. Another group is animals. Animals eat plants, other animals, or both plants and animals. These very big groups are made up of smaller groups. One smaller group is all the animals that have four limbs. (Limbs are legs, arms, and wings.)

Look at the photos and read the caption on page 15.



Which is the red bird more closely related to: the red flower or the yellow bird? Why do you think so?

All Organisms Are Related

There is one way that all organisms are the same. They are all made of tiny parts called **cells**. Some organisms have only one cell. Other organisms are made of many cells.

Whether they are big or small, plant or animal, all living things are made of tiny cells. Cells are the basic parts that make up organisms.



This whole living thing is one tiny cell! It is much too small to see without a microscope.



This is a buttercup plant shown under a microscope. You can see the tiny cells that make up the plant.

Turn to page 22 of the book.



Take a moment to **reread this page** with your
partner.

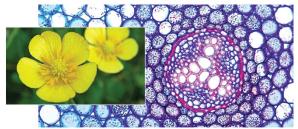
All Organisms Are Related

There is one way that all organisms are the same. They are all made of tiny parts called **cells**. Some organisms have only one cell. Other organisms are made of many cells.

Whether they are big or small, plant or animal, all living things are made of tiny cells. Cells are the basic parts that make up organisms.



This whole living thing is one tiny cell! It is much too small to see without a microscope.



This is a buttercup plant shown under a microscope. You can see the tiny cells that make up the plant.



What did you find out about **all organisms** from reading this page?







All organisms are related, but some are more closely related than others.

Organisms that have more similarities are more closely related.





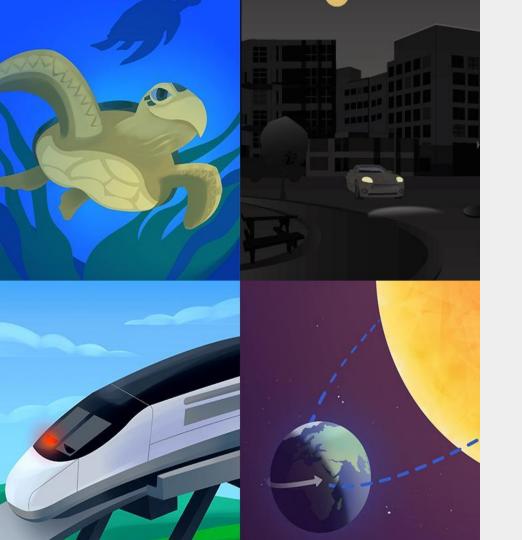
Think of an organism that is **closely related** to a horse.

Explain why you think it's closely related.

End of Lesson



Amplify.



Plan for the day: Part 2

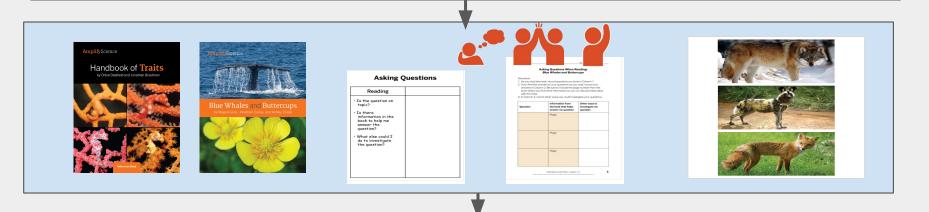
- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

Gathering evidence

Inheritance and Traits, 1.2

Why are the wolves different even though they are all from the same species?

What are some ways that organisms can be similar or different?



What have students figured out so far?

Evidence sources work together

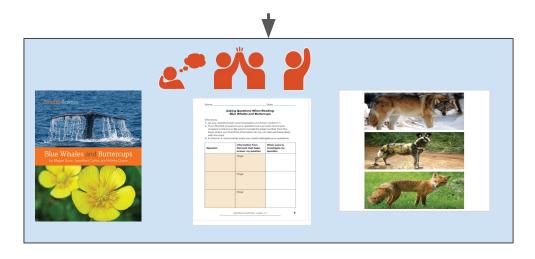
Investigating and discussing observations

How do these activities

work together to

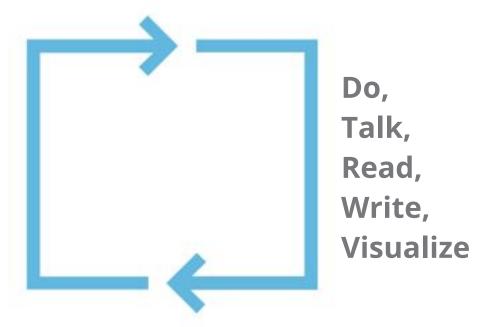
support understanding of
how different substances
are different?

Investigation Question: What are some ways that organisms can be similar or different?



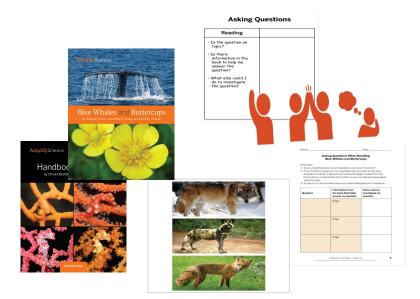
Multimodal learning

Gathering evidence over multiple lessons



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

Phenomenon (Chapter Question) **Investigation Question** Multiple sources of evidence **Key Concepts**

Chapter Question: Why are the wolves different even though they are all from the same species?

Investigation Question: What are some ways that organisms can be similar or different?



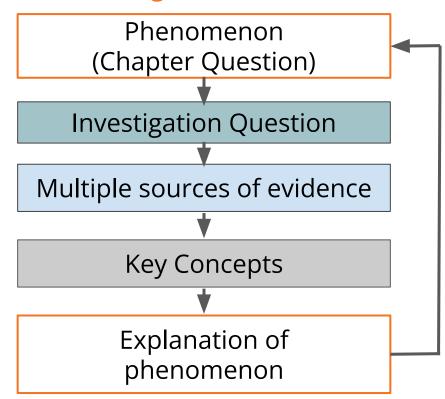




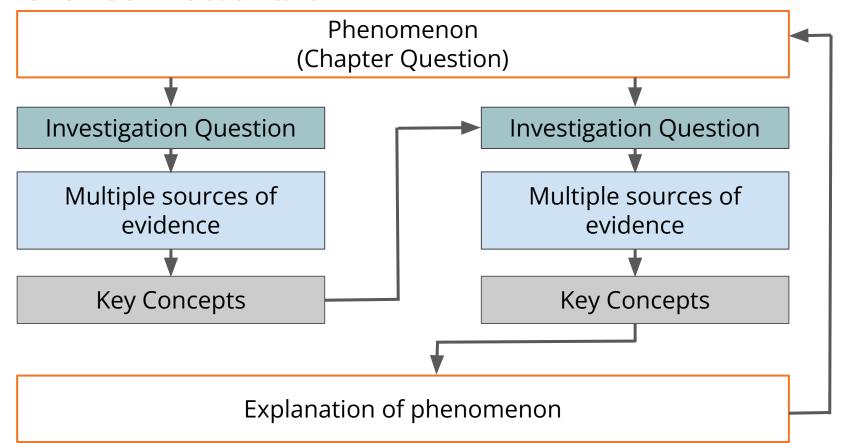
Students figure out: Organisms have similar traits

Coherence Flowchart

A diagram of student learning



Coherence Flowchart



Unit Anchor Phenomenon

Problem students work to solve

Inheritance and Traits: Variation in Wolves

Wolf 44 appears different from the rest of the wolves in its pack What is the origin of the traits of Wolf 44—a wolf that appears different from the rest of its pack?

Chapter-level Anchor Phenomenon

Chapter 1 Question

Investigative Phenomena

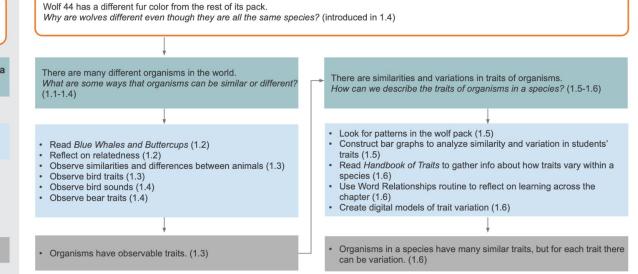
Investigation Questions

Evidence sources and reflection opportunities

Key concepts

Application of key concepts to the problem

Explanation that students can make to answer the Chapter 1 Question



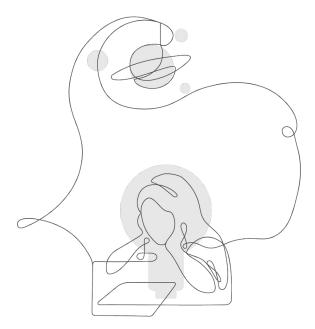
- Review wolf data and reflect on variation of traits within the wolf pack (1.7) • Write class explanation to answer the Chapter 1 Question (1.7)

Even though all wolves are the same species, some wolves are different from others due to variation of traits within a species. This means that even though wolves can have similarities in their traits, there can also be variations in each trait. For example, wolves have different colors of fur: some wolves have a trait for gray fur, others have a trait for black fur.

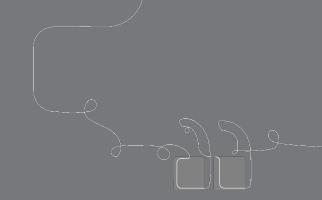
Explore the Coherence Flowchart

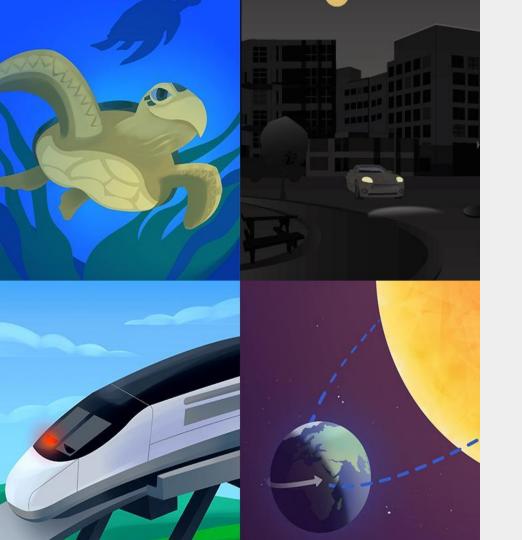
Skim the Chapter 1 Coherence Flowchart of your first unit.

How can the Coherence Flowchart serve you as a planning tool as you begin teaching Amplify Science?



Questions?

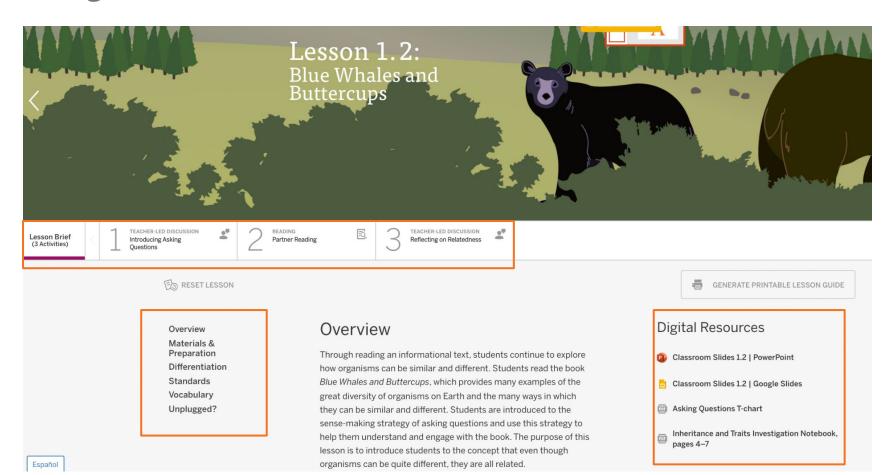




Plan for the day: Part 2

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

Navigate to the Lesson Brief



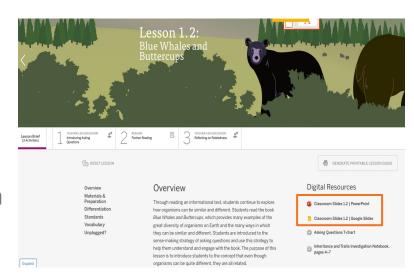
Preparing to teach

Classroom Slides

- 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:

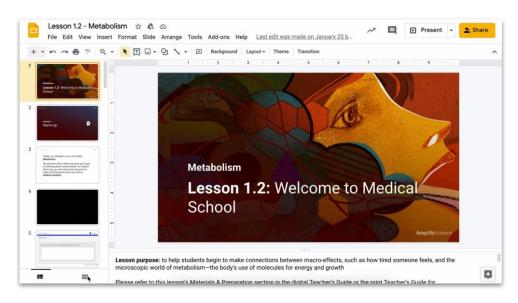
 What features of the Classroom Slides will support you in teaching this lesson?



Using Classroom Slides as a planning tool

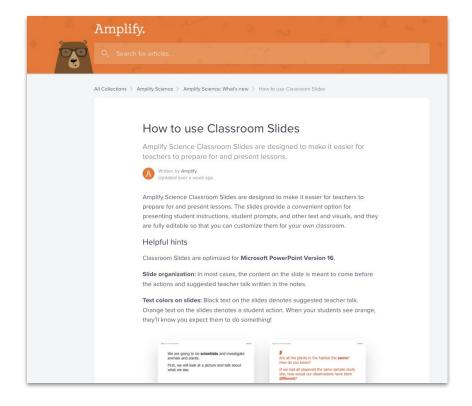
Teacher tip: Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

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



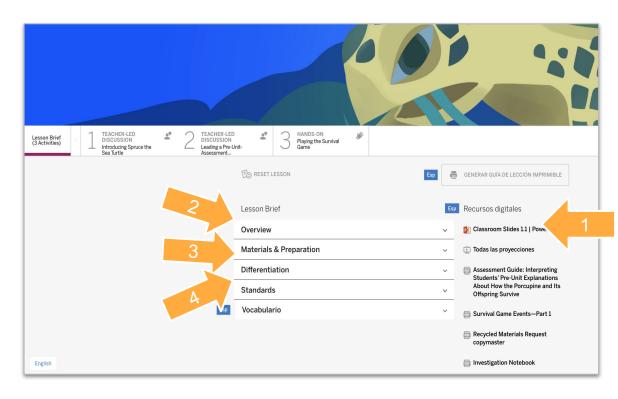
Teaching with Classroom Slides

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.



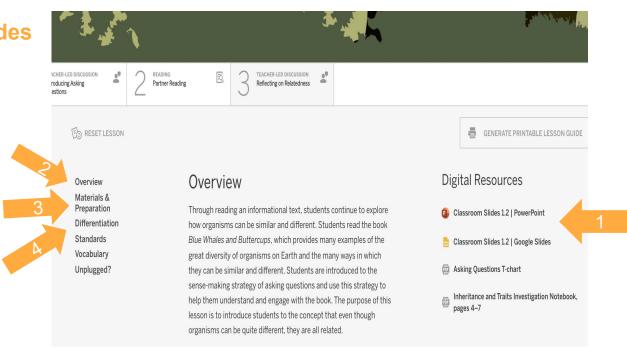
4 Steps for Starting Your Lesson

- Download Classroom Slides and review them.
- Read the Overview.
- 3. Review the Materials & Preparation document.
- 4. Read the **Differentiation** document.



4 Steps for Starting Your Lesson

- 1. Download Classroom Slides and review them.
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- 4. Read the **Differentiation** document.



Lesson	Activity Overview	
What is the purpose of this lesson? Access prior knowledge about rocks. Make observations of rocks.	Activity 1 (##min)	
What will students learn?	Activity 2 (##min)	
3-D Statement (identify SEP, CCC, and DCI):	Activity 3 (##min)	
Student Resources:	Activity 4 (##min)	
Assessment Opportunities:	Activity 5 (##min)	

Lesson <u>1.2</u>	Activity Overview	
What is the purpose of this lesson? The purpose of this lesson is to introduce students to the concept that even though organisms can be quite different, they are all related.	Activity 1 (15 min)	Introducing Asking Questions
What will students learn? An organism is a living thing, such as a plant or an animal. All organisms are related. Scientists closely observe the similarities and differences between different organisms to see how closely related they may be. Asking questions during reading helps readers better understand the ideas in the text. Science findings are based on recognizing patterns.mScience findings are limited to what can be answered with evidence	Activity 2 (30 min)	Partner Reading
3-D Statement (identify SEP, CCC, and DCI): Students obtain information by reading the book <i>Blue Whales and Buttercups</i> And ask questions about similarities and differences. (Patterns).	Activity 3 (15 min)	Reflecting on Relatedness
Student Resources: For each pair of students: 1 copy of Blue Whales and Buttercups Inheritance and Traits Investigation Notebook (pages 4–7)	Activity 4 (# min)	
Assessment Opportunities: On-the-Fly, Activity 2 of the University of California. All rights reserved.	Activity 5 (##min)	

Remember to plan for...

Student work:

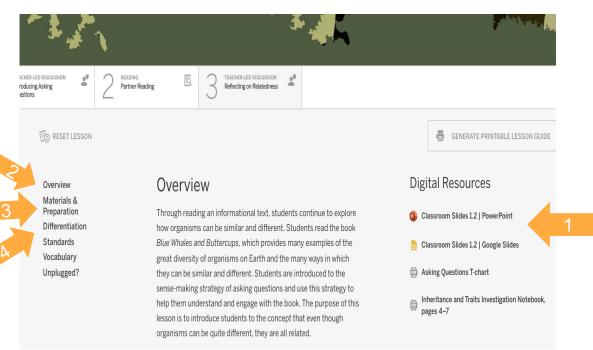
How do you plan to collect evidence of student work?

Differentiation:

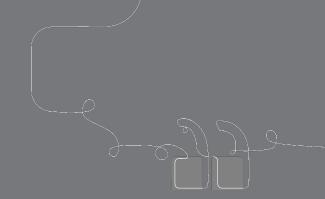
 How do you plan to differentiate the lesson for diverse learners?

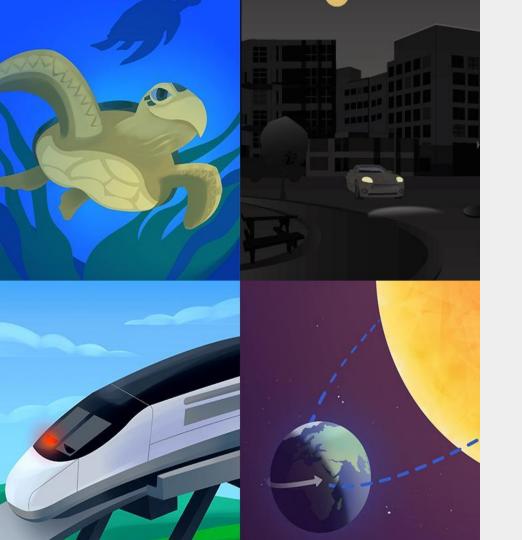
4 Steps for Starting Your Lesson

- 1. Download Classroom Slides and review them.
- 2. Read the Overview.
- Review the Materials & Preparation document.
- 4. Read the **Differentiation** document.
- 5. If you have time, navigate to Lesson 1.3 and repeat steps 1-4.



Questions?





Plan for the day: Part 2

- 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







Caregivers

LAUSD Micrositehttps://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

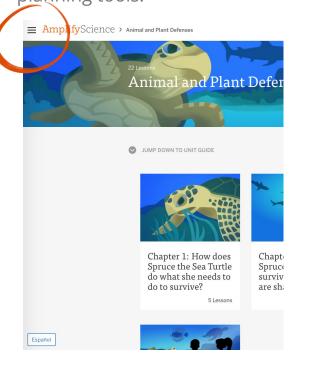
Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



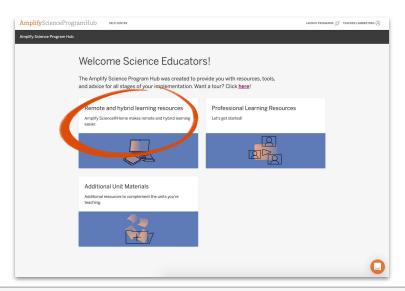


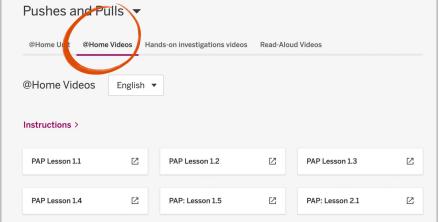
Program Hub

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









Overarching goals

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

- Navigate the Amplify Science curriculum.
- Describe what teaching and learning look like in Amplify Science.
- Apply the program essentials to prepare to teach.

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

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! surveymonkey.com/r/InitialAmplifySciPL

Presenter name:

Workshop title:

Part 1: Relaunching the Standard Curriculum

Part 2: Guided Planning (Planning for a Lesson)

Modality:

Remote

