

# New York City Resources Site

<https://amplify.com/amplify-science-nyc-doe-resources/>



Amplify.

## Amplify Science Resources for NYC (K-5)

Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades K-5.

UPDATE: Summer 2020

Introduction

Getting started resources

Planning and implementation resources

Admin resources

Parent resources

COVID-19 Remote learning resources 2020

Professional learning resources

Questions

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**Account Access:** It's an exciting time for Amplify Science! We have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS. You will need to use your regular credentials to login and begin your summer planning.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

**Upcoming PL Webinars:** Join us for our Summer 2020 Professional Learning opportunities in July for NEW teachers and administrators and August for RETURNING teachers and administrators. Links to register coming soon!

## Site Resources

- Login information
- Pacing guides
- Getting started guide
- NYC Companion Lessons
- Resources from PD sessions
- And much more!

# Welcome to Amplify Science!

Do Now: Please log in to your account

Welcome to **Amplify**

**G** Log In with Google

**C** Log In with Clever

**A.** Log In with Amplify

 SSO login

If you have your login information please use that. If not, please use the NYC DOE Review site, as indicated on the right.

Amplify.

<https://amplify.com/amplify-science-nyc-doe-review/>

Students take on the role of a scientist or engineer every day.

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Amplify Science is a new blended curriculum developed to align to the New York City PK–8 Science Scope and Sequence 2018 that meets the New York State Science Learning Standards.

The middle school grades of our K–8 curriculum recently received the only all-green rating by EdReports.



Begin your review

What sets Amplify Science apart?

The Amplify Science approach

Components overview

Review grades K–5

Begin your review

**Click here** 

Grades K–5

Grades 6–8

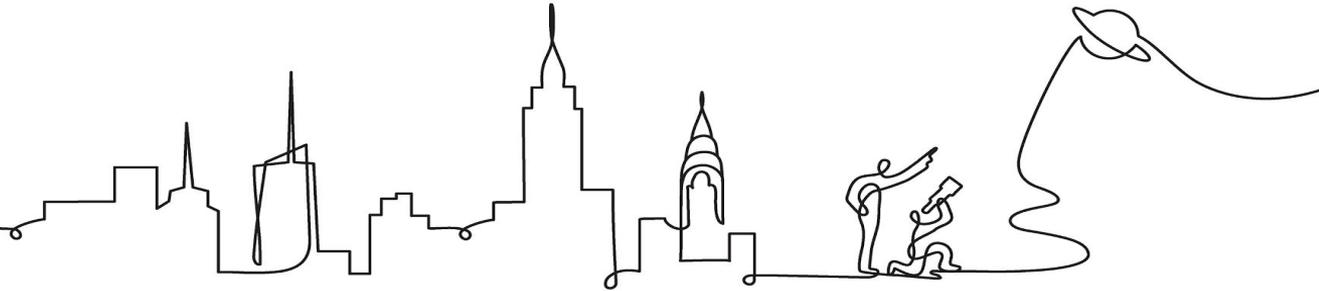
# Amplify Science

New York City

## Introduction to Amplify Science Grades 3-5

Date: **XX**

Presented by **XX**



# Introductions!

## Who do we have in the room today?

- **Question 1:** Which aspects of adopting a new science curriculum are you most excited or hopeful about?
- **Question 2:** What about adopting a new science curriculum to do you feel most hesitant about?



# Remote Professional Learning Norms



Take some time to orient yourself to the platform

- *“Where’s the chat box? What are these squares at the top of my screen?, where’s the mute button?”*



Mute your microphone to reduce background noise unless sharing with the group



The chat box is available for posting questions or responses to during the training



Make sure you have a note-catcher present



Engage at your comfort level - chat, ask questions, discuss, share!

# Use two windows for today's webinar

The image illustrates how to use two browser windows for a webinar. It shows two windows side-by-side:

- Window #1:** A Google Meet page titled "Meet - Etiwanda Grade 7 N". The URL is `meet.google.com/hcs-dxpk-wrm?aut...`. It shows a meeting interface with a video feed area and a toolbar.
- Window #2:** An Amplify Science lesson page titled "Lesson 1.2: Using Fossils to Understand Earth". The URL is `apps.learning.amplify.com/curriculu...`. The page features a large illustration of a dinosaur in a prehistoric landscape. Below the illustration, there are sections for "Lesson Brief (4 Activities)", "WARM-UP Warm-Up", "TEACHER-LED DISCUSSION Why Geologists Value Fossils", and "TEACHER-LED DISCUSSION Introducing Mesos". There are also buttons for "RESET LESSON" and "GENERATE PRINTABLE LESSON".

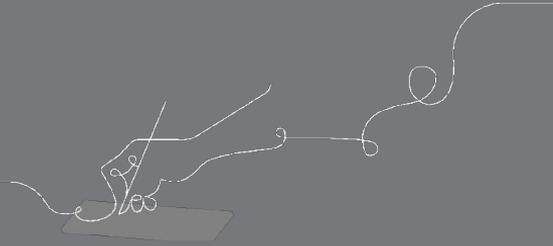
An inset in the top left shows a close-up of a window control button (a red, yellow, and green circle) with an orange arrow pointing to it, indicating how to click the button to maximize or manage the window.

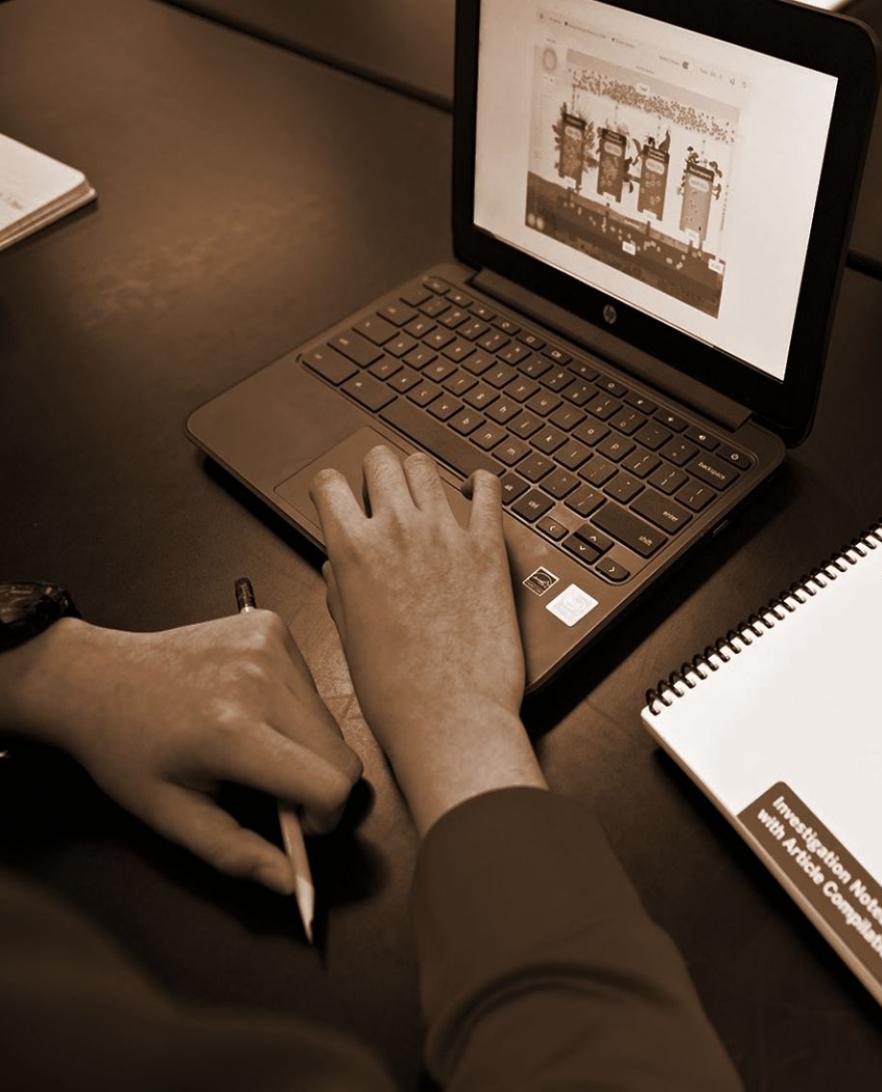
# Overarching goals

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

- Navigate the digital components of the Amplify Science curriculum.
- Understand the program's phenomenon-based approach.
- Apply the program essentials to prepare to teach in a remote & hybrid instructional context.

e



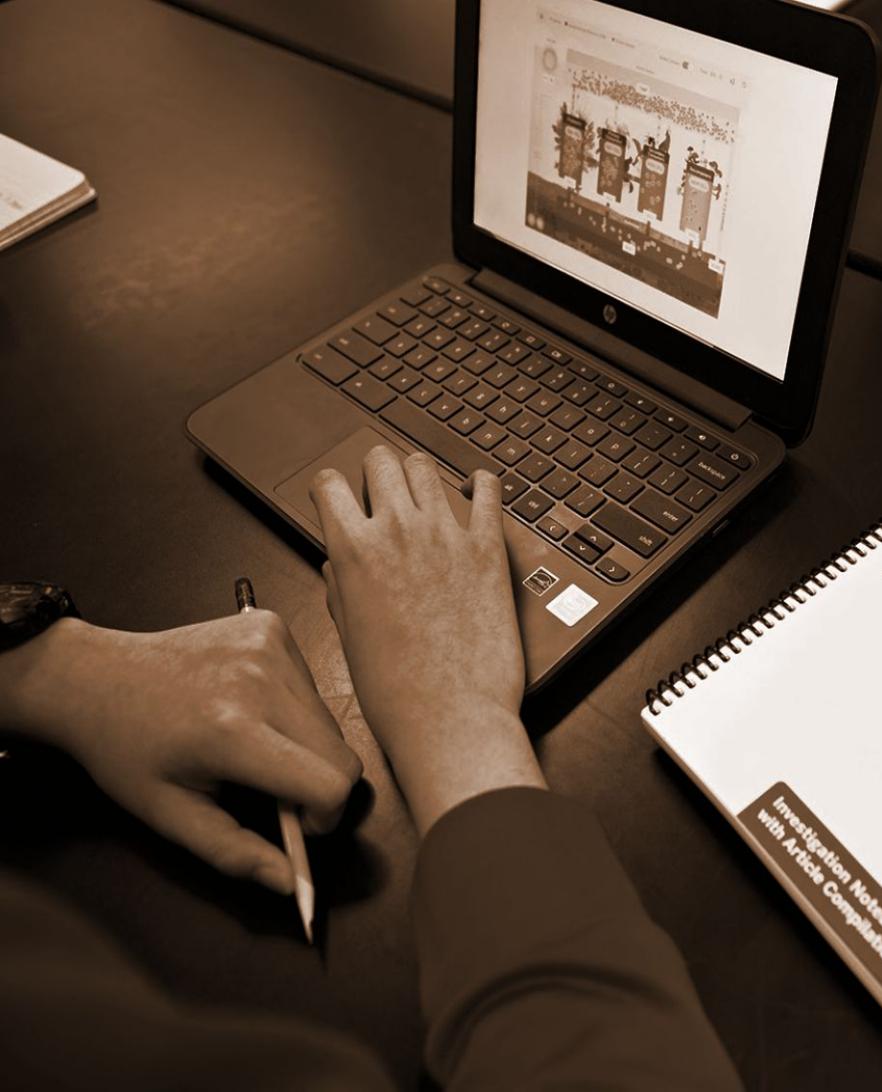


# Plan for the day

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- Guided Planning
- Closing
  - Reflection & additional resources
  - Survey

# Questions?

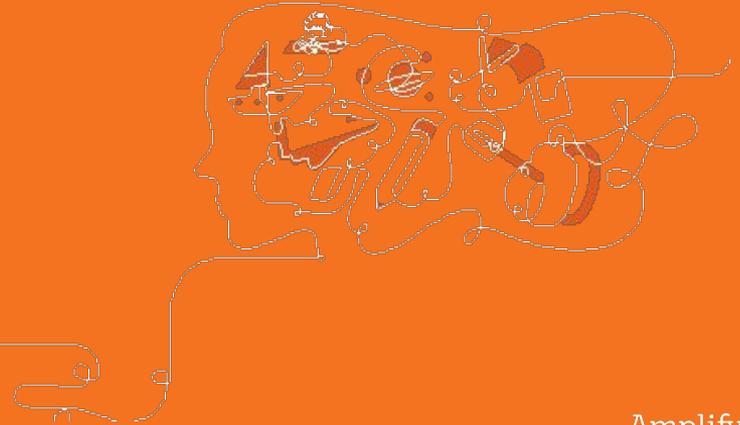




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# What is Amplify Science?





THE LAWRENCE  
HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA, BERKELEY

+ Amplify.

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Amplify Science

# Course curriculum structure



PRIMARILY LIFE SCIENCE



PRIMARILY PHYSICAL SCIENCE



PRIMARILY EARTH SCIENCE

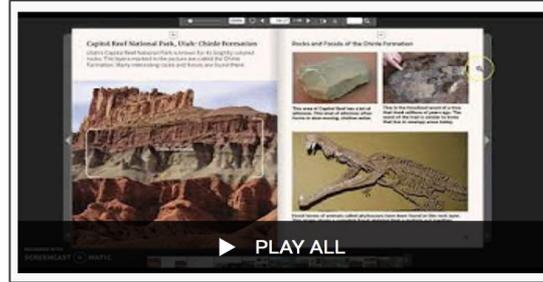
	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Minutes per lesson
<b>K</b>	Needs of Plants and Animals			Pushes and Pulls			Sunlight and Weather			<b>45</b>	
<b>1</b>	Animal and Plant Defenses			Light and Sound			Spinning Earth			<b>45</b>	
<b>2</b>	Plant and Animal Relationships			Properties of Materials			Changing Landforms			<b>60</b>	
<b>3</b>	Balancing Forces	Inheritance and Traits			Environments and Survival		Weather and Climate			<b>60</b>	
<b>4</b>	Energy Conversions	Vision and Light			Earth's Features		Waves, Energy and Information			<b>60</b>	
<b>5</b>	Patterns of Earth and Sky	Modeling Matter		The Earth System (26 lessons)			Ecosystem Restoration			<b>60</b>	

All units have 22 lessons except Grade 5: The Earth System, which has 26 lessons.

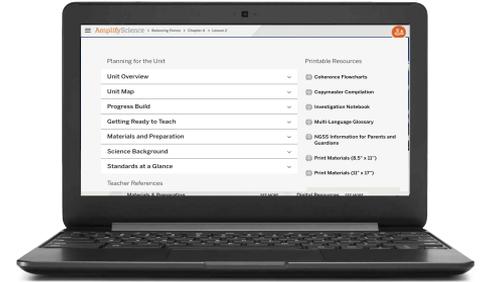
# Digital Elementary school components



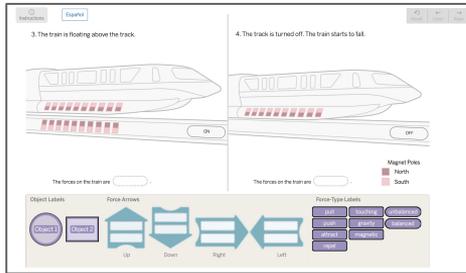
Hands-on investigation videos



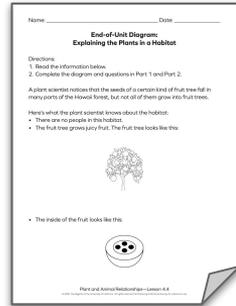
Online Student books & read-alouds



Digital Teacher's Guide



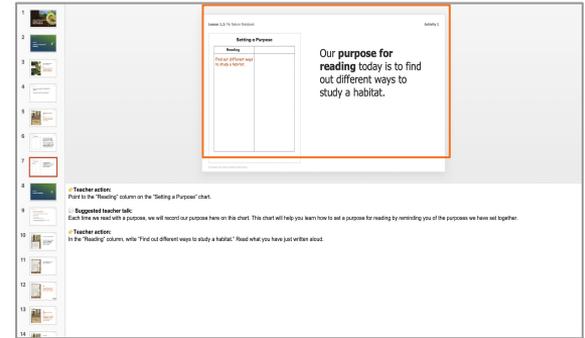
Digital practice tools



Assessments



@Home resources

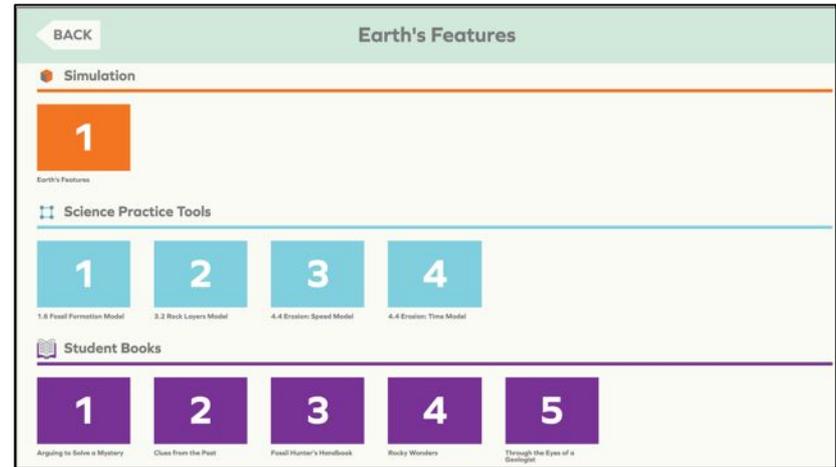
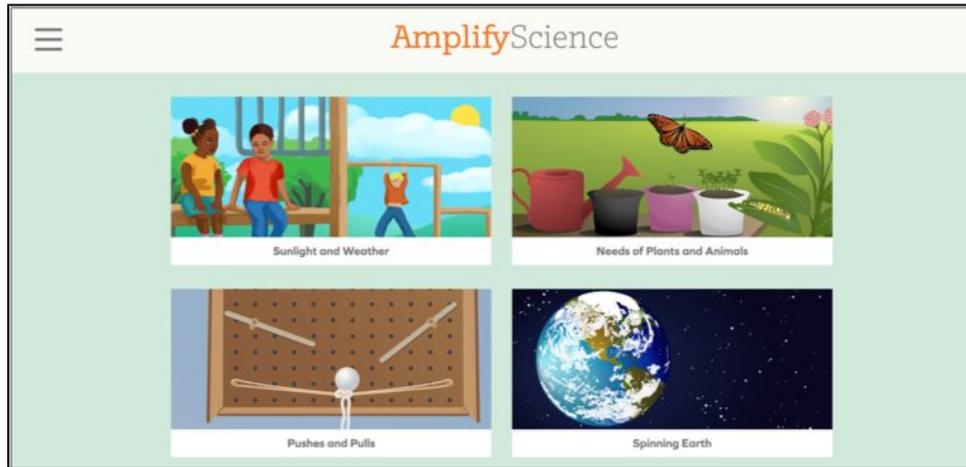


Classroom Slides

# Students app page

Elementary digital experience for students grades K-5 is through the student apps page:

[apps.learning.amplify.com/elementary](https://apps.learning.amplify.com/elementary)



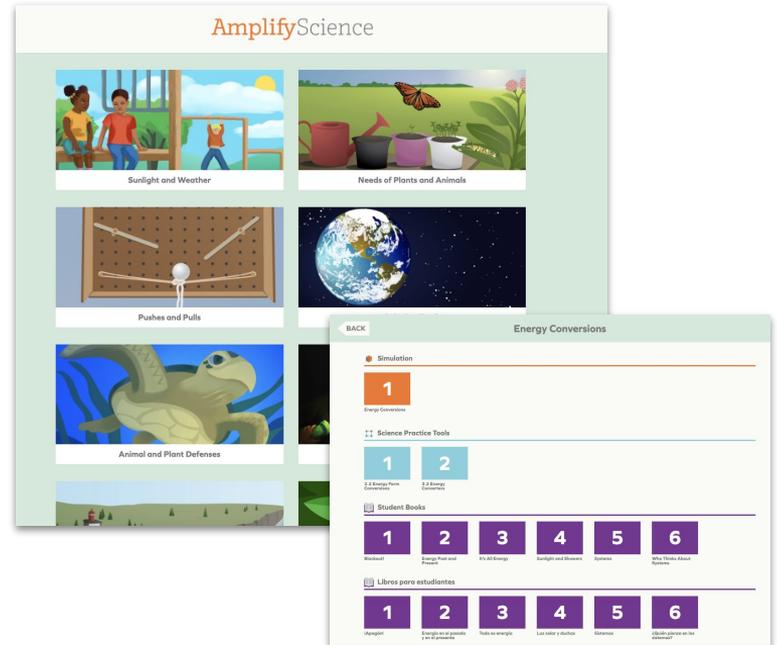
K-5 digital access

[apps.learning.amplify.com/elementary](https://apps.learning.amplify.com/elementary)



Username: **nyc3**

Password: **science1**



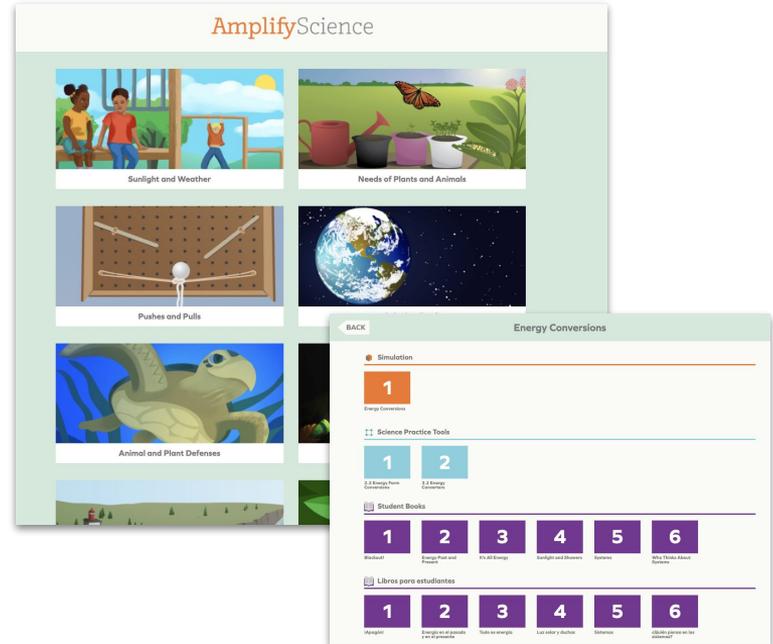
K-5 digital access

[apps.learning.amplify.com/elementary](https://apps.learning.amplify.com/elementary)



Username: [nyc4](#)

Password: [science1](#)



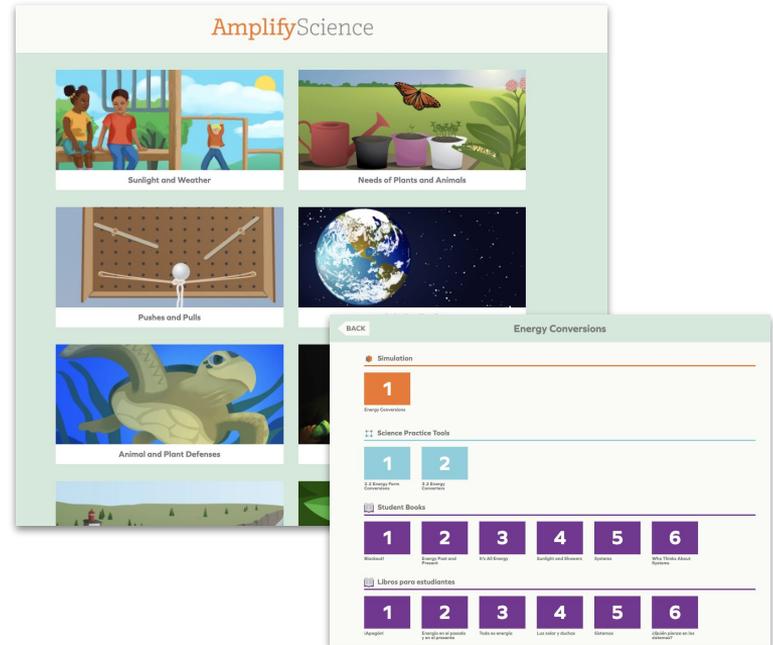
K-5 digital access

[apps.learning.amplify.com/elementary](https://apps.learning.amplify.com/elementary)



Username: **nyc5**

Password: **science1**



# Curriculum Gap Lessons

Amplify Science Resources for ...

Planning and implementation resources

- [Planning and Implementation Guide – Grade 5](#)

Educator Spotlight Submission

20-21 Login Update

Professional learning opportunities

Introduction

Getting started resources

[Planning and implementation resources](#)

Admin resources

Caregiver resources

Remote and hybrid learning resources

20-21 Professional learning resources

## NYC DOE Supplemental Guiding Documents: Curriculum Gaps

- [Grade K Curriculum Gaps](#)
- [Grade 3 Curriculum Gaps](#)
  - [“Where do we find water on Earth?”](#) slideshow (Unit 3, L. 1 of 2)
  - [Water Cycle Lesson](#) (Unit 3, L. 2 of 2)
- [Grade 4 Curriculum Gaps](#)
  - [Water Cycle Powerpoint](#) (Ch.1, L. 1)

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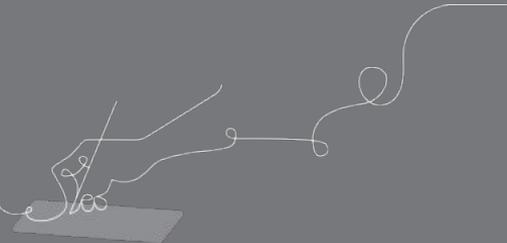
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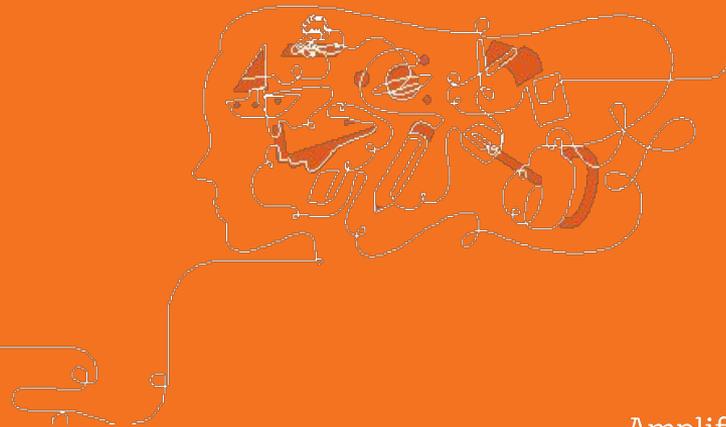
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# Questions?



# What is phenomenon-based instruction?



# New York State Science Learning Standards

Think-Type-Discuss: How might learning be different?

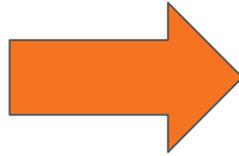
<b>Topic-based</b>	<b>Phenomenon-based</b>
Ocean habitats	A sea turtle can survive in an ocean habitat where sharks live.
Electric circuits	A flashlight won't turn on, even though it used to work.
Mixtures and solutions	One substance dissolved in water but another substance didn't.

# Comparing topics and phenomena

## A shift in science instruction

from learning about

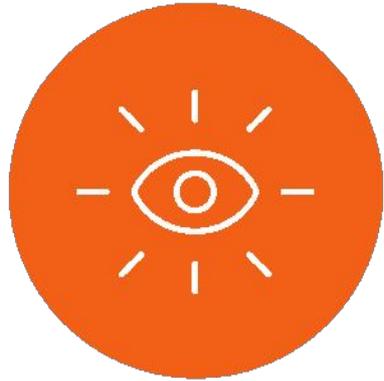
(like a student)



to figuring out

(like a scientist)

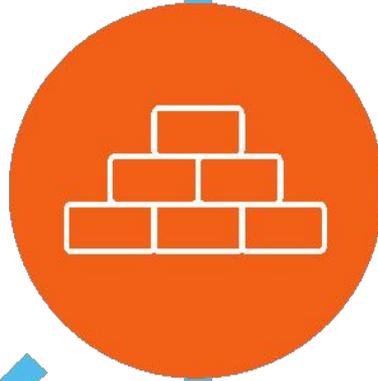
# Amplify Science approach



Introduce a phenomenon  
and a related problem



Collect evidence from  
multiple sources



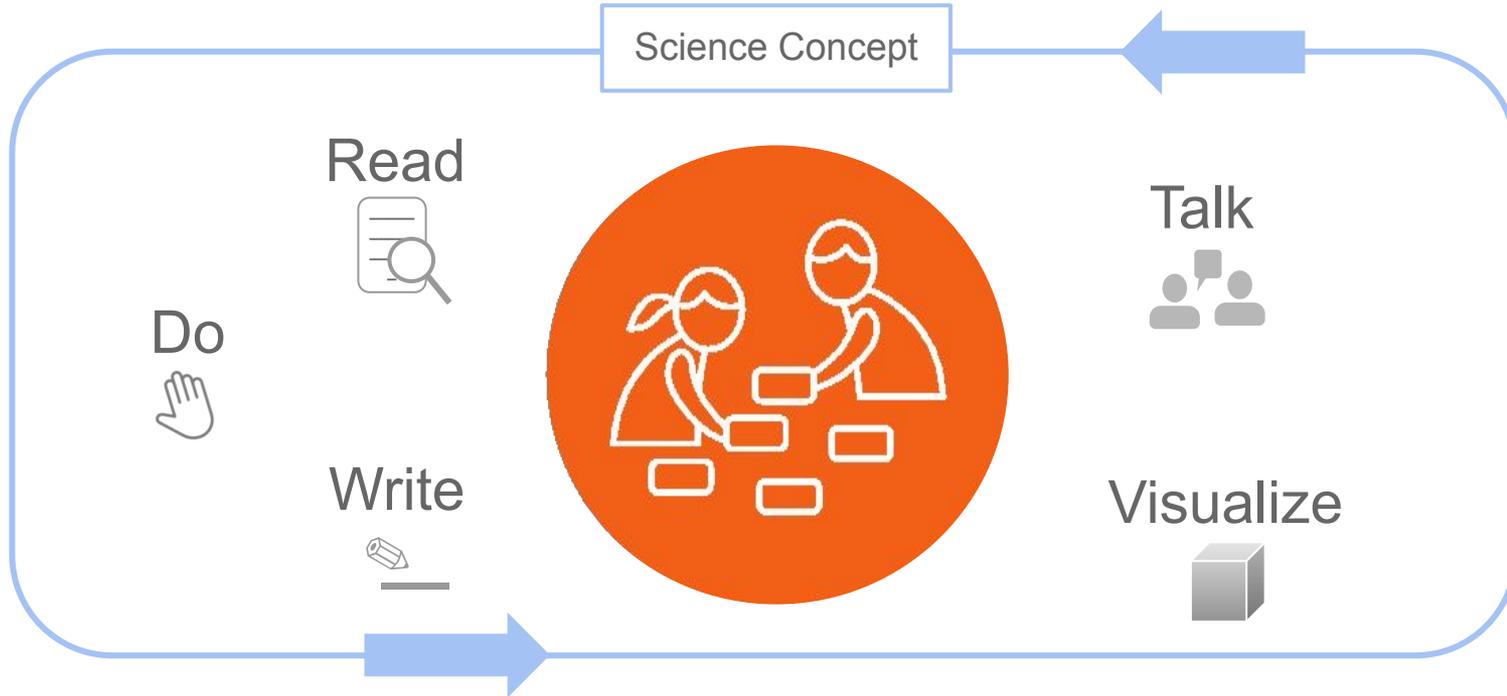
Build increasingly  
complex explanations



Apply knowledge  
to a different context

# Multimodal learning

## Gathering evidence from different sources



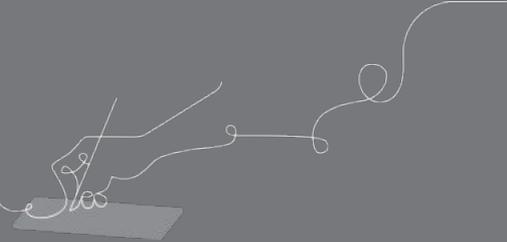
# Multimodal, phenomenon-based learning

In each Amplify Science unit, students embody the role of a scientist or engineer to **figure out phenomena**.

They gather evidence from multiple sources, using multiple modalities.



# Questions?

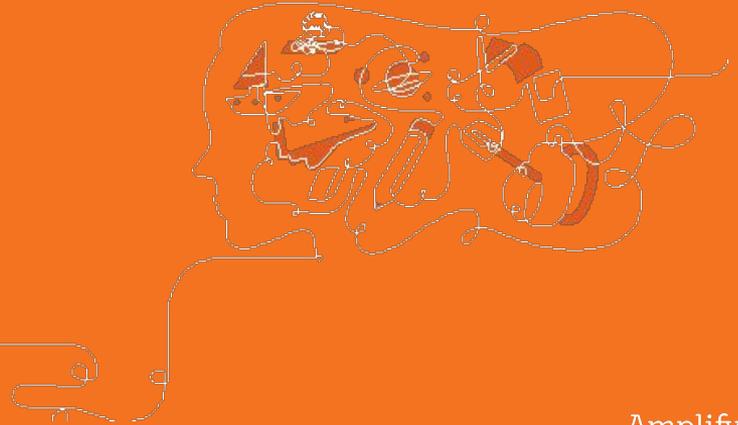




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# Asynchronous instruction





**Earth's Features**

# **@Home Lesson 1**

We're about to begin a new science unit during which we'll learn about how **Earth** can **change** over **long periods of time**.

This is Desert Rocks National Park. We will **investigate** how this place has changed over time.

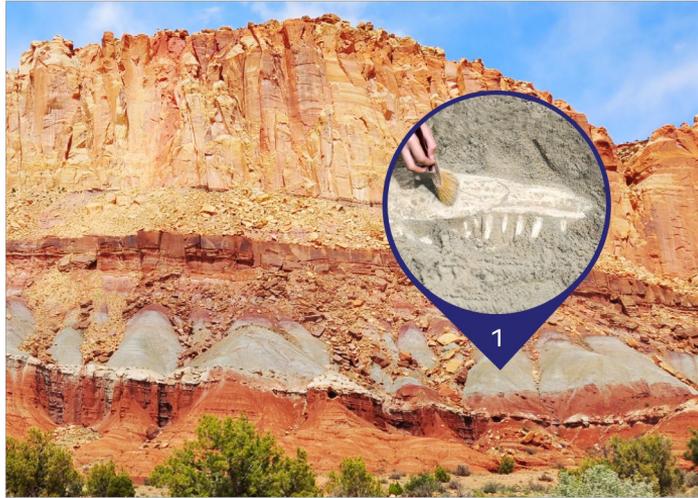


Desert Rocks National Park is not a real place, but it is **similar to many other parks** in the western United States. Our work will help park visitors understand the history of the park.





This is Desert Rocks Canyon, one of the many canyons in the park. A **canyon** is a **valley with steep sides** made of rock. Something **mysterious was found here** that might help us with our investigations.



1 ?

This is what was found.

Thinking about **what this is** and **how it got there** may give us some clues about what this place was like in the past.

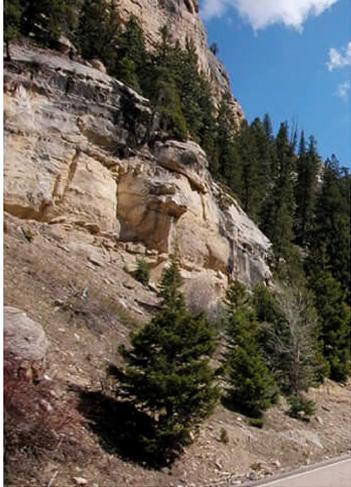
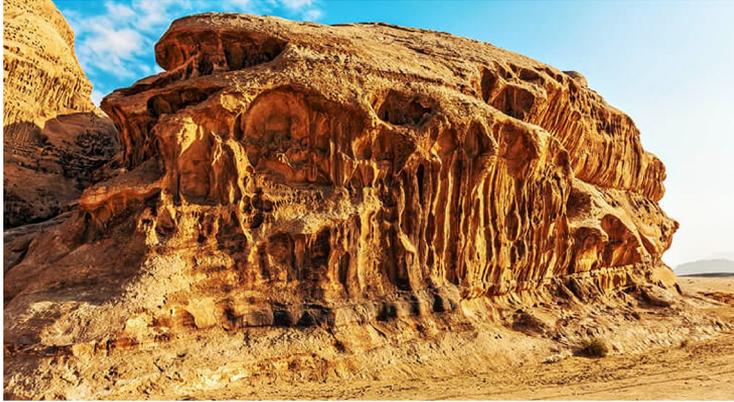


1 ?



What do you think this is?

How do you think it got there?



If you thought that was a **fossil**, you're right!

This big section of rock where the fossil was found is called a **rocky outcrop**. A rocky outcrop is a section of exposed rock we can see.



In this unit, we will do what **geologists** do: gather information to think about what a place was like in the past.

Geologists often **study rocks and fossils** to learn what a place was like in the past.



1 ?

We already have our first **two clues**: the **fossil** and the **rocky outcrop** where the fossil was found.

First, we will investigate how the **fossil got into the rocky outcrop**.

We will work as **geologists** as we think about what Desert Rocks Canyon was like in the past.



**geologist**

a scientist who studies the processes and materials that  
form the solid part of Earth

**Glossary** (continued)

**inference:** something you figure out based on observations and what you already know

**inferencia:** algo que puedes resolver basándote en observaciones y lo que ya conoces

**model:** something scientists make to answer questions about the real world

**modelo:** algo que los científicos crean para responder preguntas sobre el mundo real

**observation:** something

**observación:** algo que nos

**pattern:** something we observe

**patrón:** algo que observamos

**rock layer:** a thick sheet

**capa de roca:** una lámina

**sediment:** small pieces of rock

**sedimento:** piezas pequeñas de roca

**sedimentary rock:** a type of rock

**roca sedimentaria:** un tipo de roca

**stable:** staying mostly the same

**estable:** que permanece

**Glossary**

**argument:** the use of evidence to say why one idea is the best

**argumento:** el uso de evidencia para decir por qué una idea es la mejor

**cement:** to stick together in the process of forming rock

**cementar:** pegarse en el proceso de formar roca

**claim:** a proposed answer to a question

**afirmación:** una respuesta propuesta para una pregunta

**compact:** to press together

**compactar:** comprimir

**data:** observations or measurements recorded in an investigation

**datos:** observaciones o mediciones apuntadas en una investigación

**environment:** all the living and nonliving things in an area

**ambiente:** todo (viviente y no viviente) lo que hay en un área

**erosion:** when rock, soil, or sand is worn down and moved from one place

to another by water, wind, or ice

**erosión:** cuando la roca, el suelo o la arena son desgastados y movidos

de un lugar a otro por el agua, el viento o el hielo

**evidence:** information that supports an answer to a question

**evidencia:** información que respalda una respuesta a una pregunta

**fossil:** a clue about life from the past that is preserved in rock

**fósil:** una pista acerca de la vida del pasado que se preserva en la roca

**geologist:** a scientist who studies the processes and materials that form the solid part of Earth

**geólogo/a:** un/a científico/a que estudia los procesos y materiales que forman la parte sólida de la Tierra

You have a **Glossary** you can use if you need to find definitions for science words we are using.

Throughout the unit, we will work to answer this question:

## **Unit Question**

**How do rocks and fossils tell us about the way Earth changes over time?**



We will be studying fossils and rock as geologists.

First, we will think about what we already understand and what we don't understand yet.

Find the Pre-Unit Writing: Exploring the Rocky Outcrop pages.

You will **write** your **first ideas** about how the fossil found at Desert Rocks Canyon got into the rock. You can use the image on the next slide to help you.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Pre-Unit Writing:**

**Part 3**  
The rock in Desert Rocks Canyon formed from \_\_\_\_\_

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Pre-Unit Writing:**  
**Explaining the Rocky Outcrop** (continued)

**Part 2**  
Has the rock changed? How do you know?

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Pre-Unit Writing:**  
**Explaining the Rocky Outcrop**

A fossil was found in a layer of mudstone in this rocky outcrop in Desert Rocks National Park.

1. Answer the questions in Parts 1, 2, and 3.  
2. Be sure to answer all questions as best as you can.

**Rocky Outcrop**



**Part 1**  
How did this rock with the fossil in it form?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Earth's Features @Home Lesson 1  
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1 Mystery Fossil



**Write** your ideas about the rocky outcrop.

In this chapter, we will work to figure out:

## **Chapter 1 Question**

**How did the fossil get inside the rocky outcrop?**

Before we can figure out how the fossil got inside the rocky outcrop, we need to investigate more about fossils.

We will investigate this question:

*How do fossils form?*



**Geologists use clues** to figure out what a place was like in the past.

We will use this image as an example to practice **using clues to figure things out.**



What do you **see** in  
this image?



What do you think  
**happened** here?

What did you see that  
made you think that?



You may have said, “I see there is an eggshell in a nest.” That is an **observation**.

You also may have said, “A bird hatched out of the egg.” That is an **inference**.

When you describe what you see, you make **observations**.



**observation**

something you notice using any of the five senses

When you describe what you think happened, you make inferences.



**inference**

something you figure out based on observations  
and information you already know



Geologists **observe clues**, like fossils and rocks, and use **ideas about science** they already know to **make inferences** about what might have happened in a place in the past.

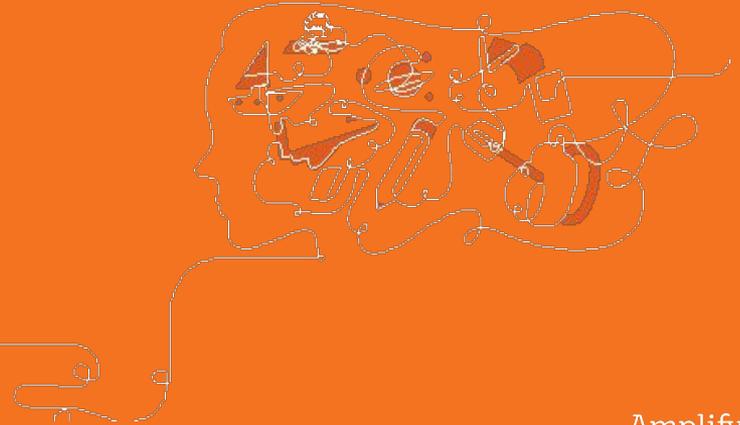
**Geologists make inferences about the past by observing fossils.**

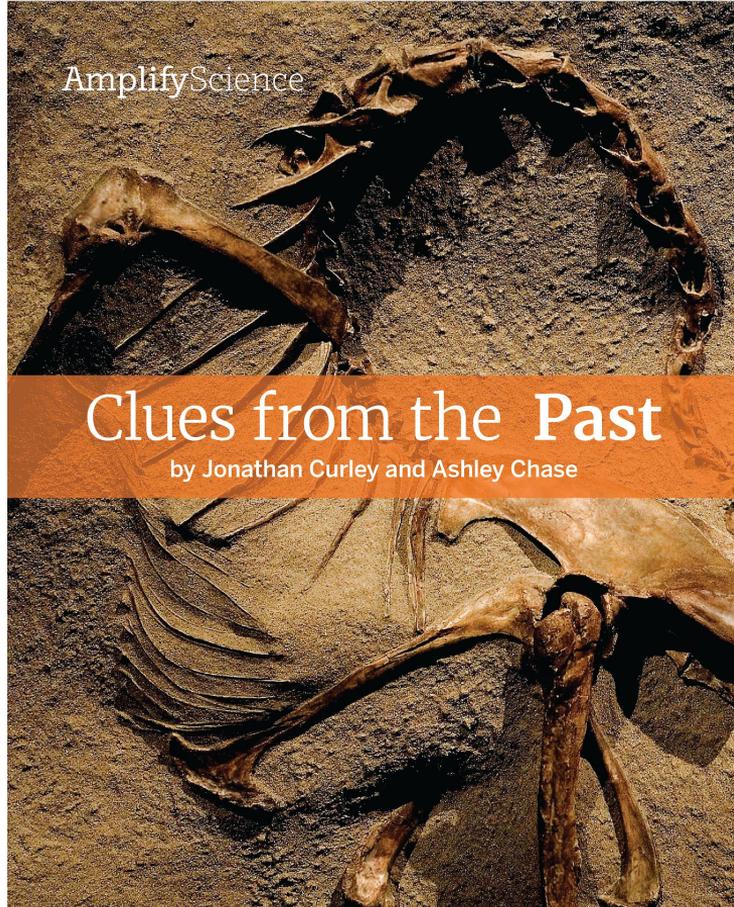


**fossil**

**a clue about life from the past that is preserved in rock**

# Synchronous instruction

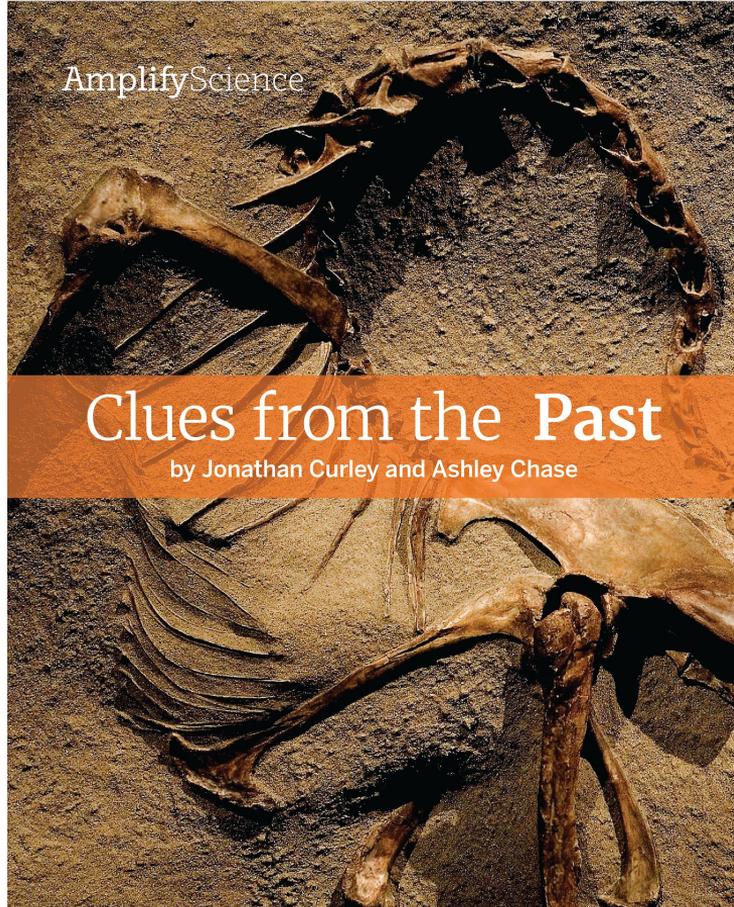




We will read a book about a **real geologist** who found a **surprising fossil**—like the mystery fossil in Desert Rocks Canyon.

## Partner Reading Guidelines

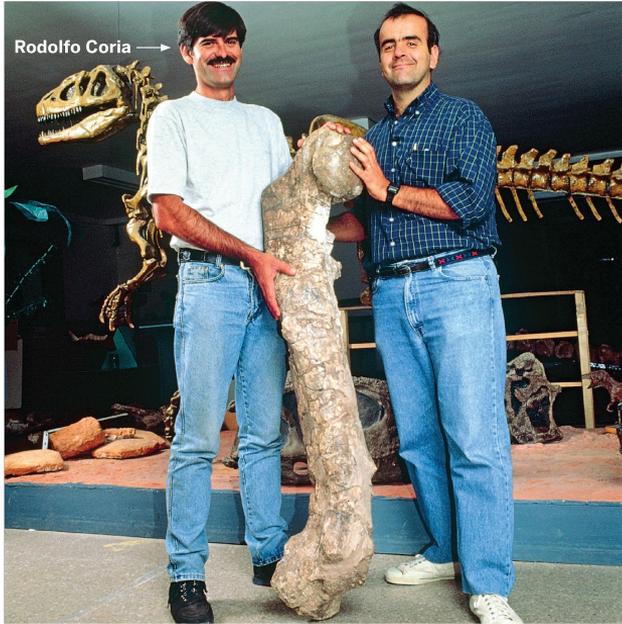
1. Sit next to your partner and place the book between you.
2. Take turns reading.
3. Read in a quiet voice.
4. Be respectful and polite to your partner.
5. Ask your partner for help if you need it. Work together to make sure you both understand what you read.



Preview the book by looking at the images and captions.



What do you think these geologists are **observing**? What kinds of **inferences** do you think they might be making?



"I felt like a mouse looking up the giant leg of an elephant." That's what Rodolfo Coria remembers about his first look at *Argentinosaurus* (ar-jen-TEEN-oh-SORE-us), a dinosaur he helped discover.

Turn to page 3.

Let's read this page together.



Rodolfo Coria is a scientist who studies dinosaurs. He lives in Argentina, a country in South America. The dinosaurs Coria studies are extinct—there are none left alive on Earth. To study dinosaurs, Coria has to make **inferences**. An inference is something he figures out by putting together what he can **observe** and what he already knows.

Turn to page 4.



Follow along as a  
volunteer reads out loud.



Rodolfo Coria is a scientist who studies dinosaurs. He lives in Argentina, a country in South America. The dinosaurs Coria studies are extinct—there are none left alive on Earth. To study dinosaurs, Coria has to make **inferences**. An inference is something he figures out by putting together what he can **observe** and what he already knows.

The last two sentences mention **inferences** and **observations**. I will reread those two sentences.



This photo shows Rodolfo Coria observing a fossil in Argentina.

Coria can't observe living dinosaurs, but he *can* observe **fossils** of dinosaurs. Fossils are imprints or parts of animals, plants, and other **organisms** that have been preserved in rock. Fossils can be found millions of years after an organism died.



**Read** the rest of  
the book.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

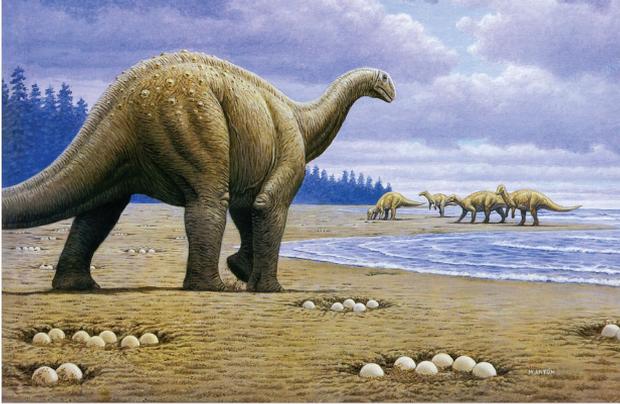
**Reading About the Work of a Geologist: *Clues from the Past***

1. Reread each page from *Clues from the Past* listed in the table below.
2. For each page, record an observation that Dr. Coria made of *Argentinosaurus*.
3. For each observation, record the inference that he made.
4. In the last row, choose another observation and inference from the book to record. Be sure to record the page number in the first column.

Observations of <i>Argentinosaurus</i>	Inferences about <i>Argentinosaurus</i>
Page 11:	
Page 12:	
Page 13:	

**Turn to page 5 in your notebooks (or use link dropped in chat).**

**You will record observations and inferences that Dr. Coria made. We'll do the first one together.**



**This artwork shows what *Argentinosaurus* may have looked like. It is based on inferences.**

Coria observed the shapes and sizes of the fossil bones he had found. They looked similar to fossils from large dinosaurs that had been found before. Coria could infer that the bones were from the lower leg and backbone of a dinosaur. He could also infer that the dinosaur was big and walked on four legs. Coria and the scientist he was working with named the dinosaur *Argentinosaurus* after their country. It was a type of dinosaur no one had known about before.

**Let's reread page 11.**



**What *observation* did Coria make of the fossil bones he found?**

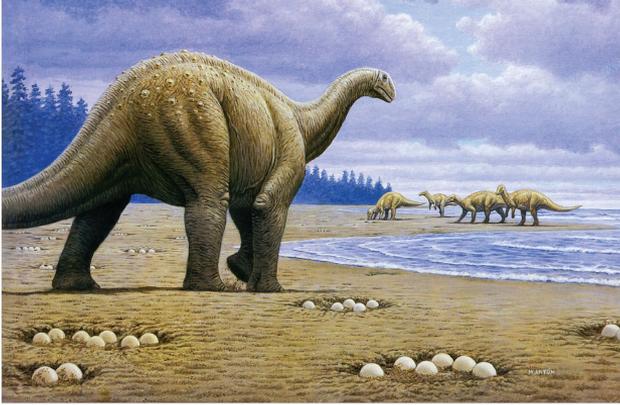
Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Reading About the Work of a Geologist: *Clues from the Past***

1. Reread each page from *Clues from the Past* listed in the table below.
2. For each page, record an observation that Dr. Coria made of *Argentinosaurus*.
3. For each observation, record the inference that he made.
4. In the last row, choose another observation and inference from the book to record. Be sure to record the page number in the first column.

Observations of <i>Argentinosaurus</i>	Inferences about <i>Argentinosaurus</i>
Page 11: He observed the sizes and shapes of fossil bones.	
Page 12:	
Page 13:	

Now we can **record** the **observation** that Dr. Coria made of the fossil bones he found.



**This artwork shows what *Argentinosauros* may have looked like. It is based on inferences.**

Coria observed the shapes and sizes of the fossil bones he had found. They looked similar to fossils from large dinosaurs that had been found before. Coria could infer that the bones were from the lower leg and backbone of a dinosaur. He could also infer that the dinosaur was big and walked on four legs. Coria and the scientist he was working with named the dinosaur *Argentinosauros* after their country. It was a type of dinosaur no one had known about before.



What **inferences** did Coria make based on his observation?

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Reading About the Work of a Geologist: *Clues from the Past***

1. Reread each page from *Clues from the Past* listed in the table below.
2. For each page, record an observation that Dr. Coria made of *Argentinosaurus*.
3. For each observation, record the inference that he made.
4. In the last row, choose another observation and inference from the book to record. Be sure to record the page number in the first column.

Observations of <i>Argentinosaurus</i>	Inferences about <i>Argentinosaurus</i>
Page 11: He observed the sizes and shapes of fossil bones.	The bones were from the lower leg and backbone of a dinosaur.
Page 12:	
Page 13:	

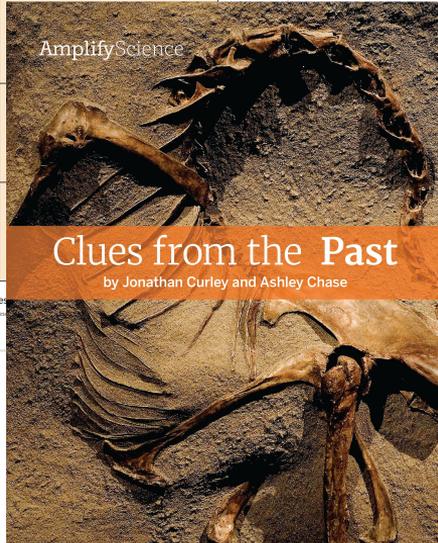
Next, we can record the **inference** that Dr. Coria made based on this observation.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Reading About the Work of a Geologist: Clues from the Past**

1. Reread each page from *Clues from the Past* listed in the table below.
2. For each page, record an observation that Dr. Coria made of *Argentinosaurus*.
3. For each observation, record the inference that he made.
4. In the last row, choose another observation and inference from the book to record. Be sure to record the page number in the first column.

Observations of <i>Argentinosaurus</i>	Inferences about <i>Argentinosaurus</i>
Page 11: He observed the sizes and shapes of fossil bones.	The bones were from the lower leg and backbone of a dinosaur.
Page 12:	
Page 13:	



**Reread** the book and **record** observations and inferences.

When you're finished, you may log off. See you tomorrow!

# Example lesson reflection

## Think-Type-Discuss

Share your insights and wonderings about the example lesson.

“I think...I wonder...”





# Plan for the day

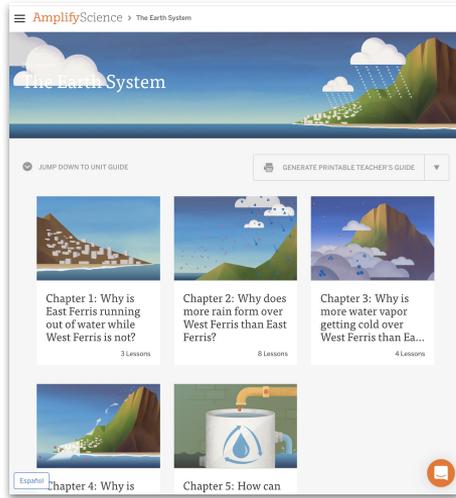
- Framing the day
  - Welcome and introductions
  - Anticipatory activity
- Overview of program & resources
  - NYC Resources site
  - Amplify Science approach
- Exemplar lesson
- @Home resources introduction
  - @Home units
  - @Home videos
- Overview of digital teacher's guide
  - Lesson brief
  - Progress build & assessments
- Guided Planning
- Closing
  - Reflection & additional resources
  - Survey

# Selecting a resource

We'll take a deeper look at each resource type, following this structure:

- Brief overview of the resource
- Exploration time
- Share insights, ask questions
- Summarize key features of resource

# Resource options



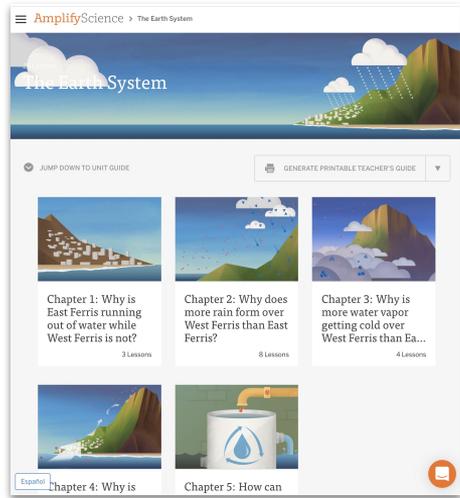
Original Amplify  
Science curriculum



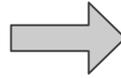
Amplify Science@Home

# Resource options

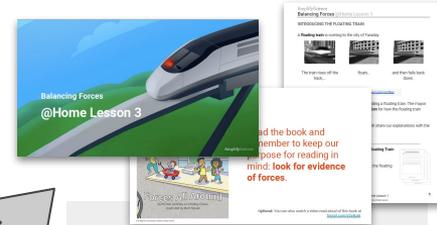
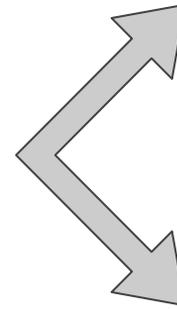
## Related but unique resources



Original Amplify Science curriculum



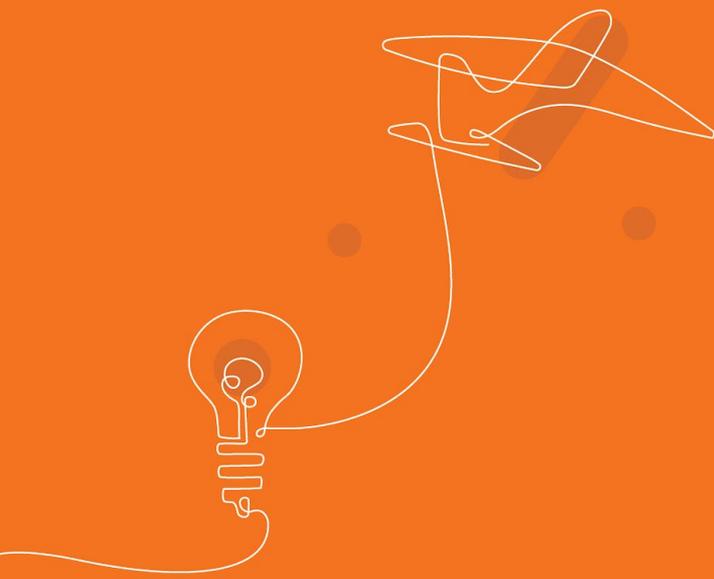
Amplify Science@Home



@Home Units



@Home Videos



# Amplify Science@Home

A suite of resources designed to make extended remote and hybrid learning easier for teachers and students.

# AmplifyScience@Home

- Built for a variety of instructional formats
- Digital and print-based options
- No materials required
- Available in English and Spanish (student and family materials)



# AmplifyScience@Home

Two different options:

## @Home Units

- Packet or slide deck versions of Amplify Science units condensed by about 50%

## @Home Videos

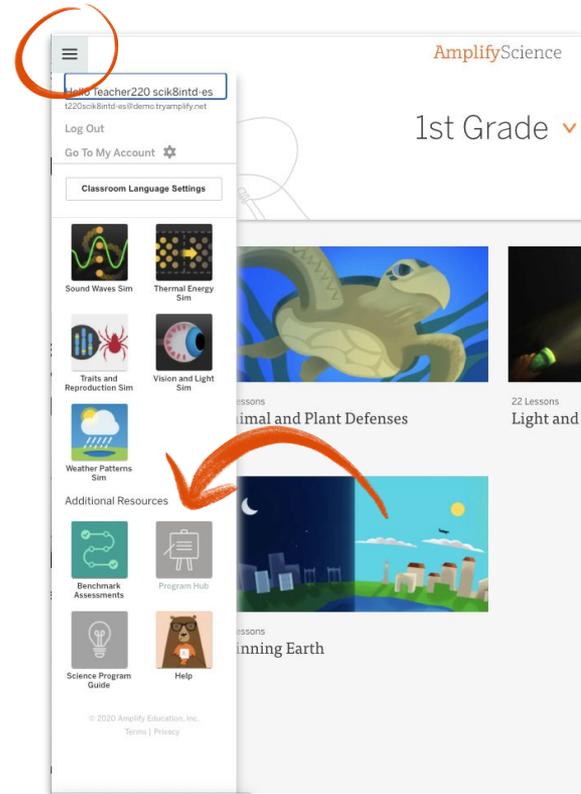
- Video playlists of Amplify Science lessons, taught by real Amplify Science teachers



# Accessing Amplify Science@Home

## Amplify Science Program Hub

- Site containing Amplify Science@Home and additional PL resources
- Accessible via the Global Navigation menu
- Additional units rolling out throughout back-to-school



AmplifyScience

Hello Teacher Sinha-Das  
tsinha@amplify.com

Log Out  
Go To My Account

Classroom Language Settings

ELA Resources  
Job Postments  
LA Science Program Guide  
Science Program Guide  
FLORIDA EDITION  
Standards Map  
Help

1st Grade ▾ **Step 1**



22 Lessons  
**Animal and Plant Defenses**



22 Lessons  
**Light and Sound**



22 Lessons  
**Spinning Earth**

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Amplify Science Program Hub

Welcome Science Educators! **Step 2**

The Amplify Science Program Hub was created to provide you with resources, tools, and advice for all stages of 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.

AmplifyScienceProgramHub

Amplify Science Program Hub > Remote and hybrid learning resources

Remote and hybrid learning resources ▾

Resources for the first unit of each grade level are available now, and subsequent units will be released on a rolling basis. For grades 6-8, materials will be released and organized according to our national Integrated Sequence.

**Step 3 (choose your grade)**

Grade Level Units

Transitional Kindergarten

AmplifyScienceProgramHub

Amplify Science Program Hub > Remote and hybrid learning resources

Remote and hybrid learning resources ▾

Resources for the first unit of each grade level are available now, and subsequent units will be released on a rolling basis. For grades 6-8, materials will be released and organized according to our national Integrated Sequence.

**Step 4 (scroll down and choose your unit)**

Grade Level Units

Orientation and Tutorials  
Learn more about how to use @Home resources.

Microbiome

Metabolism

Phase Change

Chemical Reactions

Plate Motion

# Explore your @Home Unit

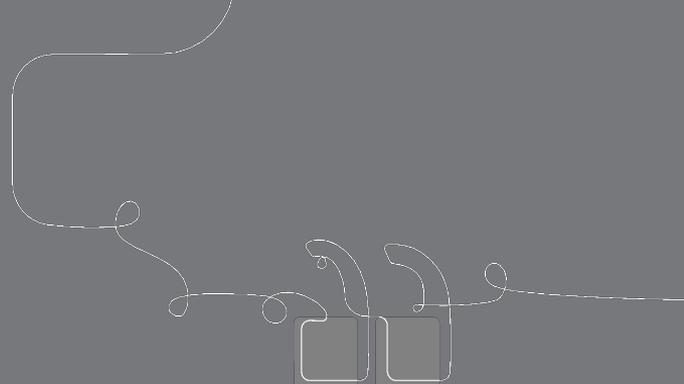
Navigate to the Program Hub and explore. You may choose to start with the Teacher Overview, or dig into a lesson.

During your exploration time, consider how you will utilize these resources.



# Share insights

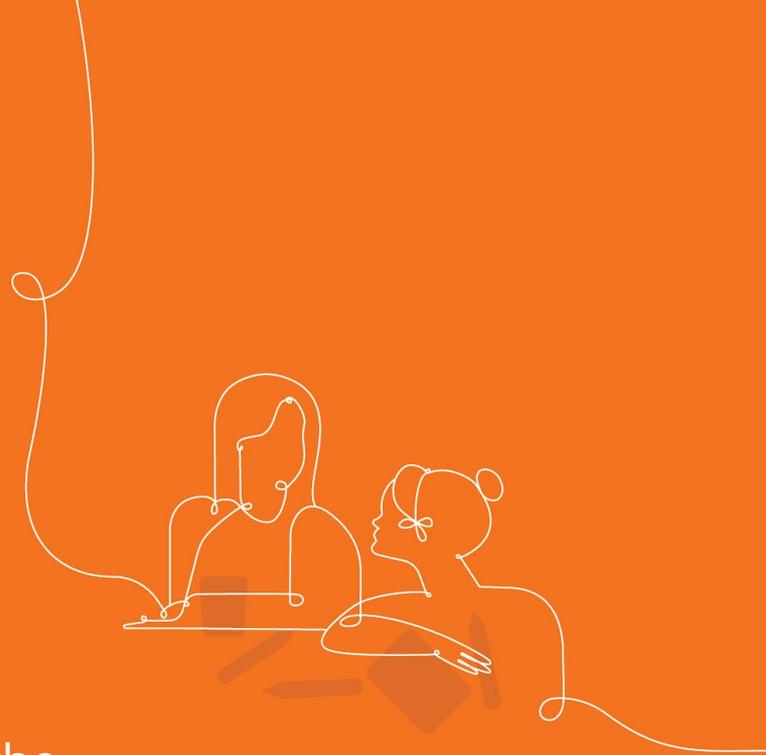
How will you utilize these  
@Home Units ?



## Questions?

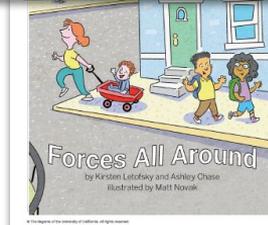
# @Home Units: A Summary Overview

Strategically modified versions of Amplify  
Science units, highlighting key activities from the  
program



# @Home Units

- Solution for **reduced instructional time**
- Print-based and tech-based access options
- Available in .pdf and Google Slides/Docs format



remember to keep our purpose for reading in mind: **look for evidence of forces.**

Optional: You can also watch a video read-aloud of this book at [my.ari.com/y2z4j6d](https://my.ari.com/y2z4j6d)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Reading Reflection: Forces All Around**

Directions:  
Return to each page in the book that is listed in the first column of the table below.  
In the second column, describe the evidence of a force in the picture in the book.  
In the third column, record whether the force is a pull, a push, or not sure.

number	Evidence of a force (What object is moving or stopping?)	Is it a push, a pull, or not sure?
page 3		
page 7		

@Home Lesson 3  
© Amplify Science

# @Home Unit resources

All resources are fully editable and customizable

- **Family Overview**
  - Provides context for families
- **Teacher Overview**
  - Outlines the unit and summarizes each lesson
  - Suggestions for adapting for different scenarios
- **Student materials**
  - ~30-minute lessons (slide decks or packets) featuring prioritized activities from Amplify Science curriculum

# Example lesson: *Energy Conversions 2.2*

AmplifyScience > Energy Conversions > Chapter 2 > Lesson 2.2



## Lesson 2.2: Energy Past and Present



Lesson Brief  
(4 Activities)

1

**HANDS-ON**  
Using the Energy  
Conversions Sorting Tool



2

**TEACHER-LED  
DISCUSSION**  
Introducing Energy Past  
and Present



3

**READING**  
Reading: Energy Past  
and Present



4

**WRITING**  
Synthesizing Ideas from  
the Book



# @Home Lesson 8: Modified lesson 2.2

## @Home Lesson 8

*Adapted from: Amplify Science Energy Conversions Lesson 2.2*

### Key Activities

- **Read:** Students read *Energy Past and Present*.
- **Write:** Students record and synthesize ideas from the book.

### Ideas for synchronous or in-person instruction

Before meeting, have students read the book. While meeting, model recording an idea from the book, then support students as needed in recording and synthesizing ideas.

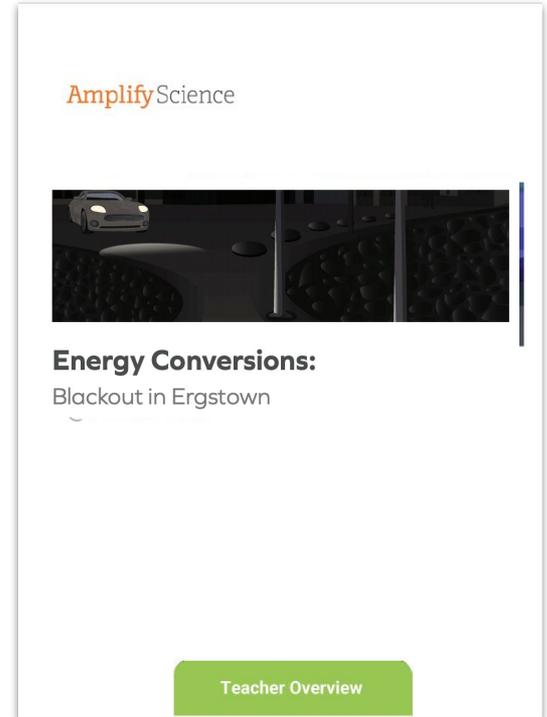
# Teacher Overview

## Unit-level

- Overview of resources
- Pacing
- Planning for instructional routines
- Assessment considerations

## Lesson-level

- Chapters at a glance
- Lesson outlines



\*Appendix provides the student investigation notebook pages that go with each lesson.

# Revisiting exemplar lesson...

Amplify Science



Earth's Features  
@Home Unit

Teacher Overview



@Home Lesson 1 Adapted from: Amplify Science *Earth's Features* Lessons 1.1 and 1.2

**Key Activities**

- **Introducing the Unit:** Students are introduced to Desert Rocks National Park and to their roles as geologists.

8

---

Chapter Outlines **Earth's Features @Home**  
Teacher Overview

- **Write:** Students write initial explanations about how Desert Rocks Canyon has changed over time.
- **Introducing Observations and Inferences:** Students are introduced to observations and inferences with an everyday example.
- **Read:** Students read *Clues from the Past* to learn how geologists use observations and inferences in their work.

**Ideas for synchronous or in-person instruction**

While meeting, introduce students to Desert Rocks National Park and to their roles as geologists. Then, introduce observations and inferences with the everyday example, and have students discuss what they see and what they think is happening in the example image.

# Explore your @Home Videos

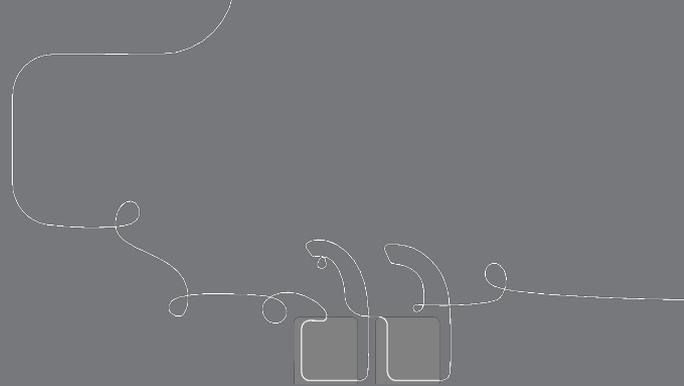
Navigate to the Program Hub and explore a video lesson. You may want to compare the video lesson to the lesson in the Teacher's Guide.

During your exploration time, consider how you plan to use these resources.



# Share insights

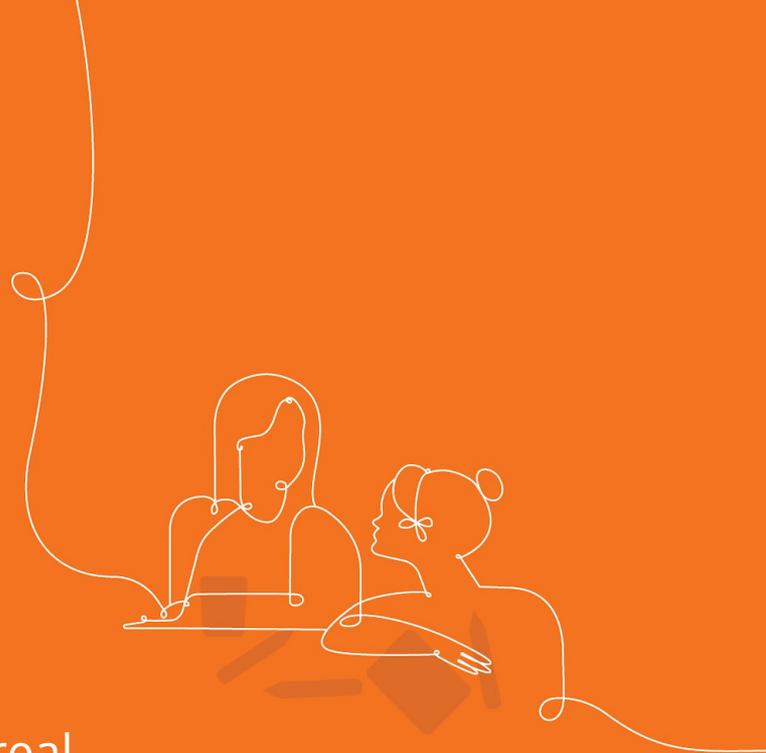
How will you utilize the @Home Videos ?



# Questions?

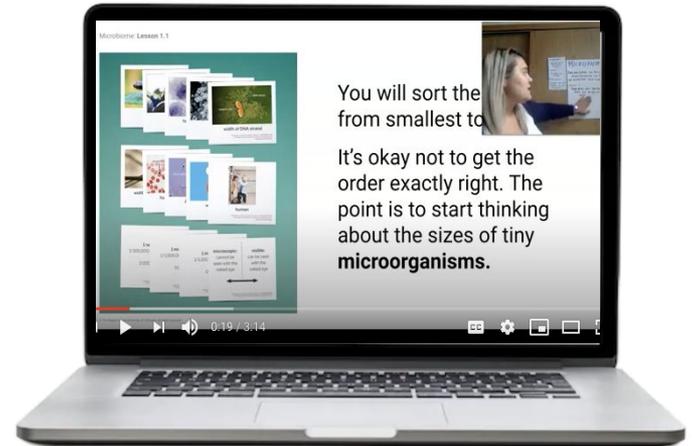
# @Home Videos: A Summary Overview

Versions of original Amplify Science lessons adapted for remote learning and recorded by real Amplify Science teachers



# @Home Videos

- Lesson playlists include **all activities** from original units
- Great option if have the **same amount of instructional time** as you typically would for science
- Requires **tech access** at home
- Use videos as **models for making your own lesson videos** or leading **online science class**



# Interactive video experience

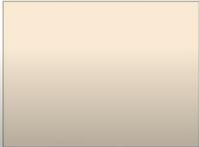
- **Calls to action**
  - Think prompts, pause and take notes, stand up and try it, talk to someone
- **Stand-alone videos within lesson playlists**
  - Read-alouds, digital tool uses, hands-on
- **Options to use notebooks and/or materials if available**

Lesson 1.3: Exploring Systems Activity 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Building a Simple Electrical System**

1. With your group, use a solar panel, a fan, and two wires to build an electrical system that functions. (The fan will spin when it functions.)
2. Predict what you can do to make the fan spin more quickly or slowly. Test your ideas, and then discuss what caused the fan to spin more quickly or slowly.
3. Predict what you can do to make the fan spin in a different direction. Test your ideas, and then discuss what caused the fan to spin in a different direction.
4. In the space below, draw your functioning system. Be sure to label every part. (Be sure to include the system needs one part that was not included in your bag of materials.)



Energy Converter - Lesson 1.3 7

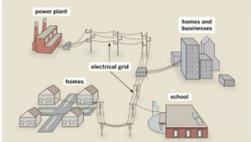
Turn to page 7, **Building a Simple Electrical System**, in your notebooks.

**Build your own or watch the simple electrical system being built and then draw what the system looks like.**



2:21 / 3:31

Lesson 1.3: Exploring Systems Activity 2



How are the diagram of the system and the simple system that was built **similar**?



2:44 / 6:09

# Example lesson: *Energy Conversions 2.2*

AmplifyScience > Energy Conversions > Chapter 2 > Lesson 2.2



Lesson 2.2:  
Energy Past and Present

< >

<p>Lesson Brief (4 Activities)</p>	<p>1 <b>HANDS-ON</b> Using the Energy Conversions Sorting Tool</p>	<p>2 <b>TEACHER-LED DISCUSSION</b> Introducing Energy Past and Present</p>	<p>3 <b>READING</b> Reading: Energy Past and Present</p>	<p>4 <b>WRITING</b> Synthesizing Ideas from the Book</p>	
--	--	--	--	--	--

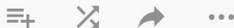
# Example lesson: *Energy Conversions 2.2*



## Grade 4 Energy Conversions Chapter 2 Lesson 2.2

6 videos • 5 views • Updated 7 days ago

Unlisted



Amplify

SUBSCRIBE

1  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part A**  
Amplify 3:41

2  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part B**  
Amplify 5:46

3  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part C**  
Amplify 1:55

4  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 2**  
Amplify 4:16

5  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 3**  
Amplify 8:53

6  **Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 4**  
Amplify 7:46

# Example lesson: *Energy Conversions 2.2*

1 HANDS-ON  
Using the Energy  
Conversions Sorting Tool



2 TEACHER-LED  
DISCUSSION  
Introducing Energy Past  
and Present



3 READING  
Reading: Energy Past  
and Present



4 WRITING  
Synthesizing Ideas from  
the Book



1  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part A  
Amplify 3:41

2  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part B  
Amplify 5:46

3  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 1 Part C  
Amplify 1:55

4  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 2  
Amplify 4:16

5  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 3  
Amplify 8:53

6  Grade 4 Energy Conversions Chapter 2 Lesson 2.2 Activity 4  
Amplify 7:46

# @Home Videos

## Using the resources

- Assign videos for students to watch during remote, asynchronous time
- Leverage synchronous time for live teaching
  - Lots of time? Teach full lessons
  - Less time? Revisit and preview (see table)

### Synchronous time

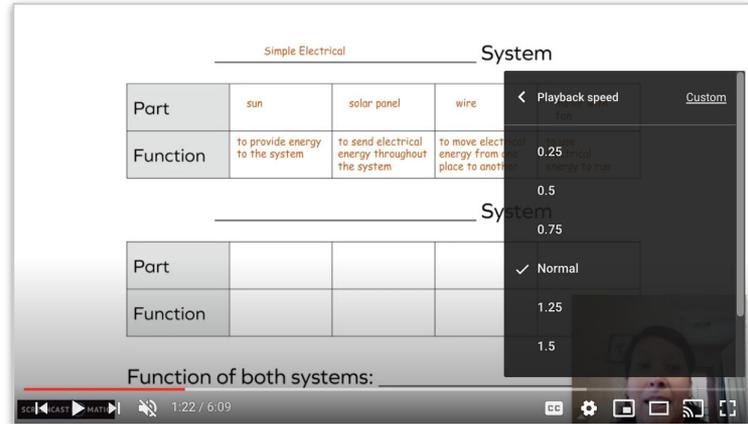
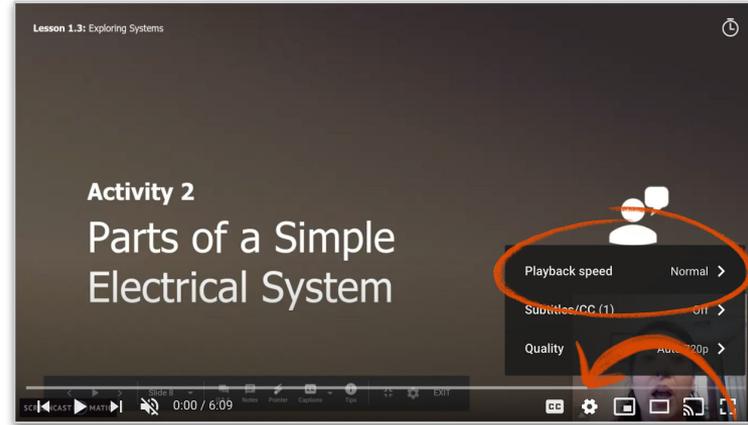
- Online discussions
- Hands-on investigations (option for teacher demo)
- Sim demonstrations
- Interactive read-alouds
- Shared Writing
- Co-constructed class charts

# Planning suggestions: @Home Videos

The Teacher's Guide is the best planning tool for @Home videos.

- Use the **Lesson Overview Compilation** in the Unit Guide as a pacing and planning tool.
- Refer to the lessons themselves to plan for synchronous instruction.

Try adjusting the playback speed of videos to preview them.

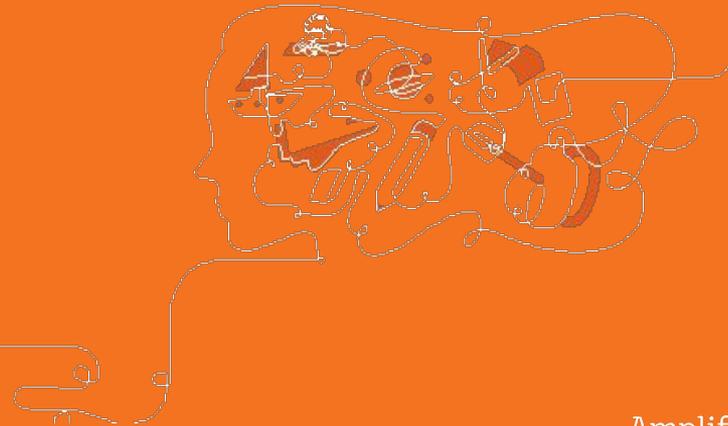




# Plan for the day

- Framing the day
  - Welcome and introductions
  - Anticipatory activity
- Overview of program & resources
  - NYC Resources site
  - Amplify Science approach
- Exemplar lesson
- @Home resources introduction
  - @Home units
  - @Home videos
- Overview of digital teacher's guide
  - Lesson brief
  - Progress build & assessments
- Guided Planning
- Closing
  - Reflection & additional resources
  - Survey

# Brief overview of digital teacher's guide



# Explore digital teacher's guide

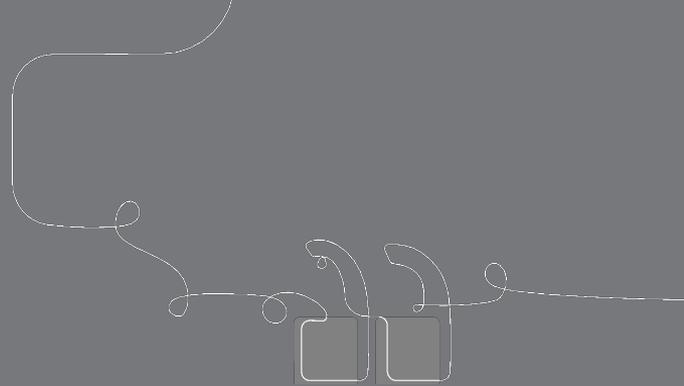
You may choose to start with the unit landing page, or dig into an original lesson.

During your exploration time, consider how you will utilize these resources.



# Share insights

How will you utilize the digital teacher's guide?



## Questions?

# Unit Guide

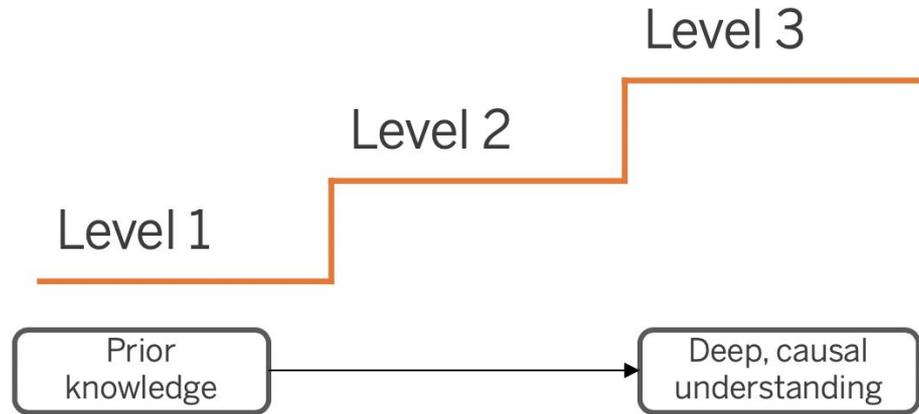
AmplifyScience > Animal and Plant Defenses

Planning for the Unit		Printable Resources
Unit Overview	▼	 Coherence Flowcharts
Unit Map	▼	 Copymaster Compilation
Progress Build	▼	 Investigation Notebook
Getting Ready to Teach	▼	 Multi-Language Glossary
Materials and Preparation	▼	 NGSS Information for Parents and Guardians
Science Background	▼	 Print Materials (8.5" x 11")
Standards at a Glance	▼	 Print Materials (11" x 17")
Teacher References		Offline Preparation
Lesson Overview Compilation	▼	Teaching without reliable classroom internet? Prepare unit and lesson materials for offline access.
Standards and Goals	▼	<a href="#">Offline Guide</a>
3-D Statements	▼	
Assessment System	▼	
Embedded Formative Assessments	▼	
Books in This Unit	▼	

# Progress Build

## Teaching tip

Being familiar with your unit's Progress Build means you know what's coming. This will help you avoid giving ideas away too early in the unit!



# Types of Assessments



## Formative Assessments

Used to guide instruction

### Pre-Unit

Designed to gauge students' initial understanding and pre-conceptions about core ideas in the unit.

### On-the-Fly

Quick check for understanding designed to help monitor and support student progress throughout the unit.

### Critical Juncture

Designed to occur at points in the unit in which it is especially important that students understand the content before continuing.



## Summative Assessments

Used to measure student learning at the end of instruction

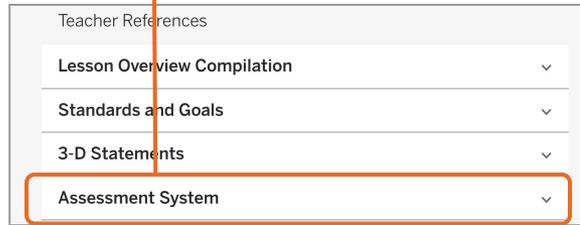
### End-of-Unit

Final evaluation of students' understanding of core ideas in the unit.

# Review an assessment

## Part 1: Choose an Assessment Opportunity

1. Navigate to the *Assessment System* reference in the Unit Guide



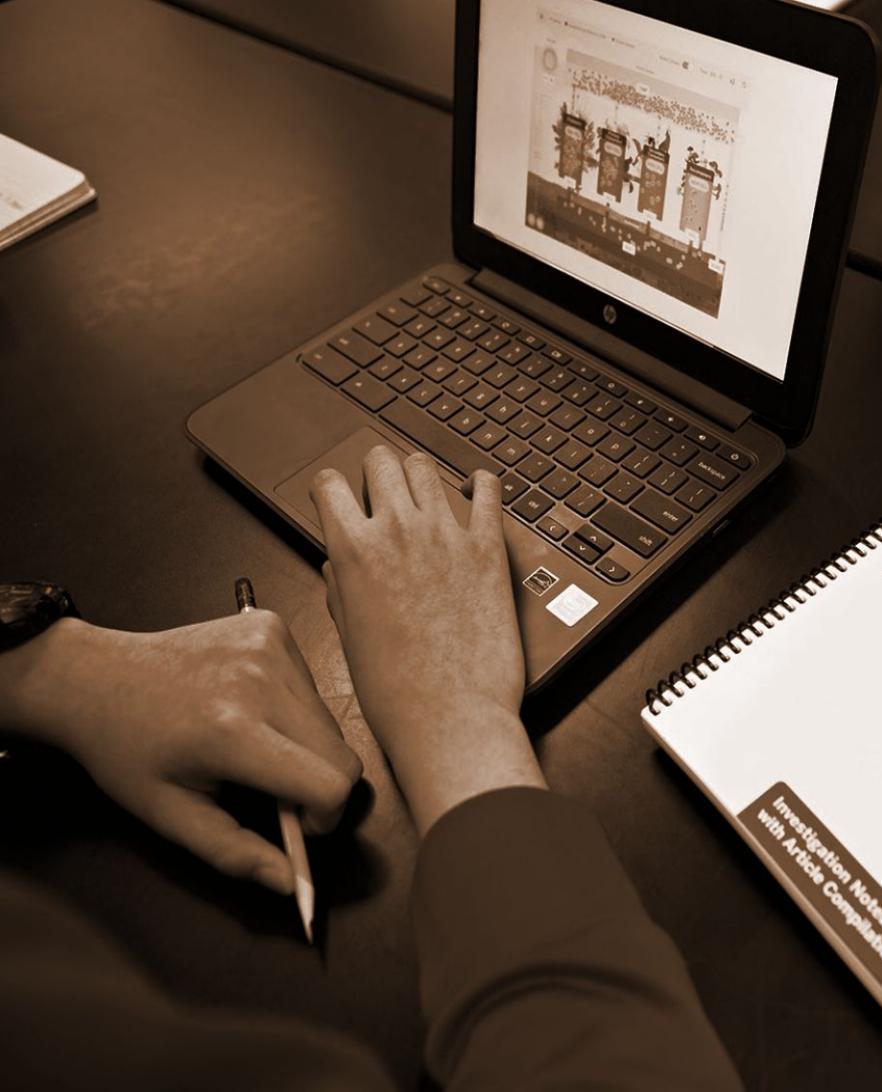
2. Choose an 'Assessment opportunity' to preview.  
*i.e.* Pre-Unit, On-the-Fly, Critical Juncture, or End-of-Unit
3. Navigate to the lesson and review the assessment

## Part 2: Review the Assessment

4. As you review the assessment, answer these questions:
  - a. What are students doing?
  - b. What would student performance tell me about student understanding?
  - c. How could I adjust instruction based on student performance?
  - d. How could I record student data?

# Questions?

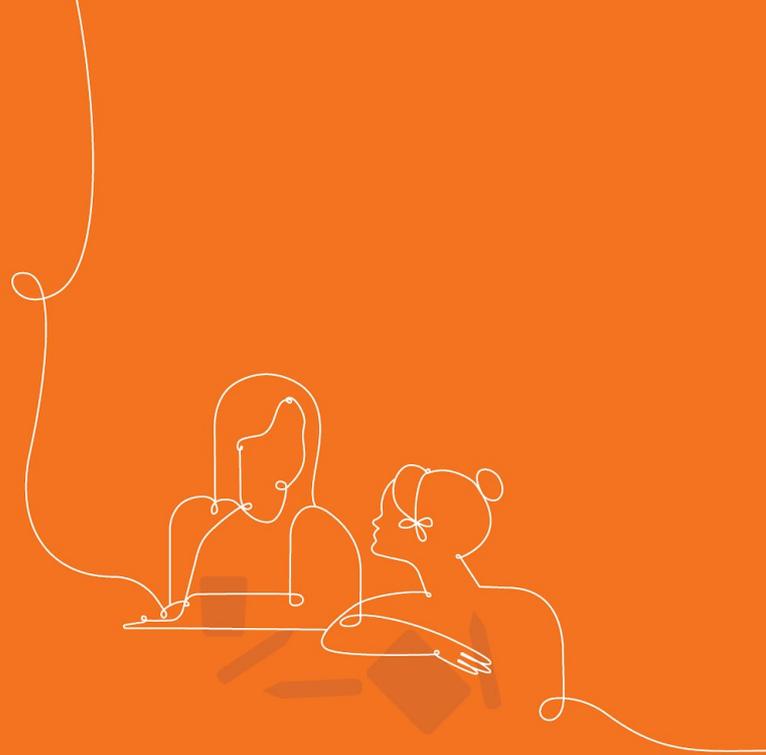




# Plan for the day

- Framing the day
  - Welcome and introductions
  - Anticipatory activity
- Overview of program & resources
  - NYC Resources site
  - Amplify Science approach
- Exemplar lesson
- @Home resources introduction
  - @Home units
  - @Home videos
- Overview of digital teacher's guide
  - Lesson brief
  - Progress build & assessments
- **Guided Planning**
- Closing
  - Reflection & additional resources
  - Survey

# Guided Planning



# Navigation Temperature Check

Rate yourself on your comfort level accessing the Amplify Science digital curriculum.

1 = Extremely Uncomfortable

2 = Uncomfortable

3 = Mild

4 = Comfortable

5 = Extremely Comfortable

# @Home Resources example use case

## Remote Model: with synchronous & asynchronous learning



Days 1 & 2

*Asynchronous*

Assign: Lesson 1.1 @Home Video and sheets for students to work through on their own



Day 3

*Synchronous*

Teach: Lesson 1.2 using clips from the @Home Video



Day 4

*Asynchronous*

Assign: Lesson 1.3 @Home Packet or @Home Slides for students to work through on their own



Day 5

*Synchronous*

Revisit: hands-on or discourse-based activities from the week's lessons

# Let's discuss and plan on



## How do you plan to use these resources?



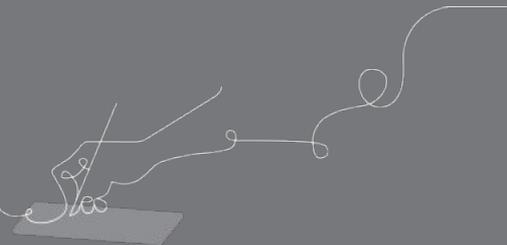
# Planning with @Home Resources: Work time

## @Home Resources: Pacing and planning tool

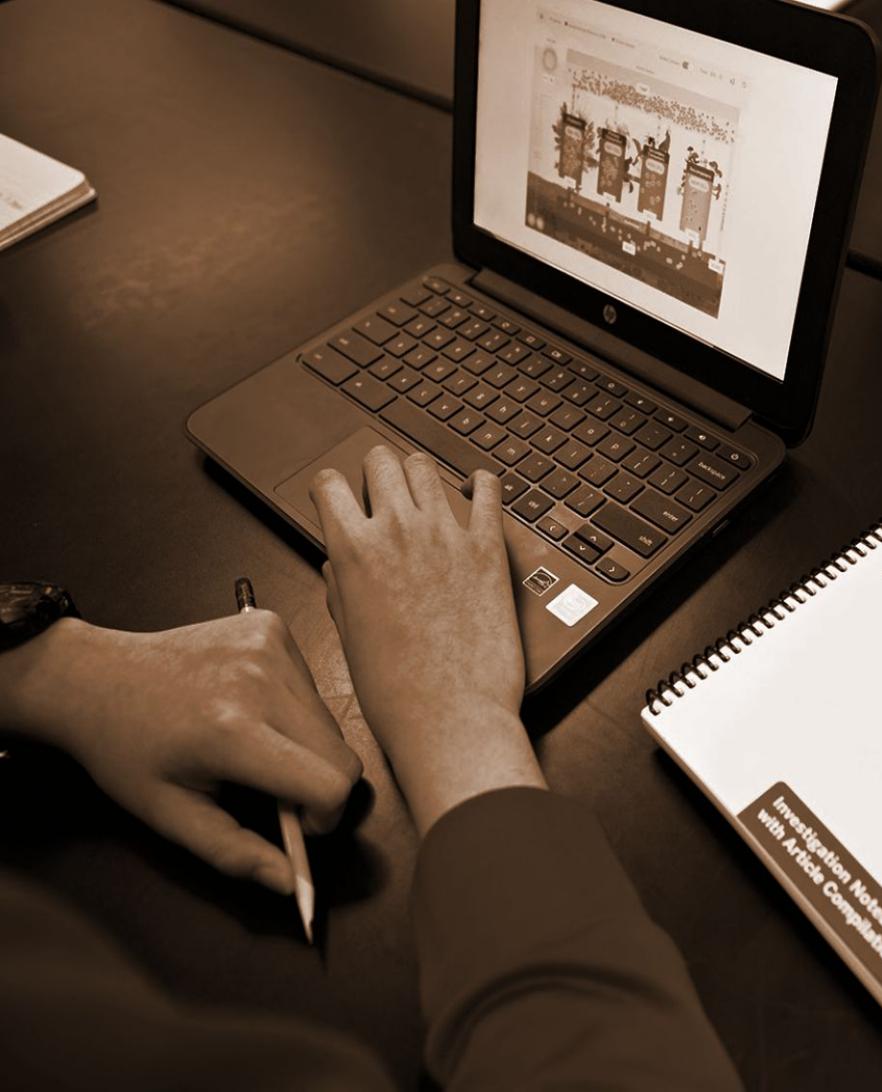
Directions: Use your class schedule to complete the first row of the table. Then follow the directions to map your week in the bottom row.

Day 1	Day 2	Day 3	Day 4	Day 5
Minutes for science: Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Online class	Minutes for science: Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Online class	Minutes for science: Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Online class	Minutes for science: Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Online class	Minutes for science: Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Online class
<p><b>If you have reduced science instructional time:</b> Use the Teacher Overview to familiarize yourself with the upcoming @Home Lessons. If applicable, pay attention to the guidance for synchronous or in-person instruction and suggestions for further condensing or expanding the unit, which are available at the unit level as well as for each lesson or chapter. Then, map your week in the row below.</p> <p><b>If you have the same amount of science instructional time:</b> Use the Lesson Overview Compilation in the Unit Guide to familiarize yourself with upcoming lessons. Refer to Suggestions for Synchronous Time on the next page to consider the best format for different parts of the lesson(s). Then, map your week in the row below.</p>				
Lesson: <input type="checkbox"/> Students work independently <input type="checkbox"/> Teach live lesson (using synchronous suggestions) <input type="checkbox"/> Assign video <input type="checkbox"/> Preview <input type="checkbox"/> Review Notes:	Lesson: <input type="checkbox"/> Students work independently <input type="checkbox"/> Teach live lesson (using synchronous suggestions) <input type="checkbox"/> Assign video <input type="checkbox"/> Preview <input type="checkbox"/> Review Notes:	Lesson: <input type="checkbox"/> Students work independently <input type="checkbox"/> Teach live lesson (using synchronous suggestions) <input type="checkbox"/> Assign video <input type="checkbox"/> Preview <input type="checkbox"/> Review Notes:	Lesson: <input type="checkbox"/> Students work independently <input type="checkbox"/> Teach live lesson (using synchronous suggestions) <input type="checkbox"/> Assign video <input type="checkbox"/> Preview <input type="checkbox"/> Review Notes:	Lesson: <input type="checkbox"/> Students work independently <input type="checkbox"/> Teach live lesson (using synchronous suggestions) <input type="checkbox"/> Assign video <input type="checkbox"/> Preview <input type="checkbox"/> Review Notes:

# Questions?



	Grade	Unit	Student role	Unit type	Focal crosscutting concept	Sense-making strategy	Writing genre
K		Needs of Plants and Animals	scientist	investigation	systems	setting a purpose	explanation
		Pushes and Pulls	pinball engineer	design	cause and effect	visualizing	explanation
		Sunlight and Weather	weather scientist	modeling	cause and effect	making predictions	explanation
1		Animal and Plant Defenses	aquarium scientist	modeling	structure and function	visualizing	explanation
		Light and Sound	light and sound engineer	design	cause and effect	asking questions	explanation
		Spinning Earth	sky scientist	investigation	patterns	making predictions	explanation
2		Plant and Animal Relationships	plant scientist	investigation	systems	setting a purpose	explanation
		Properties of Materials	glue engineer	design	cause and effect	making predictions	design argument
		Changing Landforms	geologist	modeling	scale, proportion, and quantity	visualizing	explanation
3		Balancing Forces	scientist	modeling	stability and change	setting a purpose	explanation
		Inheritance and Traits	wildlife biologist	investigation	patterns	asking questions	explanation
		Environments and Survival	biomimicry engineer	design	structure and function	making inferences	explanation
		Weather and Climate	meteorologist	argumentation	patterns	visualizing	scientific argument
4		Energy Conversions	systems engineer	design	systems	synthesizing	design argument
		Vision and Light	conservation biologist	investigation	structure and function	asking questions	explanation
		Earth's Features	geologist	argumentation	stability and change	making inferences	scientific argument
		Waves, Energy, and Information	marine scientist	modeling	patterns	visualizing	explanation
5		Patterns of Earth and Sky	astronomer	investigation	patterns	visualizing	explanation
		Modeling Matter	food scientist	modeling	scale, proportion, and quantity	making inferences	explanation
		The Earth System	water resource engineer	design	systems	synthesizing	explanation
		Ecosystem Restoration	ecologist	argumentation	energy and matter	making inference and synthesizing	scientific argument



# Plan for the day

- Framing the day
  - Welcome and introductions
  - Anticipatory activity
- Overview of program & resources
  - NYC Resources site
  - Amplify Science approach
- Exemplar lesson
- @Home resources introduction
  - @Home units
  - @Home videos
- Overview of digital teacher's guide
  - Lesson brief
  - Progress build & assessments
- Guided Planning
- Closing
  - Reflection & additional resources
  - Survey

# Revisiting our objectives

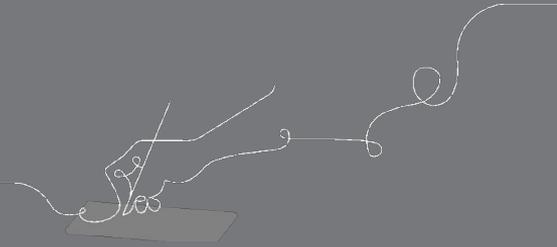
Do you feel ready to to...

- Navigate the digital components of the Amplify Science curriculum.
- Understand the program's phenomenon-based approach.
- Apply the program essentials to prepare to teach in a remote & hybrid instructional context.

**1-** I'm not sure how I'm going to do this!

**3-** I have some good ideas but still have some questions.

**5-** I have a solid plan for how to make this work!



# New York City Resources Site

<https://amplify.com/amplify-science-nyc-doe-resources/>



Amplify.

## Amplify Science Resources for NYC (K-5)

Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades K-5.

UPDATE: Summer 2020

Introduction

Getting started resources

Planning and implementation resources

Admin resources

Parent resources

COVID-19 Remote learning resources 2020

Professional learning resources

Questions

UPDATE: Summer 2020

**Account Access:** It's an exciting time for Amplify Science! We have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

**Upcoming PL Webinars:** Join us for our Summer 2020 Professional Learning opportunities in July for NEW teachers and administrators and August for RETURNING teachers and administrators. Links to register coming soon!

## Site Resources

- Login information
- Pacing guides
- Getting started guide
- NYC Companion Lessons
- **Resources from PD sessions**
- And much more!

# Amplify Science Program Hub

A hub for Amplify Science resources

- **Videos and resources to continue getting ready to teach**
- Amplify@Home resources
- Keep checking back for updates

The screenshot shows the Amplify Science Program Hub website. The browser address bar displays the URL: [apps.learning.amplify.com/curriculum/#/yearoverview?subject=Science&programKey=6a0daafbc3564e50841a558d9bb5181...](https://apps.learning.amplify.com/curriculum/#/yearoverview?subject=Science&programKey=6a0daafbc3564e50841a558d9bb5181...). The user is logged in as **Melba Teacher Lambertsen** (mlambertsen@tryamplify.net). The page features a navigation menu on the left with a hamburger icon circled in red. The main content area is titled **Life Science** and includes a sidebar for **Additional Resources** with icons for **Benchmark Assessments**, **ELA Resources**, **Interim Assessments**, **LA Science Program Guide**, **Science Program Guide**, and **Help**. The main content area displays a grid of resource cards, including **Metabolism** (19 Lessons) and **Home** (19 Lessons). The footer contains the copyright notice: © 2020 Amplify Education, Inc.

# Additional Amplify resources



## **Program Guide**

Glean additional insight into the program's structure, intent, philosophies, supports, and flexibility.

**<https://my.amplify.com/programguide/content/national/welcome/science/>**

## **Amplify Help**

Find lots of advice and answers from the Amplify team.

**[my.amplify.com/help](https://my.amplify.com/help)**

# Additional Amplify Support

## Customer Care

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



scihelp@amplify.com



800-823-1969

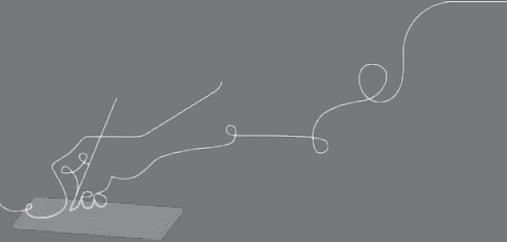


Amplify Chat

## When contacting the customer care team:

- Identify yourself as an Amplify Science user.
- Note the unit you are teaching.
- Note the type of device you are using (Chromebook, iPad, Windows, laptop).
- Note the web browser you are using (Chrome or Safari).
- Include a screenshot of the problem, if possible.
- Copy your district or site IT contact on emails.

# Final Questions?



# Please provide us feedback!

URL: <https://www.surveymonkey.com/r/BY56SBR>

Presenter name: XX

