Welcome to Amplify Science!

Follow the directions below as we wait to begin.

1. Please log in to your Amplify Account.

2. Sign in using link dropped in chat.

3. Open your Participant Notebook.

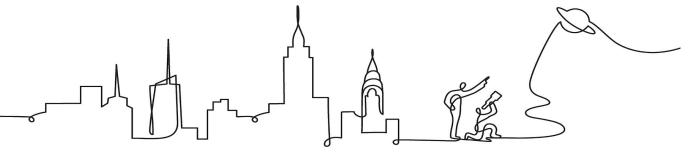


Amplify Science New York City

The Amplify Science Approach: Practicing Multiple Modalities & 3-D Learning Grade 2

Date xx

Presented by xx



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

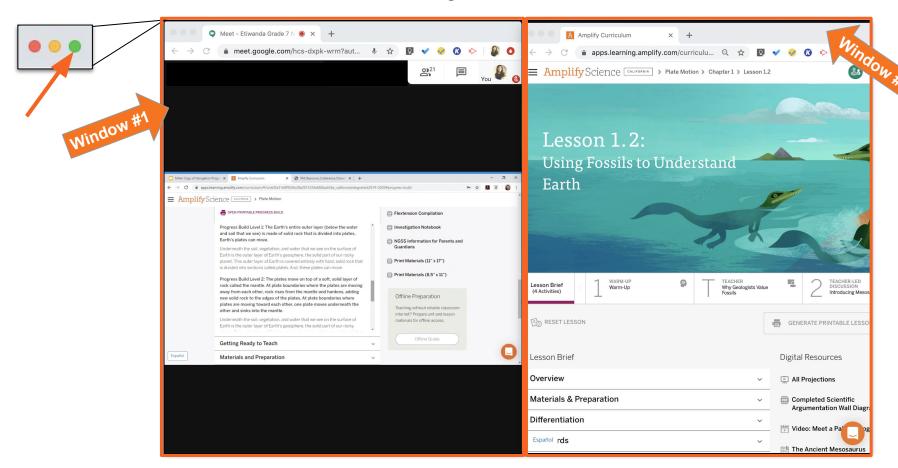


Make sure you have a note-catcher present



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

Use two windows for today's webinar



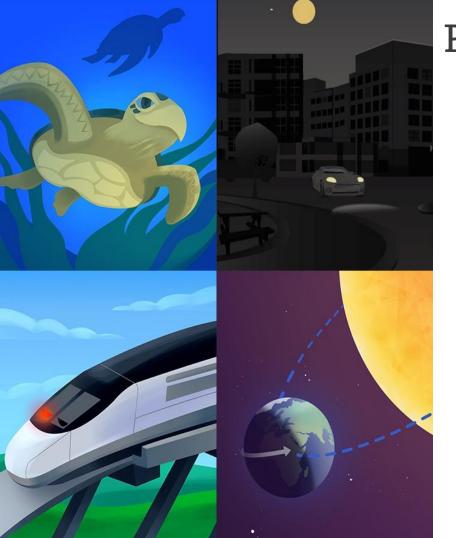
Objectives

By the end of this 1-hour workshop, you will be able to...

- Analyze the role of multimodal and 3-dimensional learning in a coherent @Home lesson activity sequence.
- Adapt multimodal and 3-dimensional instructional routines to your learners' particular instructional contexts.
- Support caregivers as partners in practicing multiple modalities and 3-dimensional learning at home.







Plan for the day

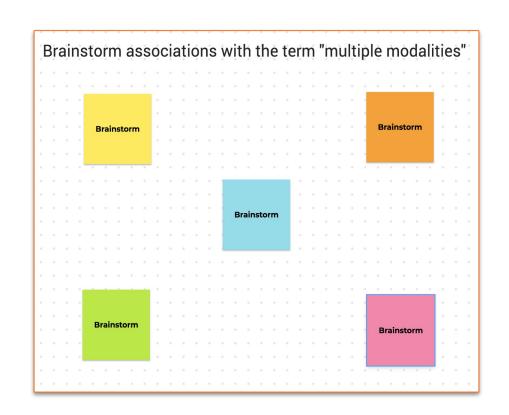
- Framing the day
 - Welcome and introductions
 - Anticipatory activity
- Overview of Amplify Science Approach
 - Multimodal, phenomenon-based learning
 - 3 dimensions of NYSSLS
- @Home Resources review
 - o @Home Units
 - o @Home Videos
- Multimodal & 3-D Learning: @Home lesson
 - Coherent activity sequence analysis
 - Adaptations of multiple modalities
 - Classroom wall
- Caregivers as partners
 - Family overview resource
 - Caregivers' site
- Closing
 - Reflection & additional resources
 - Survey

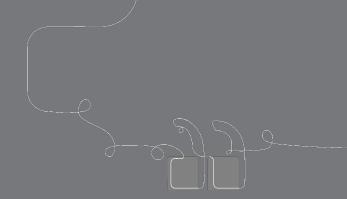
Amplify.

Anticipatory activity

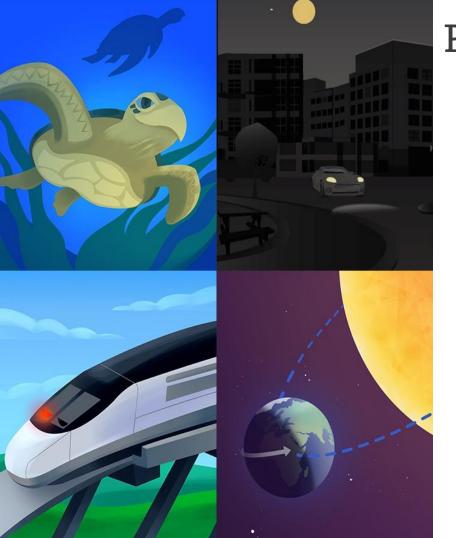
On the Jamboard "post"....

- Your associations with these terms:
 - "Multiple modalities"
 - "3-Dimensional learning"
 - "Amplify Science approach"





Questions?



Plan for the day

- Framing the day
 - Welcome and introductions
 - Anticipatory activity
- Overview of Amplify Science Approach
 - Multimodal, phenomenon-based learning
 - o 3 dimensions of NYSSLS
- @Home Resources review
 - o @Home Units
 - o @Home Videos
- Multimodal & 3-D Learning: @Home lesson
 - Coherent activity sequence analysis
 - Adaptations of multiple modalities
 - Classroom wall
- Caregivers as partners
 - Family overview resource
 - Caregivers' site
- Closing
 - Reflection & additional resources
 - Survey

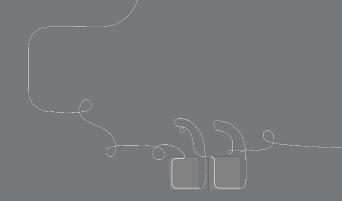
Amplify.

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.



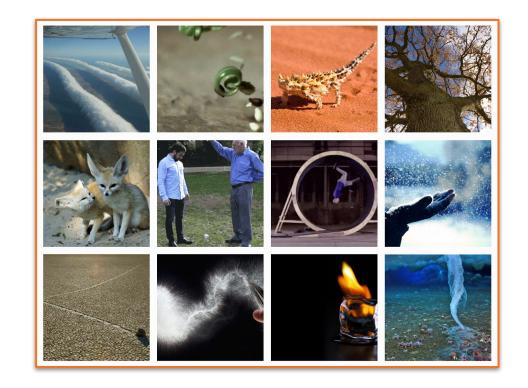


What are PHENOMENA?

Phenomena are observable occurrences.

 These occurrences stimulate curiosity or pose problems to for students to solve.

 Students are motivated to ask science questions or design solutions that drive learning.



Amplify Science units focus on phenomena

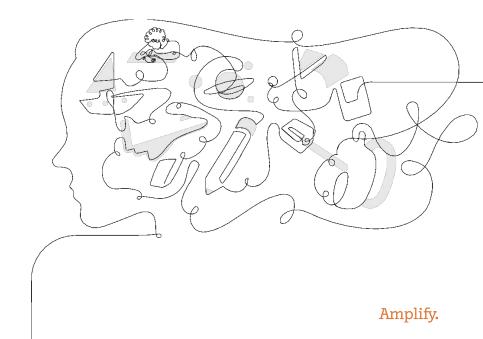
Topics Phenomena How do sea turtles defend themselves from all about sea turtles sharks? How do organisms get inheritance and traits their traits? How can an ecosystem be restored to its original ecosystem restoration healthy state?

Shifts called for in the NRC* framework

Learning about topics Figuring out phenomena Listing or classifying facts Understanding interrelatedness of ideas devoid of context Complex causal Simple observations explanations

^{*}National Research Council of the National Academy of Sciences, 2011

Figure out, not learn about



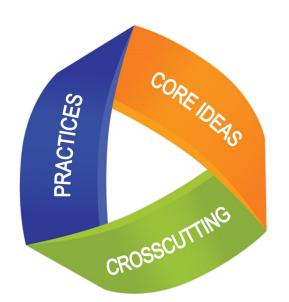
Problem-based deep dives

Students inhabit the roles of scientists and engineers to figure out solutions to real-world problems and how the natural world works.



Three dimensions of NYSSLS





Disciplinary Core Ideas

 Describe core ideas in the science discipline (DCI)

Science and Engineering Practices

 Describe behaviors scientists and engineers engage in (SEP)

Crosscutting Concepts

 Describe concepts linking the different domains of science (CCC)



Disciplinary Core Ideas

The foundational concepts lessons are based on

Physical Science

PS1 Matter and Interactions

PS2 Motion and Stability: Forces and Interactions

PS3 Energy

PS4 Wave Properties

Earth & Space Science

ESS1 Earth's Place in the Universe

ESS2 Earth's Systems

ESS3 Earth and Human Activity

Life Science

LS1 From Molecules to Organisms: Structure and Properties

LS2 Ecosystems: Interactions, Energy, and Dynamics

LS3 Heredity: Inheritance and Variation of

Traits

LS4 Biological Evolution: Unity and Diversity

Earth & Space Science

ETS1 Earth's Place in the Universe

Science and Engineering Practices (SEP)

How students engage as scientists

- 1. Asking questions (for science) and defining problems (for engineering)
- 2. Developing and using models
- 3. Planning and carrying out investigations
- 4. Analyzing and interpreting data
- 5. Using mathematics and computational thinking
- 6. Constructing explanations (for science) and designing solutions (for engineering)
- 7. Engaging in argument from evidence
- 8. Obtaining, evaluating, and communicating information

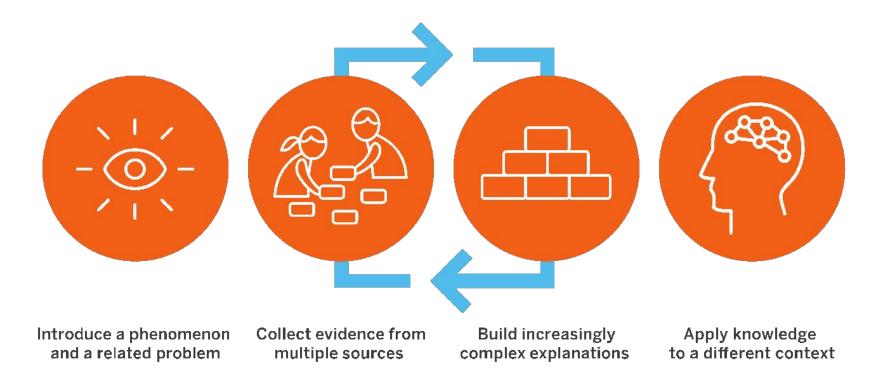
Crosscutting Concepts (CCC)

How students makes sense of phenomenon

- Patterns
- Cause and Effect
- Scale, Proportion and Quantity
- Systems and System Models
- Energy and Matter
- Structure and Function
- Stability and Change



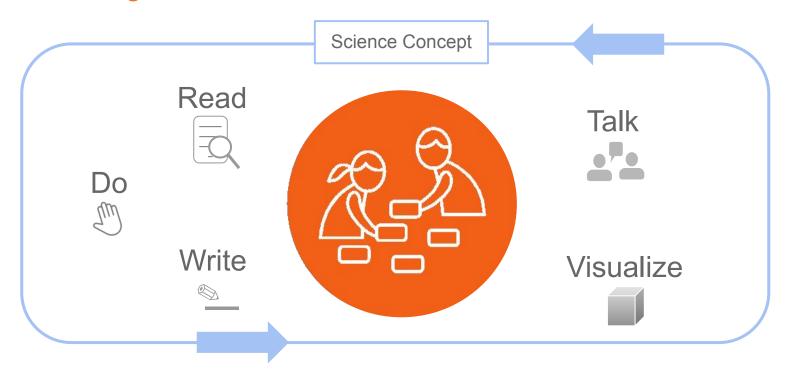
Amplify Science approach



Amplify.

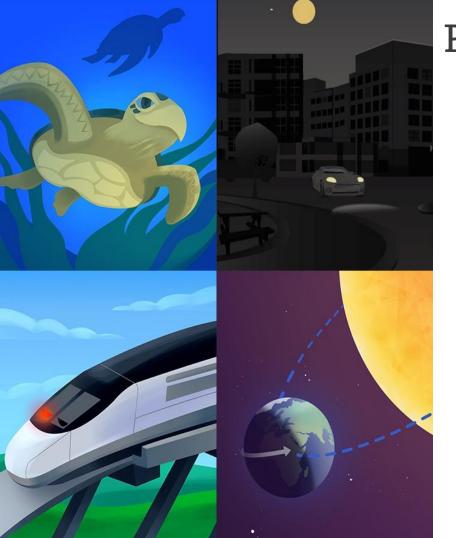
Multimodal learning

Gathering evidence from different sources





Questions?



Plan for the day

Framing the day

- Welcome and introductions
- Anticipatory activity

Overview of Amplify Science Approach

- Multimodal, phenomenon-based learning
- o 3 dimensions of NYSSLS

• @Home Resources review

- o @Home Units
- o @Home Videos

• Multimodal & 3-D Learning: @Home lesson

- Coherent activity sequence analysis
- Adaptations of multiple modalities
- o Classroom wall

• Caregivers as partners

- Family overview resource
- Caregivers' site

Closing

- Reflection & additional resources
- Survey

Amplify.

Temperature Check

Rate your comfort level accessing and navigating the Amplify Science @Home Resources

- 1 = Extremely Uncomfortable
- 2 = Uncomfortable
- 3 = Mild
- 4 = Comfortable
- 5 = Extremely Comfortable

AmplifyScience@Home

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





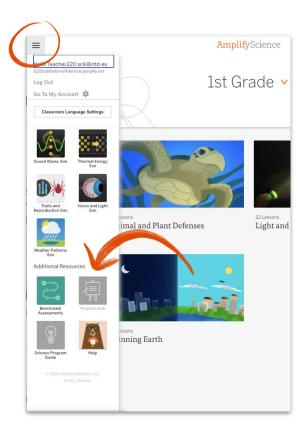




Accessing Amplify Science@Home

Amplify Science Program Hub

- Contains Amplify Science@Home and additional PL resources
- Accessible via the Global Navigation menu
- First unit for each grade level is now available
- Additional units rolling out throughout back-to-school



AmplifyScience@Home

Two different options:

@Home Units

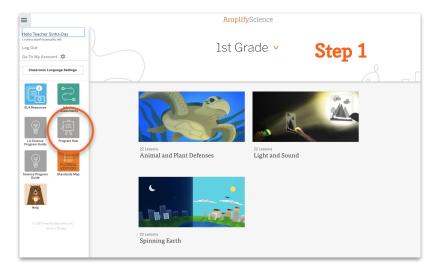
 Packet or slide deck versions of Amplify Science units condensed by about 50%

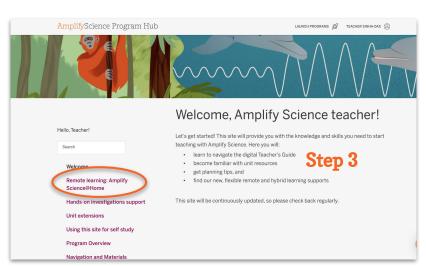
@Home Videos

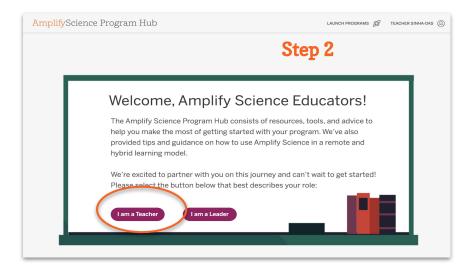
Video playlists of Amplify
 Science lessons, taught by real
 Amplify Science teachers

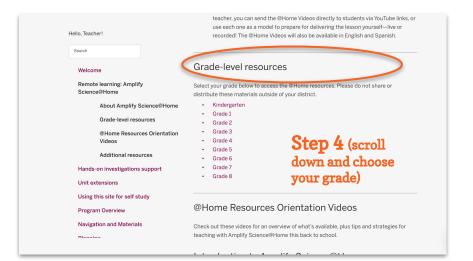










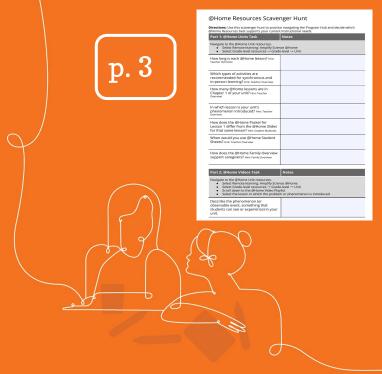


Review your @Home Unit

Navigate to your unit on the Program Hub and explore (if you this is your first time).

OR,

Complete scavenger hunt (if you explored these resources before)





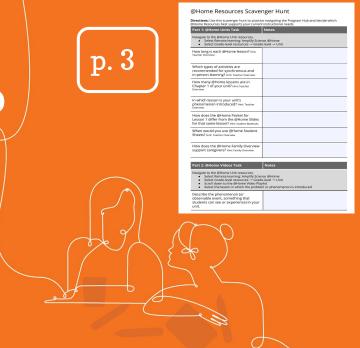
Questions?

Review your @Home Video

Navigate to your unit on the Program Hub and explore (if you this is your first time).

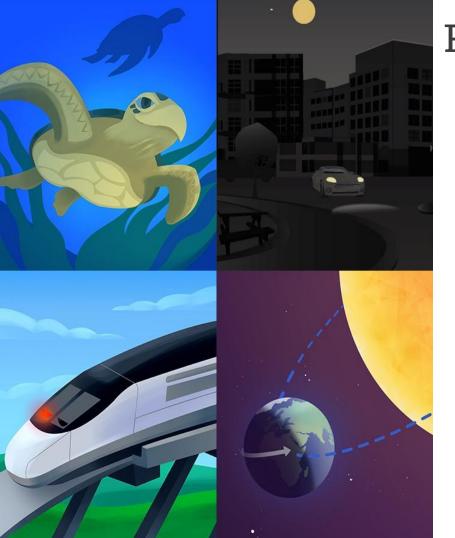
OR,

Complete scavenger hunt (if you explored these resources before)





Questions?



Plan for the day

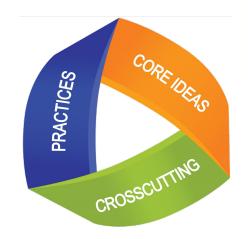
- Framing the day
 - Welcome and introductions
 - Anticipatory activity
- Overview of Amplify Science Approach
 - Multimodal, phenomenon-based learning
 - o 3 dimensions of NYSSLS
- @Home Resources review
 - o @Home Units
 - o @Home Videos
- Multimodal & 3-D Learning: @Home lesson
 - Coherent activity sequence analysis
 - Adaptations of multiple modalities
 - o Classroom wall
- Caregivers as partners
 - Family overview resource
 - Caregivers' site
- Closing
 - Reflection & additional resources
 - Survey

Amplify.

@Home Units

Reduced set of prioritized activities

- Preserves a coherent instructional build
- Retains a multi-modal &3-D learning approach
- Adapted versions of doing, talking, reading, and writing





@Home Lesson

A coherent activity sequence

Observe lesson

 Note modalities and science & engineering practices that were utilized



Amplify Science multimodal approach & 3-dimensional learning

Coherent activity sequence analysis

In Amplify Science units, students figure out phenomena by using science and engineering practices. They gather evidence from multiple sources and make explanations and arguments through multiple modalities: doing, talking, reading, writing, and visualizing. While we have retained this core approach in the @Home Lessons, enacting it at home will require adaptations.

Based on the **coherent activity sequence** you've just observed, circle the modalities and science & engineering practices that were utilized in order to promote an **authentic and purposeful context for inquiry**:

Multiple Modalities	
Doing? □	Talking? □
Notes:	Notes:
Writing? □	Reading? □
Neteri	Nexes
Notes:	Notes:
Science & Engineering Practices	
Asking questions and defining problems?	Developing and using models?
Notes:	Notes:
Notes.	Notes.

Plant and Animal Relationships

@Home Lesson 8

Remember, we have been investigating this question:

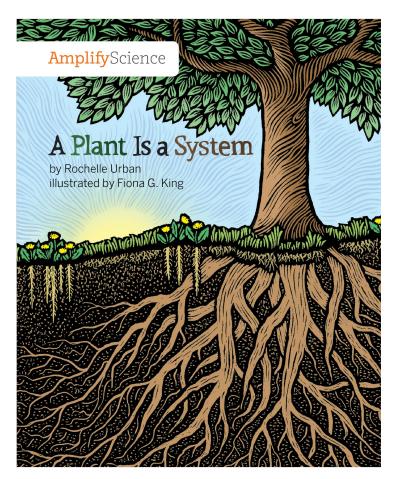
How do plants get the water and sunlight that they need to grow?



Earlier, you **observed** the roots and leaves of different plants.



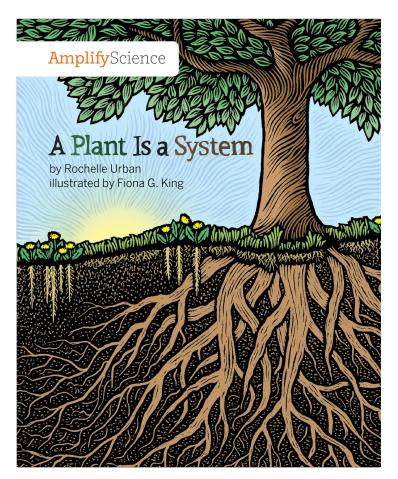
What are your ideas about how a plant's roots and leaves help the plant get what it needs to grow?



Today, we will read a new book called A Plant Is a System.

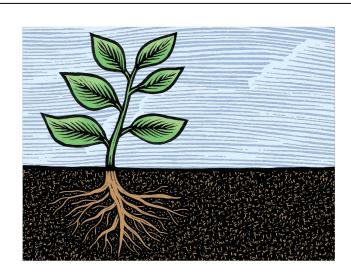


What are some things you **observe** on the cover of the book?



An important way that readers learn from a book is to **set a purpose** before reading.

Our purpose for reading is to find out **how a plant uses its parts** to get the water and sunlight it needs to grow.



A **plant** is a **system**. A system is a group of parts that work together.

A plant has parts. Each part of a plant does something different. Every part is important. Each one is part of the system.

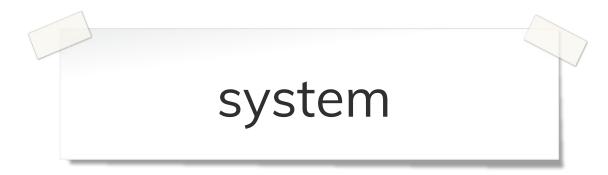
Turn to page 3.



3

You can access a digital version of the book <u>here</u> or watch a video read-aloud of this book at <u>tinyurl.com/AMPPAAR-04</u>.

A **system** is a group of parts that work together.



We just learned that a plant is a system.

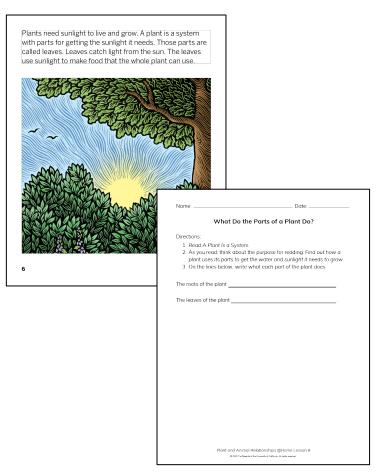
What	t Do the Parts of a Plant Do?
plant uses its par	System. k about the purpose for reading: Find out how a ts to get the water and sunlight it needs to grow. w, write what each part of the plant does.
The roots of the plant	
The leaves of the plant	<u>. </u>

Find the What Do the Parts of a Plant Do? page.

This page has places to write what you find out about roots and leaves as you read.

Plant and Animal Relationships @Home Lesson 8

© 2020 The Regerts of the University of Coeffornia, All rights reserved.



Turn to page 6.



Continue **reading** through the end of the book.

As you read, write about what roots and leaves do.

You can watch a video read-aloud of this book at:



Now is a good time to take a break.

Now, you will share ideas about what you read in A Plant Is a System. You can look back through the book to help with your ideas.

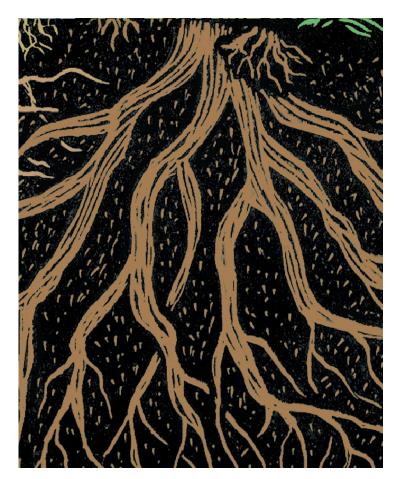
You will need a partner for these activities.





What do the **leaves** of a plant do?

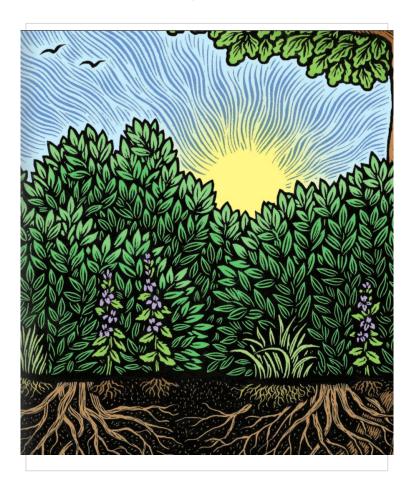
Read pages 6 and 7 again if you need help remembering.





What do the **roots** of a plant do?

Read pages 8 and 9 again if you need help remembering.





Read page 14 again if you need help remembering.

We have been learning new science words to help with our investigations in this unit.

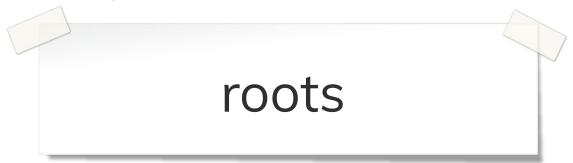
Now we will think more about **two** of the new words we are learning.

Leaves are the flat, green plant parts that use light to help the plant grow.



Leaves catch light from the sun.

Roots are the underground plant parts that take in water to help the plant grow.



Roots spread out in the soil to get water.

From our reading and investigations, we have figured out an important key concept:

Plants have leaves that get sunlight. Plants have roots that get water from the soil.

	Date:
	A Plant Is a System
Directions:	Assertions Book of entrants, inchanged and other Visit Productive States.
	ges 8–10 in A <i>Plant Is a</i> System with your partner. ch part of the plant in the box below.
3. Draw arm	rows to show how the plant uses sunlight and water. the questions below.
How is a plant grow?	t a system? How does it use its parts to get what it needs

© 2020 The Regentrof the University of Colliomic. All rights received

Find the A Plant Is a System page.



Follow the directions to complete the page.

Share ideas with your partner as you work.

End of @Home Lesson



Amplify.

Published and Distributed by Amplify. www.amplify.com

Reflection

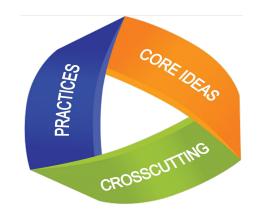
Coherent activity sequence analysis

 Which multiple modalities were students in engaged in? How were they adapted?

 Which science & engineering practices were students engaged in? How were they adapted?

Crosscutting concepts

- The "big ideas" that cut across all the domains
- Serve as useful lens to integrate new ideas
- Open next @home lesson
- Identify the cross-cutting concepts collaboratively



Crosscutting Concepts Analysis

Navigate to the next @home lesson. Make note of which crosscutting concept(s) scaffold students' understanding and connect it to other ideas about the natural world that they have learned thus far in this particular lesson.

Notes:
System & System Models? □
lotes:

Adaptations of multiple-modalities

Specific routines & additional supports

 How would you adapt different aspects of the Amplify Science approach for your learners' particular contexts?



modalities in remote/hybrid instructional contexts but you may need to set up expectations for specific routines or provide additional support to your students. Let's brainstorm ideas for how different aspects of the Amplify Science approach might be adapted for your learners' particular contexts. Modality Adaptation Doing Talking Reading Writing

Adaptations of multiple modalities

The @Home Lessons provide general guidance for these adaptations of the multiple

Suggestions for synchronous time

Using the resources

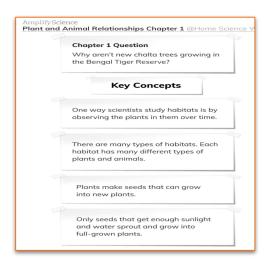
- Leverage synchronous time for live teaching
 - Lots of time? Teach full lessons
 - Less time? Revisit and preview (see table)

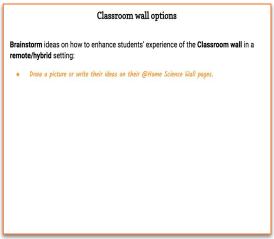
Synchronous time			
In-person	Online class		
Discourse routines	 Online discussions 		
Class discussionsHands-on	Sim demonstrations		
investigations (option for	Interactive read-alouds		
teacher demo)	 Shared Writing 		
 Physical modeling activities 	 Co-constructed class charts 		

Classroom wall

Re-imagined as @Home science wall

- Chapter Questions, key concepts,
 and vocabulary that have been introduced
 so far are provided in the last lesson of each chapter.
- How would you enhance students'
 experience of the Classroom wall in a
 remote/hybrid setting?





@Home science wall

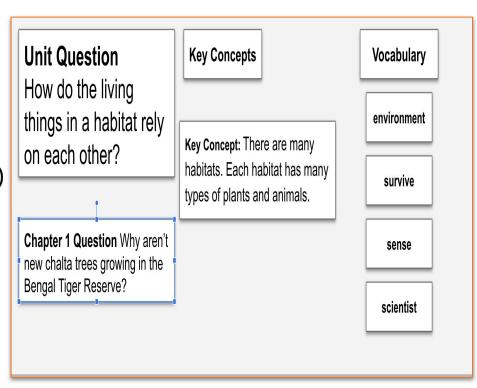
To enhance students' experience of the @Home Science Wall, you could have them:

- Draw a picture or write their ideas on their @Home Science Wall pages.
- Highlight or color in each question, key concept, or word that is introduced.
- Cut out each question, key concept, or word. These can be then posted on a wall, large sheet of paper, or refrigerator at home.
- Illustrate each word that is introduced to create a picture glossary.
- If you are meeting with your class remotely, you could create a virtual
 @Home Science Wall.

Creating a virtual @Home science wall

If meeting remotely

- Screenshot chapter questions, key concepts, vocabulary from @Home Student sheets
- Screenshot (from teacher's guide)
 or create own unit &
 investigation questions
- Animate new additions
- Now try yourself on Google slides!



Plant and Animal Relationships Classroom Wall

Unit Question

How do the living things in a habitat rely on each other?

Chapter 1 Question Why aren't new chalta trees growing in the Bengal Tiger Reserve?

Key Concepts

Key Concept: There are many habitats. Each habitat has many types of plants and animals.

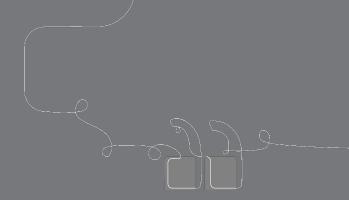
Vocabulary

environment

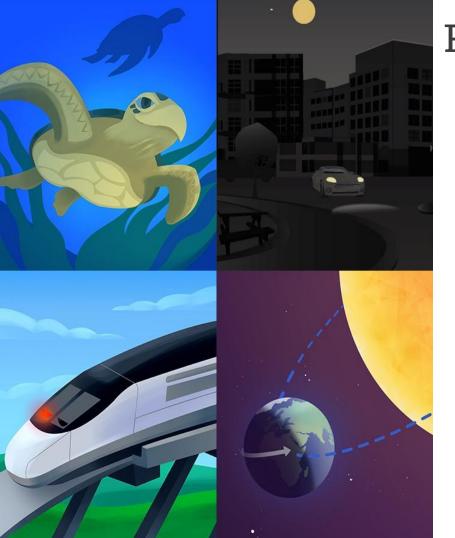
survive

sense

scientist



Questions?



Plan for the day

Framing the day

- Welcome and introductions
- Anticipatory activity

Overview of Amplify Science Approach

- Multimodal, phenomenon-based learning
- o 3 dimensions of NYSSLS

• @Home Resources review

- o @Home Units
- o @Home Videos

Multimodal & 3-D Learning: @Home lesson

- Coherent activity sequence analysis
- Adaptations of multiple modalities
- o Classroom wall

Caregivers as partners

- Family overview resource
- Caregivers' site

Closing

- Reflection & additional resources
- Survey

Amplify.

Caregivers as partners

Supporting practicing multiple modalities & 3-D learning at home

- Editable letter that introduces the unit and the kinds of activities students will be doing
- Ideas about what parents and guardians can do to support their student at home.
- Unit summary, Chapter Questions, key concepts, unit vocabulary and definitions, and information about books & hands-on materials.

AmplifyScience



Plant and Animal Relationships

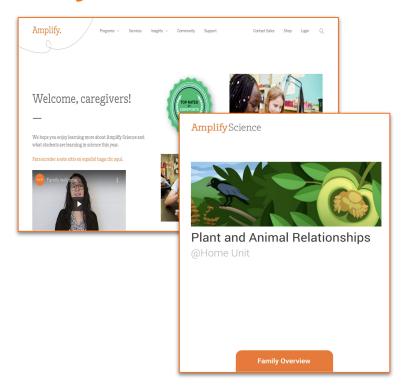
@Home Unit

Family Overview

Caregivers' site

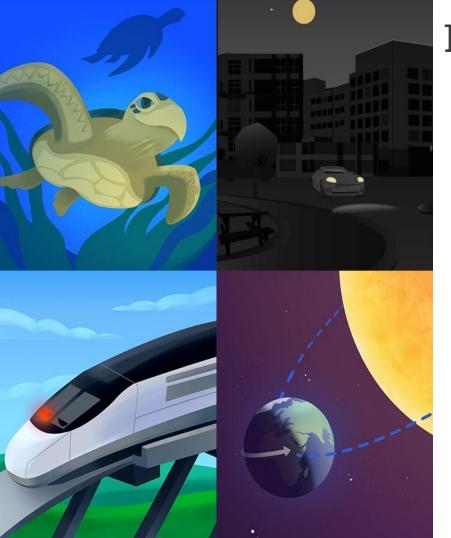
amplify.com/amplify-science-family-resource-intro/

- Provides your students' families information about Amplify Science & optional extension activities.
- Explore and reflect:
 - How will you utilize these resources to support caregivers?





Questions?



Plan for the day

Framing the day

- Welcome and introductions
- Anticipatory activity

Overview of Amplify Science Approach

- Multimodal, phenomenon based learning
- o 3 dimensions of NYSSLS

• @Home Resources review/introduction

- o @Home Units
- o @Home Videos

Multimodal & 3-D Learning: @Home lesson

- Coherent activity sequence analysis
- Adaptations of multiple modalities
- o Classroom wall

• Caregivers as partners

- Family overview resource
- Caregivers' site

Closing

- Reflection & additional resources
- Survey

Amplify.

Revisiting our objectives

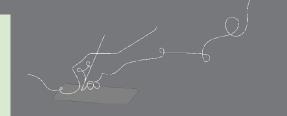
Do you feel ready to to...

- Analyze the role of multimodal and 3-dimensional learning in a coherent @Home lesson activity sequence?
- Adapt multimodal and 3-dimensional instructional routines to your learners' particular instructional contexts?
- Support caregivers as partners in practicing multiple modalities and 3-dimensional learning at home?

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 Schave access to the many updates and upgrades in or your regular credentials to login and begin your sur curriculum until late August/early September whe rosters from STARS.

Site Resources

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

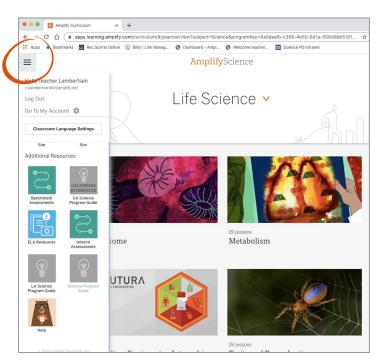
Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

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!

Amplify Science Program Hub

A new hub for Amplify Science resources

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



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

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?

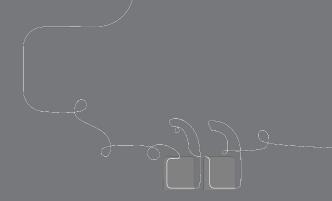
Please provide us feedback!

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

Presenter name: XXX







30 minute open office hours to follow...