

Amplify Science

New York City

Guided Unit
Internalization

With @Home Resources

Grade 5 Modeling Matter



Who's in the Room?

Represent for your Borough!



Share your name, role, borough.

1- Brooklyn North

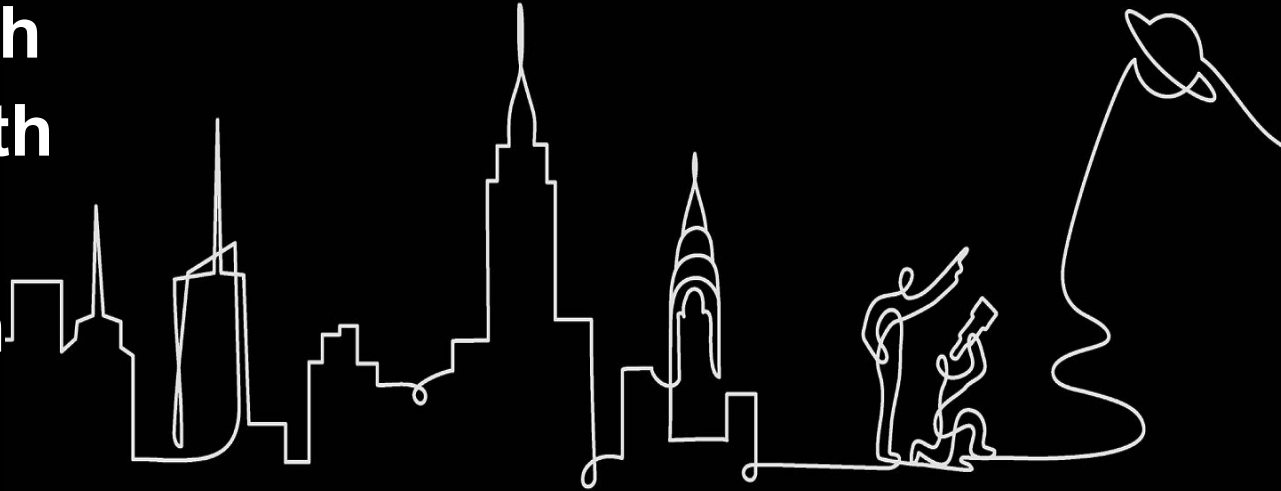
2- Brooklyn South

3- Queens North

4- Queens South

5- The Bronx

6- Staten Island



Workshop Norms



- **Please keep your camera on, if possible.**

- **Take some time to orient yourself to the platform**



- **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**



- **Be an active participant - chat, ask questions, discuss, share!**

Workshop Goals

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

- Make instructional decisions about remote or hybrid learning
- Develop a plan for using @Home resources within your class schedule and instructional format.



Amplify Science New York City

Guided Unit Internalization With @Home Resources



Guided Unit Internalization

Part 1: Unit-level internalization

Unit title:	
What is the phenomenon students are investigating in your unit?	
Unit Question:	Student role:
By the end of the unit, students figure out ...	
What science ideas do students need to figure out in order to explain the phenomenon?	

Participant Materials

AmplifyScience@Home Planning Tool

Unit:

Chapter Title:

Cohort/Group/Pod:

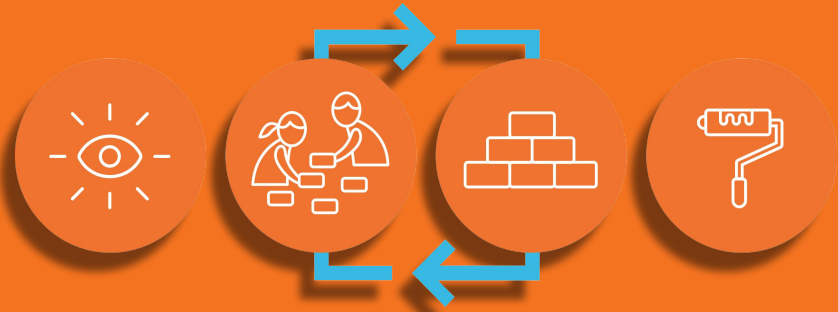
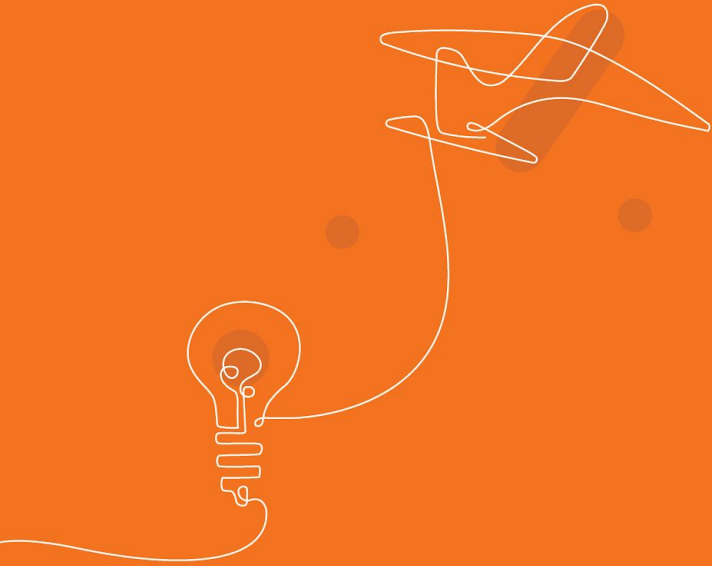
@Home Unit lesson #:	Adapted from Lesson(s):	
Student Sheets page title:	Investigation Notebook p.# Copy Master/Print Materials	
Chapter Level Phenomenon:		
@ Home Unit lesson (asynchronous)		
Key activities from @ Home lesson:	Dates to administer:	Other notes:
	Investigative Phenomenon:	
Corresponding synchronous ideas		
In person or remote? <input type="checkbox"/> In person <input type="checkbox"/> Remote	Synchronous activity:	Other notes:
	Dates(s) to administer:	

Plan for the day

- **Framing the day**
- Unit Internalization
- Amplify Science @Home
- Planning to teach using @Home resources
- Reflection and closing



Revisiting the Amplify Science approach





Questions
Reflections
Connections

Unit 2 Planning Notes

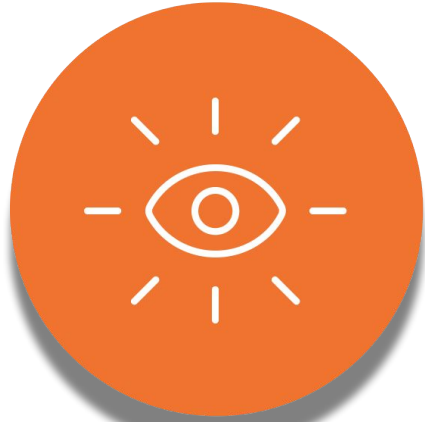
Amplify Science Approach Review:

Note Taking Opportunities

A version of this presentation will be available to you.

However, you may want to record some of the presenter's comments and suggestions from your colleagues!

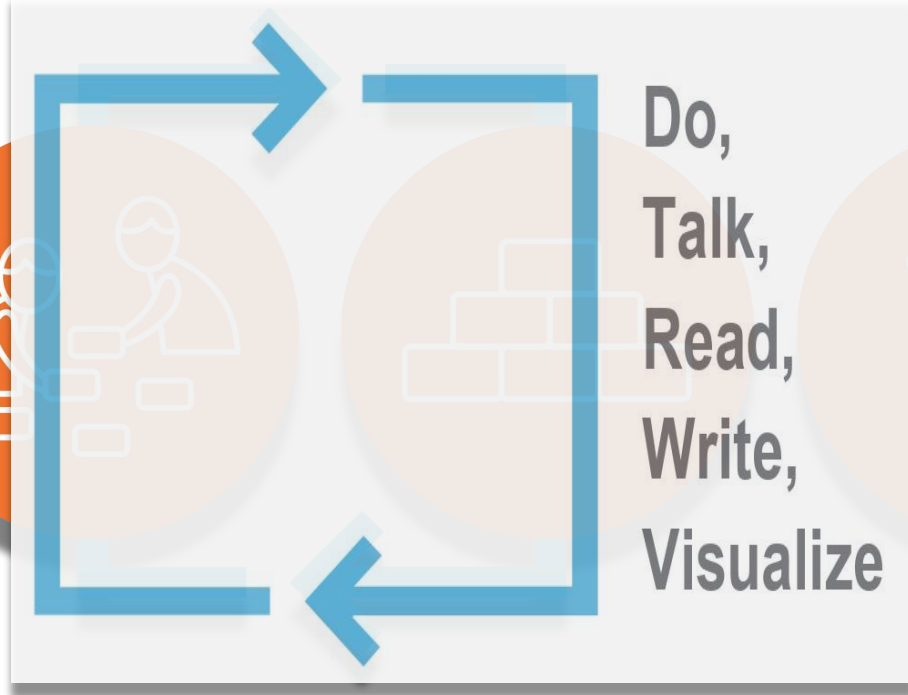
The approach



**Introduce a
phenomenon/real
world problem**



**Collect evidence
from
multiple sources**



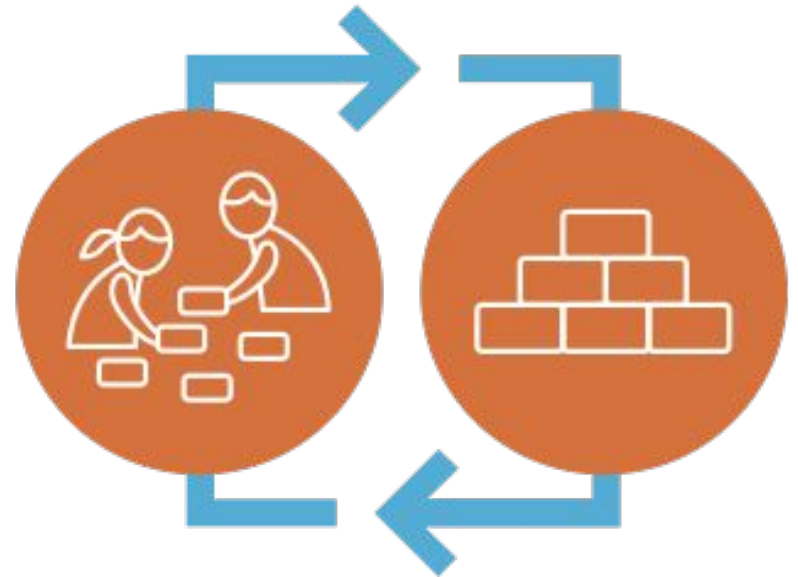
**Build
increasingly
complex
explanations**

**Apply knowledge to
solve a different
problem**

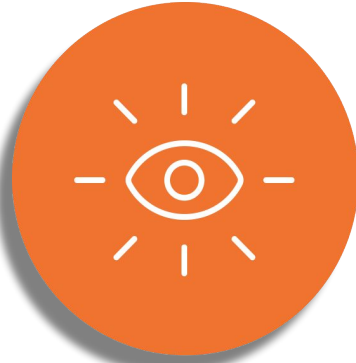
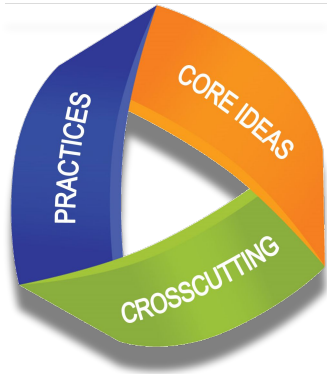
Multimodal Phenomenon-based approach

The anchor phenomenon drives instruction through a whole unit

Taking on the **roles** of scientists and engineers, students gather evidence and use it to build **increasingly complex explanations** about a rich, real-world anchoring phenomenon.



Using three dimensions to figure out





Questions?

Amplify Science Chat Race

Type the letter for your answer to the questions you see here in chat!

A

Type letter A in
Chat

C

Type letter C in
Chat

B

Type letter B in
Chat

D

Type letter D in
Chat

What are the multiple modalities?

A

Do, talk, read,
write, visualize

C

Do, visualize,
hands-on
projects

B

Read, write,
google search

D

Reading, writing,
math

What is the first step to the Amplify Science Approach?

A

Collect evidence
from multiple
sources

C

Apply knowledge to
solve different
problem

B

Introduce a
Phenomenon and/or
real world problem

D

Build an increasingly
complex explanation

Where can you find login information and NYC scope and sequence?

A

On the NYC
Resource Site

C

In the offline
preparation
guide

B

The Program
Hub

D

The TG on the
Unit Level

Plan for the day

- Framing the day
- **Unit Internalization**
- Amplify Science @Home
- Planning to teach using @Home resources
- Reflection and closing



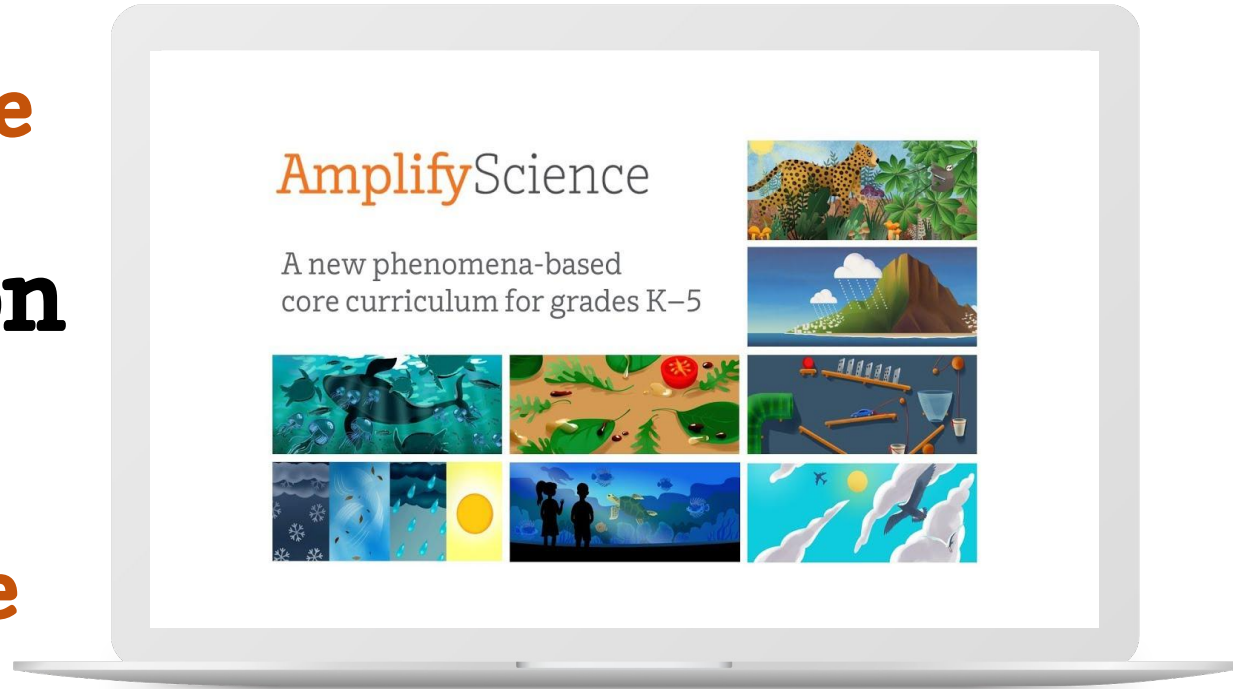
Unit Anchor Phenomenon

The food coloring from Good Food Production, Inc., is not exactly the same as Red Dye #75.










Navigate-Type-Chat

What are the chapter and investigative phenomena for your unit 2?

Amplify Science Unit Two Internalization Notes with Digital Teacher's Guide



Where do you find all of the Unit Phenomena listed with Unit questions?

Planning for the Unit		Printable Resources
Unit Overview	▼	 3-D Assessment 
Unit Map	▼	 Coherence Flowcharts
Progress Build	▼	 Copymaster Compilation
Getting Ready to Teach	▼	 Investigation Notebook
Materials and Preparation	▼	 Multi-Language Glossary
Science Background	▼	 NGSS Information for Parents and Guardians
Standards at a Glance	▼	 Print Materials (8.5" x 11")
Teacher References		 Print Materials (11" x 17")
Lesson Overview Compilation	▼	Offline Preparation

Unit Anchor Phenomenon

Problem students work to solve

Chapter-level Anchor Phenomenon

Chapter 1 Question

Investigative Phenomena

Investigation Questions

Evidence sources and reflection opportunities

Key concepts

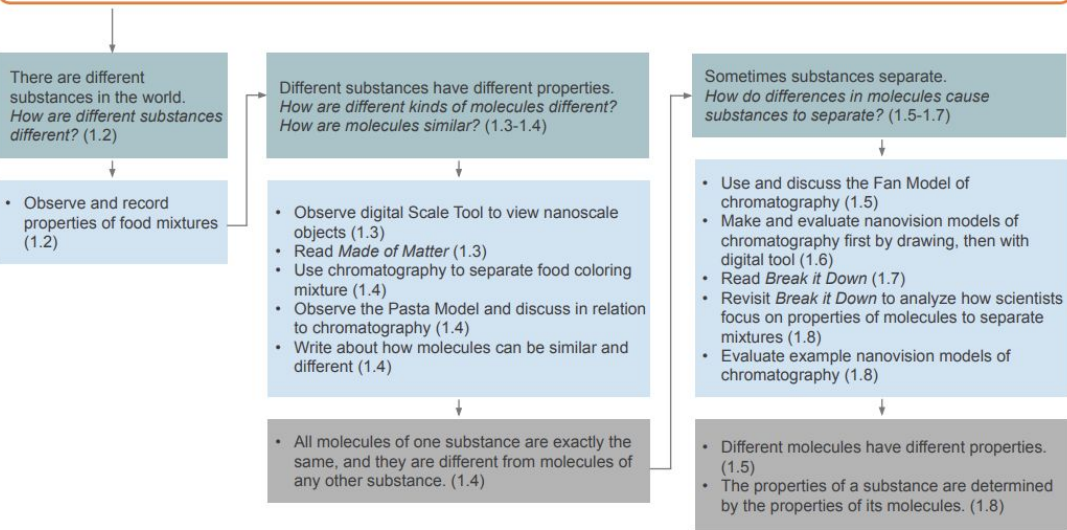
Application of key concepts to the problem

Explanation that students can make to answer the Chapter 1 Question

Modeling Matter: The Chemistry of Food

The food coloring from Good Food Production, Inc., is not exactly the same as Red Dye #75. How can we help Good Food Production, Inc. figure out if their food coloring includes a harmful dye?

Good Food Production, Inc.'s food coloring separated into different dyes. Why did the food coloring separate into different dyes? (introduced in 1.5)

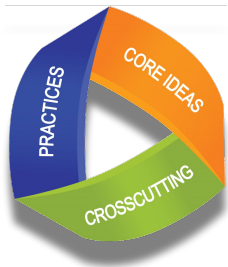


Revise nanovision models (1.9)
Write explanations to answer the Chapter 1 Question (1.10)

The different dyes that are mixed together have different properties (colors), so they are made of different molecules. The molecules in the mixture that are carried up the paper by the water are attracted to the water and mix with it. As the water travels up the paper, different kinds of molecules travel different distances because their molecules are different sizes or have a different attraction to the paper.

Phenomena Coherence Flowcharts

Note: New 3-D Assessment Objectives Overview Now Available



Planning for the Unit	Printable Resources
Unit Overview	3-D Assessment Objectives
Unit Map	Coherence Flowcharts
Progress Build	Copymaster Compilation
Getting Ready to Teach	Investigation Notebook
Materials and Preparation	Multi-Language Glossary
Science Background	NGSS Information for Parents and Guardians
Standards at a Glance	Print Materials (8.5" x 11")
Teacher References	Print Materials (11" x 17")
Lesson Overview Compilation	Offline Preparation

NEW

New 3D Assessment Objectives Overview

Modeling Matter

3-D Assessment Objectives Overview

The NGSS Performance Expectations specify three-dimensional learning objectives for Grade 5 as well as for the 3–5 grade band. The tables below include the focal Performance Expectations for this unit and identify the locations of summative and formative assessments that reveal student knowledge and use of the three dimensions to support progress toward these Performance Expectations.

Each table includes the Disciplinary Core Ideas (DCIs), Science and Engineering Practices (SEPs), and Crosscutting Concepts (CCCs) included in that Performance Expectation and specifies the location of assessments associated with these three dimensions. Note that SEPs and CCCs build across the grade and grade band, so we list relevant assessments across grades 3–5. Also, in cases in which a DCI is addressed in multiple units at a grade, we list assessments in the additional unit(s).

Key:

- Summative assessments are noted with (S); if not so labeled, the assessment is designed to be formative.
- **OTFA** = On-the-Fly Assessment
- **CJ** = Critical Juncture
- **PRE** = Pre-Unit Assessment
- **EOU** = End-of-Unit Assessment
- **TS** = Teacher Support Note
- **INV** = Investigation Assessment
- **CW** = Chapter Writing Assessment

See the Assessment System overview document for more information.

5-PS1-3. Make observations and measurements to identify materials based on their properties.

SEP: Planning and Carrying Out Investigations

DCI: PS1.A: Structure and Properties of Matter

CCC: Scale, Proportion, and Quantity

Balancing Forces (Grade 3)
INV: Lesson 5.1, Activity 3 (S)

Vision and Light (Grade 4)
OTFA 3: Lesson 2.1, Activity 4
OTFA 7: Lesson 3.2, Activity 3
OTFA 8: Lesson 3.2, Activity 4
OTFA 11: Lesson 4.1, Activity 2
OTFA 13: Lesson 5.1, Activity 4
INV: Lesson 5.2, Activities 1–4 (S)

Earth's Features (Grade 4)
OTFA 12: Lesson 4.3, Activity 2

Patterns of Earth and Sky (Grade 4)
OTFA 10: Lesson 3.3, Activity 3
OTFA 13: Lesson 4.2, Activity 3
INV: Lesson 4.3, Activities 1–3 (S)

Modeling Matter (Grade 5)
OTFA 1: Lesson 1.2, Activity 2
OTFA 12: Lesson 3.1, Activity 3

The Earth System (Grade 5)
OTFA 9: Lesson 4.1, Activity 2
TS: Lesson 5.4, Activity 3
TS: Lesson 5.5, Activity 3

Modeling Matter (Grade 5)
PRE: Lesson 1.1, Activity 2
OTFA 1: Lesson 1.2, Activity 2
OTFA 4: Lesson 1.5, Activity 4
OTFA 5: Lesson 1.6, Activity 2
CJ 1.A: Lesson 1.9, Activity 2
CJ 1.B: Lesson 1.10, Activity 2
CW: Lesson 1.10, Activity 2
EOU: Lesson 3.7, Activity 2 (S)

The Earth System (Grade 5)
OTFA 3: Lesson 2.2, Activity 1
OTFA 4: Lesson 2.3, Activity 4
OTFA 5: Lesson 2.4, Activity 4
CJ 1: Lesson 2.6, Activity 2
CW: Lesson 2.6, Activity 2
OTFA 7: Lesson 3.2, Activity 3
CJ 2: Lesson 3.3, Activity 3
CW: Lesson 3.3, Activity 3
CJ 3: Lesson 4.2, Activity 2
EOU 1: Lesson 4.3, Activity 2 (S)
OTFA 10: Lesson 4.4, Activity 2

Weather and Climate (Grade 3)
CW: Lesson 2.5, Activity 3

Patterns of Earth and Sky (Grade 5)
OTFA 2: Lesson 1.3, Activity 2

Modeling Matter (Grade 5)
PRE: Lesson 1.1, Activity 2
OTFA 2: Lesson 1.3, Activity 3
OTFA 9: Lesson 2.3, Activity 3
EOU: Lesson 3.7, Activity 2 (S)

Printable Resources

NEW



3-D Assessment Objectives



Coherence Flowcharts



Copymaster Compilation



Flextension Compilation



Investigation Notebook



Multi-Language Glossary



NGSS Information for Parents and Guardians

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title:

What is the phenomenon students are investigating in your unit?

Unit Question:

Student role:

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









What science ideas do students need to figure out in order to explain the phenomenon?

Guided Unit Internalization Document

What is the student role? What will students figure out in Chapter 1?

Guided Unit Internalization
Part 1: Unit-level Internalization

Unit title:	
What is the phenomenon students are investigating in your unit?	
Unit Question:	Student role:
By the end of the unit, students figure out ...	
What science ideas do students need to figure out in order to explain the phenomenon?	

Planning for the Unit	Printable Resources
Unit Overview ▾	 3-D Assessment Objectives
Unit Map ▾	 Coherence Flowcharts
Progress Build ▾	 Copymaster Compilation
Getting Ready to Teach ▾	 Investigation Notebook
Materials and Preparation ▾	 Multi-Language Glossary
Science Background ▾	 NGSS Information for Parents and Guardians
Standards at a Glance ▾	 Print Materials (8.5" x 11")
Teacher References	 Print Materials (11" x 17")
Lesson Overview Compilation ▾	Offline Preparation

What are the Unit and Chapter Questions unit two?

Guided Unit Internalization
Part 1: Unit-level Internalization

Unit title:	
What is the phenomenon students are investigating in your unit?	
Unit Question:	Student role:
By the end of the unit, students figure out ...	
What science ideas do students need to figure out in order to explain the phenomenon?	

Planning for the Unit

Unit Overview



Unit Map



Progress Build



Getting Ready to Teach



Materials and Preparation



Science Background



Standards at a Glance



Teacher References

Lesson Overview Compilation



Printable Resources



3-D Assessment Objectives



Coherence Flowcharts



Copymaster Compilation



Investigation Notebook



Multi-Language Glossary



NGSS Information for Parents and Guardians



Print Materials (8.5" x 11")



Print Materials (11" x 17")

Offline Preparation

By the end of
the unit what
will the
students
figure out?

Guided Unit Internalization
Part 1: Unit-level internalization









Unit title:

What is the phenomenon students are investigating in your unit?

Unit Question: Student role:

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









What science ideas do students need to figure out in order to explain the phenomenon?

Planning for the Unit		Printable Resources
Unit Overview	▼	 3-D Assessment Objectives
Unit Map	▼	 Coherence Flowcharts
Progress Build	▼	 Copymaster Compilation
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Teacher References		 Print Materials (11" x 17")
Lesson Overview Compilation	▼	Offline Preparation

What science concepts do students need to figure out in order to build an explanation of the unit phenomena?

Planning for the Unit	
Unit Overview	▼
Unit Map	▼
Progress Build	▼
Getting Ready to Teach	▼
Materials and Preparation	
Science Background	▼
Standards at a Glance	▼
Teacher References	
Lesson Overview Compilation	▼

Printable Resources

-  3-D Assessment Objectives
-  Coherence Flowcharts
-  Copymaster Compilation
-  Investigation Notebook
-  Multi-Language Glossary
-  NGSS Information for Parents and Guardians
-  Print Materials (8.5" x 11")
-  Print Materials (11" x 17")

Offline Preparation

Guided Unit Internalization
Part 1: Unit-level Internalization

Unit title:	
What is the phenomenon students are investigating in your unit?	
Unit Question:	Student role:
By the end of the unit, students figure out ...	
What science ideas do students need to figure out in order to explain the phenomenon?	

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title:

What is the phenomenon students are investigating in your unit?

Unit Overview

Unit Question:

Lesson Overview Compilation

Student role:

Unit Overview

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

**Unit Map, See also
Progress Build**

What science ideas do students need to figure out in order to explain the phenomenon?

**Unit Map, Progress Build,
Science Background Document**

**Where to
Look!**

Where do you find a table listing the books and the in-class lessons they are used for?

A

Science
Background

C

Progress Build

B

Lesson Overview
Compilation

D

Materials and
Preparation

Where do you find possible student preconceptions?

A

Science
Background

C

Progress Build

B

Lesson Overview
Compilation

D

Materials and
Preparation

In Chat

- What is the Unit Anchor Phenomenon?
 - What is the Unit Question?



Questions?

Plan for the day

- Framing the day
- Unit Internalization
- **Amplify Science @Home**
- Planning to teach using @Home resources
- Reflection and closing





Questions
Reflections
Connections

Unit 2 Planning Notes

Global
Navigation

Program Hub

AmplifyScience


Hello Teacher Sinha-Das
17616-0401@amplify.net

Log Out
Go To My Account


Classroom Language Settings

ELA Resources
Job Postments
LA Science Program Guide
Science Program Guide
Help


1st Grade ▾ **Step 1**



22 Lessons
Animal and Plant Defenses



22 Lessons
Light and Sound



22 Lessons
Spinning Earth

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AmplifyScience Program Hub

LAUNCH PROGRAMS TEACHER SINHA-DAS


Step 2

Welcome, Amplify Science Educators!

The Amplify Science Program Hub consists of resources, tools, and advice to help you make the most of getting started with your program. We've also provided tips and guidance on how to use Amplify Science in a remote and hybrid learning model.

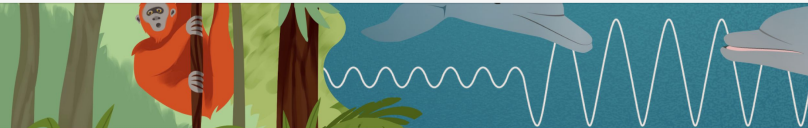
We're excited to partner with you on this journey and can't wait to get started! Please select the button below that best describes your role:

I am a Teacher I am a Leader



AmplifyScience Program Hub

LAUNCH PROGRAMS TEACHER SINHA-DAS



Hello, Teacher!

Search

Welcome

Remote learning: Amplify Science@Home

Hands-on investigations support

Unit extensions

Using this site for self study

Program Overview

Navigation and Materials

Welcome, Amplify Science teacher!

Let's get started! This site will provide you with the knowledge and skills you need to start teaching with Amplify Science. Here you will:

- learn to navigate the digital Teacher's Guide
- become familiar with unit resources
- get planning tips, and
- find our new, flexible remote and hybrid learning supports

This site will be continuously updated, so please check back regularly.

Step 3

AmplifyScience Program Hub

LAUNCH PROGRAMS TEACHER SINHA-DAS

Hello, Teacher!

Search

Welcome

Remote learning: Amplify Science@Home

About Amplify Science@Home

Grade-level resources

@Home Resources Orientation Videos

Additional resources

Hands-on investigations support

Unit extensions

Using this site for self study

Program Overview

Navigation and Materials

Grade-level resources

Select your grade below to access the @Home resources. Please do not share or distribute these materials outside of your district.

- Kindergarten
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- Grade 8

Step 4 (scroll down and choose your grade)

@Home Resources Orientation Videos

Check out these videos for an overview of what's available, plus tips and strategies for teaching with Amplify Science@Home this back to school.

Reminder!

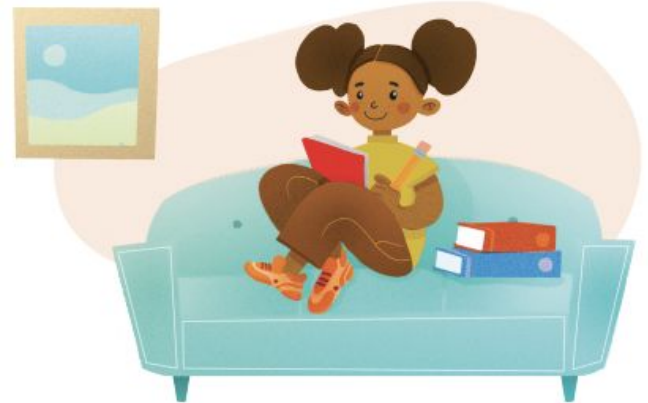
AmplifyScience@Home

@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



The background of the slide features a vibrant red color with a wavy, liquid-like texture. Numerous bright red, glossy droplets of varying sizes are scattered across the right side of the frame, creating a sense of movement and depth. The lighting on the droplets highlights their rounded shapes and reflective surfaces.

Modeling Matter

@Home Lesson 1

Key Activities

- **Introducing Good Food Production, Inc.:** Students are introduced to the unit context and to their role as food scientists.
- **Write:** Students complete a pre-unit writing activity to record their initial thoughts about unit content.
- **Read:** Students read the introduction of the unit reference book, *Food Scientist's Handbook*, to learn more about the role of a food scientist.

Ideas for synchronous or in-person instruction

While meeting, introduce the unit context by showing images of food scientists. Invite students to share their ideas about where food scientists work and what they study. Then, have students complete the pre-unit writing and reference book reading after meeting.



We are starting a unit called *Modeling Matter: The Chemistry of Food*.

This unit is about **matter**, which is the stuff that everything around us is made of, including food!



We will take a **close look at food**, not just as something tasty to eat, but also as something interesting to study.

Let's think about what **food scientists** do.



Take a moment to look at these pictures of food scientists.



Where do you think a food scientist **works**?





Take a moment to look at these pictures.



What do you think food scientists **want to find out** about the food they study?



Good Food Production, Inc.

For the next few weeks,
we are going to take on
the role of **food
scientists** for a company
called Good Food
Production, Inc.

Key Activities

- **Introducing Good Food Production, Inc.:** Students are introduced to the unit context and to their role as food scientists.
- **Write:** Students complete a pre-unit writing activity to record their initial thoughts about unit content.
- **Read:** Students read the introduction of the unit reference book, *Food Scientist's Handbook*, to learn more about the role of a food scientist.

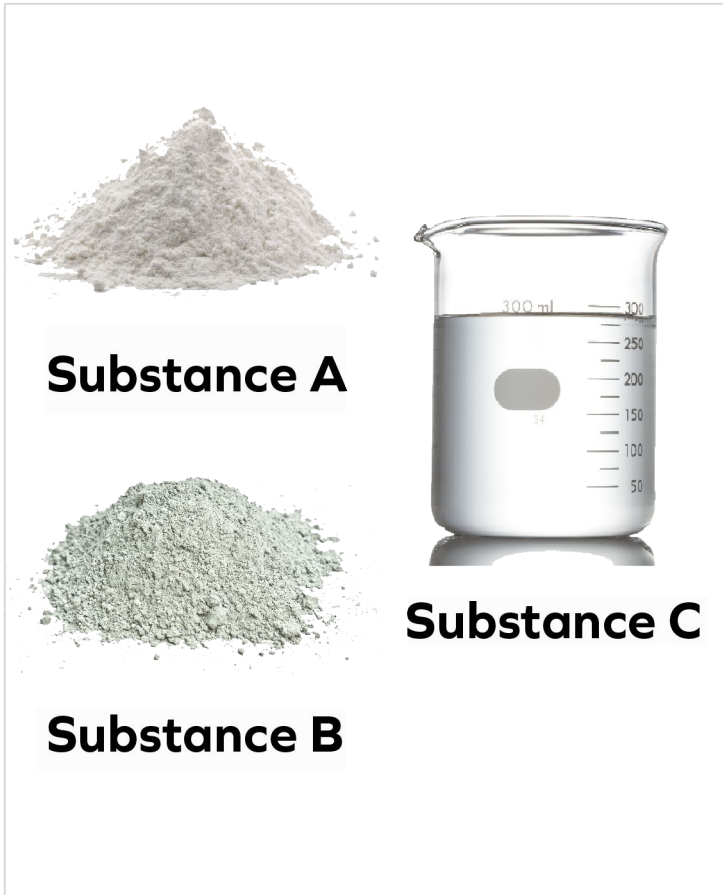
Ideas for synchronous or in-person instruction

While meeting, introduce the unit context by showing images of food scientists. Invite students to share their ideas about where food scientists work and what they study. Then, have students complete the pre-unit writing and reference book reading after meeting.



Before we start, you will **write your ideas** about a food scientist testing new ingredients in her lab by mixing them together.

She tests three **substances**.



Substance A is a white powder.

Substance B is a different white powder.

Substance C is a clear liquid.



Substance A



Substance C

She adds a spoonful of Substance A to a cup of Substance C. She stirs them for 30 seconds.

Substance A settles to the bottom of the container.



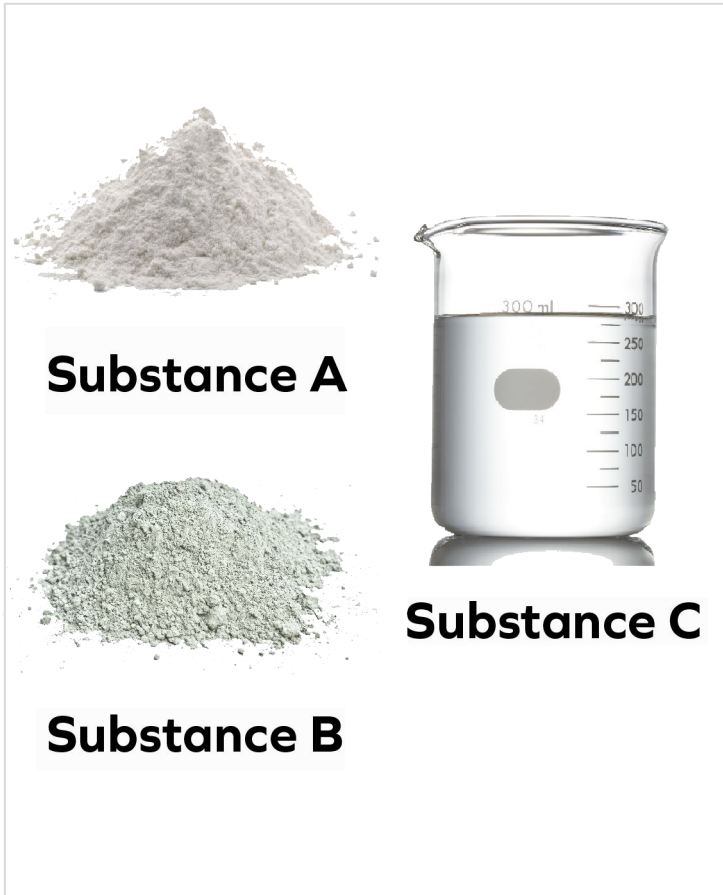
Substance B



Substance C

She adds a spoonful of Substance B to a new cup of Substance C. She stirs them for 30 seconds.

Substance B can no longer be seen.



You are going to write your **first ideas** about why something different happened with Substance A than with Substance B when mixed with Substance C.

Name: _____ Date: _____

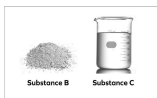
Pre-Unit Writing: Explaining Mixtures

Scenario

A food scientist is testing new ingredients in her lab. She takes a spoonful of Substance A, a white powder, and adds it to Substance C, a clear liquid. She stirs them for 30 seconds. Substance A settles to the bottom of the container.



Next, she takes a spoonful of Substance B, a different white powder, and adds it to a new container of Substance C. She stirs them for 30 seconds. Substance B can no longer be seen in the container.



Question

Why did something different happen with Substance A than with Substance B when mixed with Substance C? Be sure to explain what happened to both substances.

Write a scientific explanation.

On the following pages, answer the question as completely as you can. You can draw a diagram in the box on the last page if it helps you explain your thinking.

Modeling Matter—Lesson 1.1

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1

Modeling Matter—Lesson 1.1

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2

Modeling Matter—Lesson 1.1

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3

Find the Pre-Unit Writing: Explaining Mixtures pages.



Read the directions.

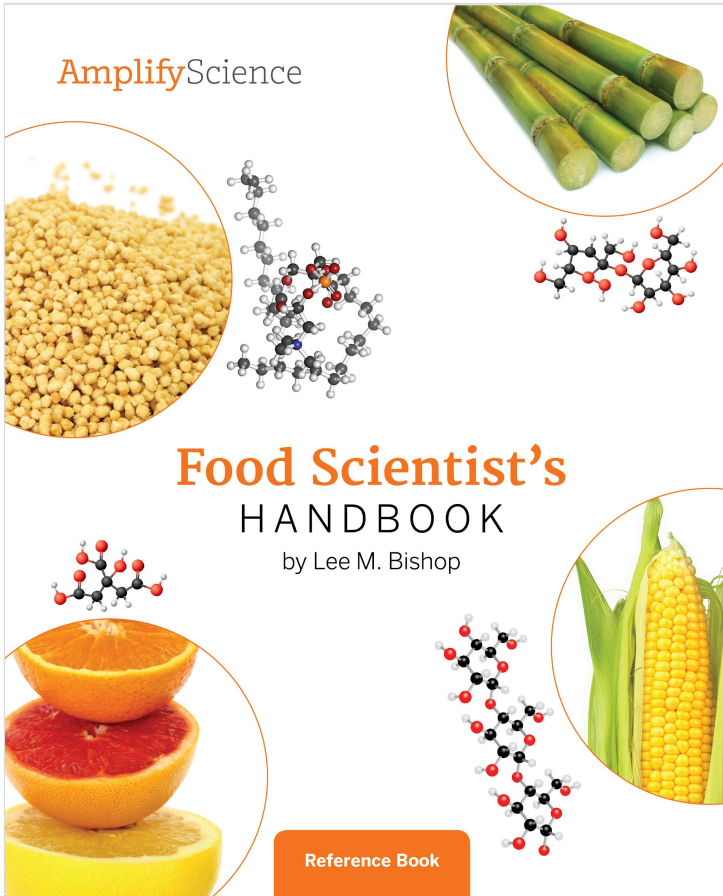
Then, record your ideas about the mixtures.

Key Activities

- **Introducing Good Food Production, Inc.:** Students are introduced to the unit context and to their role as food scientists.
- **Write:** Students complete a pre-unit writing activity to record their initial thoughts about unit content.
- **Read:** Students read the introduction of the unit reference book, *Food Scientist's Handbook*, to learn more about the role of a food scientist.

Ideas for synchronous or in-person instruction

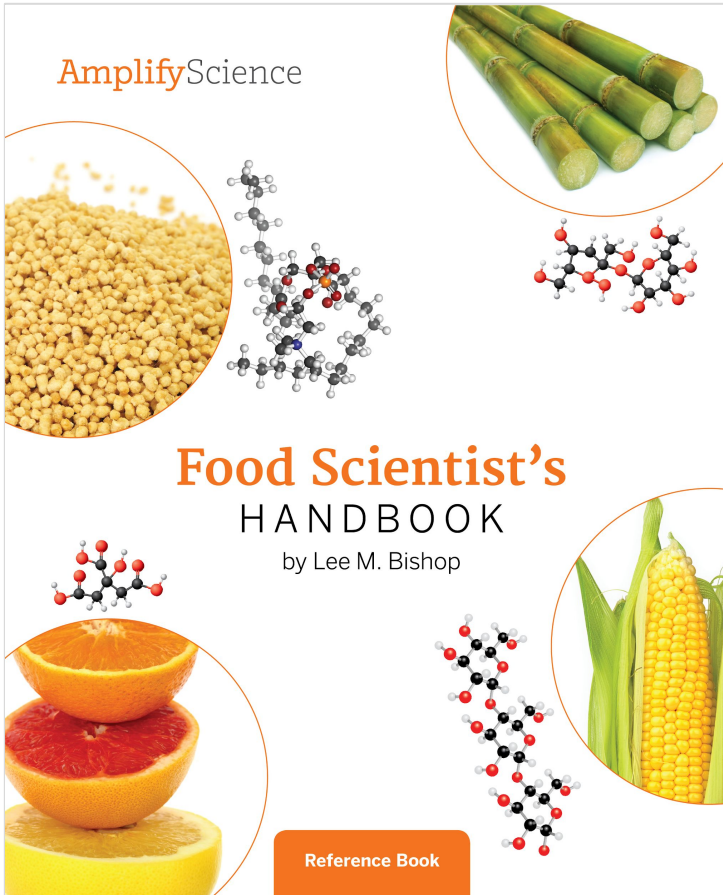
While meeting, introduce the unit context by showing images of food scientists. Invite students to share their ideas about where food scientists work and what they study. Then, have students complete the pre-unit writing and reference book reading after meeting.



This is a **reference book** for food scientists. A reference book is read differently from some other informational books.

Instead of reading reference books cover to cover, we use them to **locate information about topics** we wonder about.

Check with your teacher about how you will access books in this @Home Unit.



You will have many chances to find useful information in this book as you do your food science investigations.

Today we will read the introduction to learn more about the role of a **food scientist**.

You can access a digital version of the book [here](#), or watch a video read-aloud at [\[link\]](#)



These are food scientists.

Introduction to Food Science

Food science is all about applying scientific thinking to the way food is prepared. It is not just about making flavorful new creations that nobody has ever seen before. It is also about understanding the science behind why things happen the way they do when food is prepared.

Food scientists are scientists who perform careful experiments with food. Food scientists work in labs and out in the field just like other scientists. Some food scientists study and design better ways to grow safe and healthy plants and animals. Other food scientists research ways to take those plants and animals and make new foods in new ways. Another important job of food scientists is to measure what **substances** are in foods, so they can make sure those foods are safe and healthy.

Food scientists are learning more every day about what makes up the ingredients people use in the kitchen. This helps them figure out how to use new ingredients and how to use old ingredients in better ways. Food scientists are always learning more about the **molecules** that make up the ingredients they work with, because knowing more about the molecules helps them think up new and better ways to use those ingredients. Food scientists also think carefully about what happens to ingredients when they put them through processes like mixing, heating, or cooling.



Some food scientists study new ways to make food from plants.



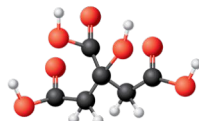
Read
pages
4-5.

Food scientists need to know what is happening to ingredients on a very small scale—the **nanoscale**. Understanding what happens to ingredients on the nanoscale when they are mixed, heated, or cooled can help food scientists figure out what processes they should use to make new kinds of food.

To become a food scientist it is important to learn about how all of science works. Food scientists go to special schools to study food science, but they begin by learning things like math, physics, biology, and chemistry.



Food scientists think about what is happening at the nanoscale in foods: for example, the way citric acid molecules make oranges taste sour.



This is a model of a citric acid molecule.



Read page 6.



Now that we've read about food scientists, let's return to these pictures.



Do you remember the kinds of places **where a food scientist works?**





Scientists who **work in labs** might use special technologies to study foods up close. Scientists who **work in the field** might visit places where animals or plants are—where foods are raised or grown.



What might scientists **want to find out** about the foods they study?

People's needs and wants for new or safer foods change over time.

By studying foods, food scientists can make **flavorful new creations** and **safer food products** to address these changing needs and wants.



Throughout this unit, we will continue to learn about **what food scientists do.**

End of Lesson



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

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Key Activities

- **Introducing Good Food Production, Inc.:** Students are introduced to the unit context and to their role as food scientists.
- **Write:** Students complete a pre-unit writing activity to record their initial thoughts about unit content.
- **Read:** Students read the introduction of the unit reference book, *Food Scientist's Handbook*, to learn more about the role of a food scientist.

Ideas for synchronous or in-person instruction

While meeting, introduce the unit context by showing images of food scientists. Invite students to share their ideas about where food scientists work and what they study. Then, have students complete the pre-unit writing and reference book reading after meeting.

Suggestions for Online Synchronous Time



Online synchronous time

Online discussions: It's worthwhile to establish norms and routines for online discussions in science to ensure equity of voice, turn-taking, etc.

Digital tool demonstrations: You can share your screen and demonstrate, or invite your students to share their screen and think-aloud as they use a Simulation or other digital tool.

Interactive read-alouds: Screen share a digital book or article, and pause to ask questions and invite discussion as you would in the classroom.

Shared Writing: This is a great opportunity for a collaborative document that all your students can contribute to.

Co-constructed class charts: You can create digital charts, or create physical charts in your home with student input.

Navigate to your unit on the Program Hub locate and record planning notes on:

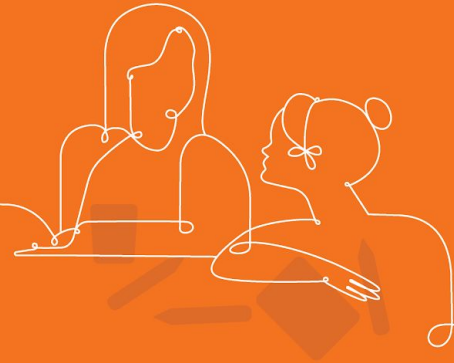
@Home Videos

@Home Units

@Home Book Read-aloud

@Home Hands-on Videos

**Explore your
Unit 2
@Home**



Which document displays the correlations between in-class lessons and @Home lessons?

A @Home Teacher overview

C Lesson Brief

B Amplify Welcome Page

D Lesson Index

How do the students access program components including e-books?

A

Elementary
Student Apps
Page

C

The caregivers
site

B

Amplify
Welcome Page

D

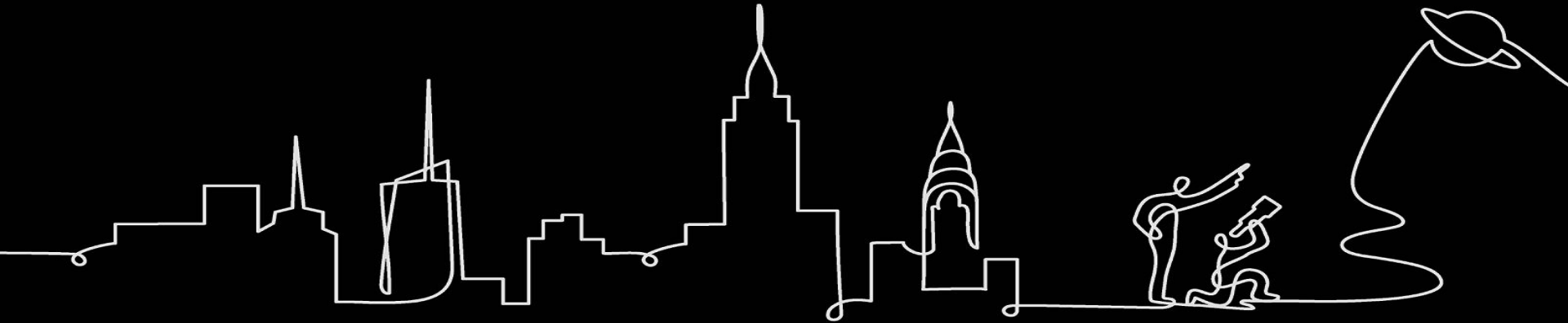
The program hub

In Chat

What are some possible
uses for the @Home
Videos

Reflect-Type-Chat! Share and Learn

What are some of the things you figured out while exploring and comparing the @Home Resources



Plan for the day



- Framing the day
- Unit Internalization
- Amplify Science @Home
- **Planning to teach using @Home resources**
- Reflection and closing



Sample instructional scenario








Hybrid pod model

Select 1-2 lessons for the week and decide the best instructional format for the different parts of the lesson

In class		Remote online class	Remote
<ul style="list-style-type: none">● Hands-on investigations (option for teacher demo)● Discourse routines● Class discussions● Physical modeling activities		<ul style="list-style-type: none">● Sim demonstrations● Read-alouds● Shared Writing● Co-constructed class charts	<ul style="list-style-type: none">● @Home video lessons● @Home Unit activities● Reflective writing● Independently review

Sample instructional scenario

Hybrid pod model

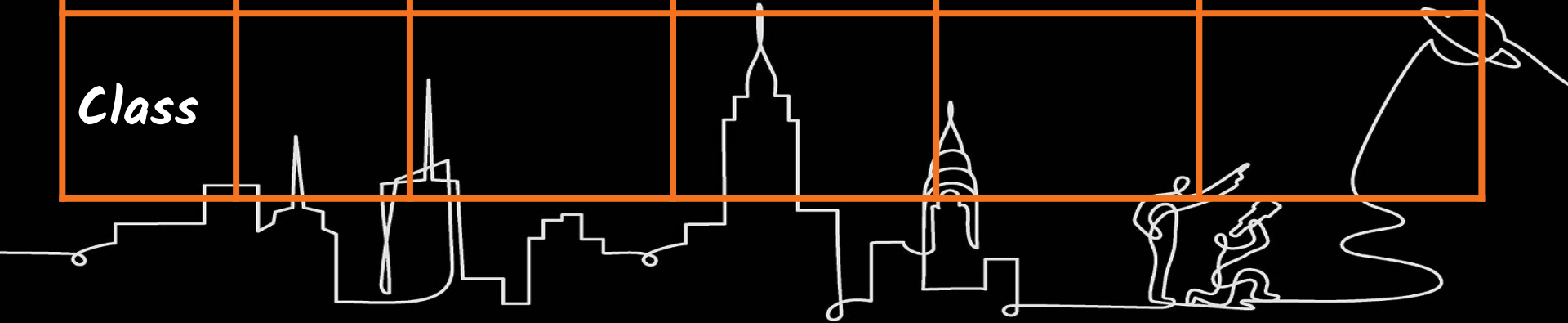
	M-T	W	Th-F
Pod 1	In class 	Remote online class 	Remote 
Pod 2	Remote 	 	In class 

Think-Type-Chat

Share and Learn

Take a moment to think about your current instructional model. Please share in chat!

	M	T	W	Th	F
Class					
Class					



@Home Resources example use case

Hybrid Model: Teach live during in-person/synchronous time



Day 1

Remote

Assign: Lesson 1.1
@Home Video



Day 2

In-person

Teach: Lesson 1.2
live



Day 3

Synchronous

Teach: Lesson 1.3
using clips from
@Home Video



Day 4

Remote

Assign: Lesson 1.4
@Home
Packet/Slides



Day 5

In-person

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

@Home Resources example use case

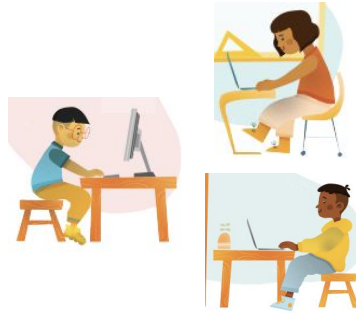
Remote Model: with synchronous & asynchronous learning



Days 1 & 2

Asynchronous

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



Day 3

Synchronous

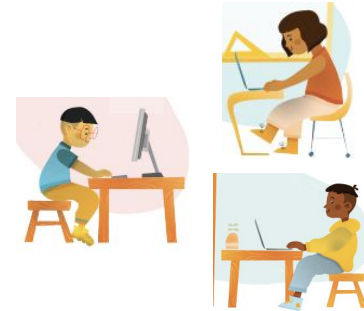
Teach: Lesson 1.2 using clips from the @Home Video



Day 4

Asynchronous

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

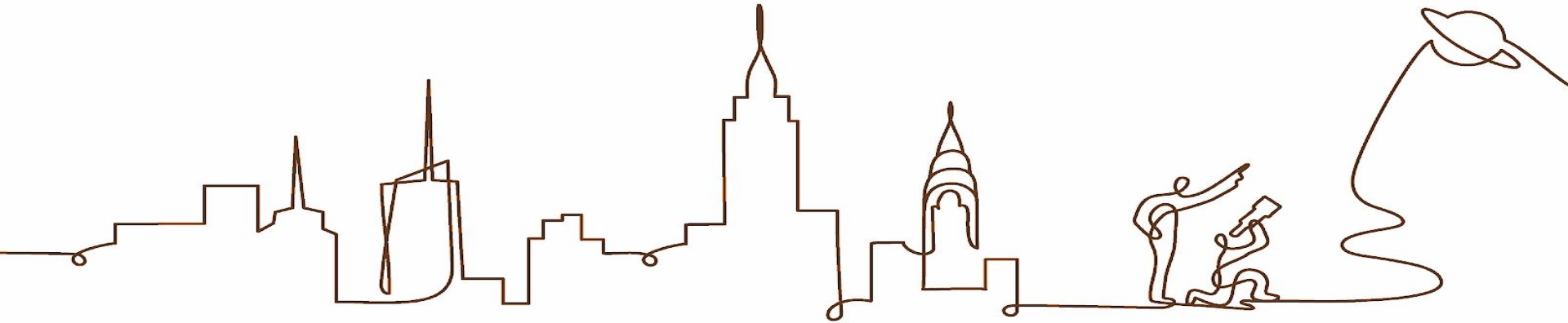


Day 5

Synchronous

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

@Home Differentiation



Use the Unit Guide and Lesson Index to explore the differentiation possibilities for @Home units.

**Review your
Unit 2
@Home**



Guided Planning

Objectives

- Use the resources we have explored to compare @Home lessons w/ in-class lessons.
- Use the planning template and @Home resources (found on the Program HUB) to plan an upcoming lesson .



Unit:

Chapter Title:

Cohort/Group/Pod:

@Home Unit lesson #:		Adapted from Lesson(s):	
Student Sheets page title:		Investigation Notebook p.# Copy Master/Print Materials	
Chapter Level Phenomenon:			
@ Home Unit lesson (asynchronous)			
Key activities from @ Home lesson:		Dates to administer:	Other notes:
		Investigative Phenomenon:	
Corresponding synchronous ideas			
In-person or remote? <input type="checkbox"/> In-person <input type="checkbox"/> Remote		Synchronous activity:	Other notes:
		Dates(s) to administer:	

Resources

1. Lesson Index
2. Coherence
Flowcharts
3. 3-D
Assessment
objectives
overview
4. @Home
Teacher
overview

@Home Videos

Use for synchronous or asynchronous?

- Synchronous
- Asynchronous
- Neither

If using, note lesson & activity/activities:

View for best practices?

- Yes
- No

If yes, notes some best practices:

Other notes:

Corresponding original lesson(s)

Differentiation strategies:

Additional synchronous activity notes:

Use any original slides?

- Yes
- No

Other notes:

Differentiation plan

Synchronous, remote ideas:

Synchronous, in-person ideas:

Asynchronous ideas:

Resources

1. Lesson Index
2. @Home Teacher overview
3. Differentiation Brief
4. Lesson Brief

3rd party apps to use		
<p>Using Jamboard ?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Notes:</p> <p>Using Pear Deck?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Notes:</p>	<p>Google Classroom:</p> <p>Which @Home Resources to upload?</p> <p><input type="checkbox"/> @Home Unit pdf <input type="checkbox"/> @Home Unit slides <input type="checkbox"/> @Home Video url <input type="checkbox"/> Other</p> <p>Notes:</p>	<p>Other apps & notes:</p>

Teacher Notes from lesson brief:

Resources

1. Lesson Index
2. @Home Teacher overview
3. Differentiation Brief
4. Lesson Brief

Guided Planning Work Time

- Use the planning template and @Home resources (found on the Program HUB) to plan an upcoming lesson
- While planning consider the information below to select the appropriate resources:
 - Do you have more, less, or the same time as last year for Science?
 - Your classroom instructional model (Hybrid or Remote)
 - Student's access to technology (packet or slides/sheets)
 - The 3rd party applications will you pair with Amplify resources (if any)?
 - Do I want to add a hands on component? (model via video? Or complete during in person synchronous instruction)

Plan for the day

- Framing the day
- Unit Internalization
- Amplify Science @Home
- Planning to teach using @Home resources
- **Reflection and closing**



Where do you locate the new 3-D assessment objective overview?

A

Unit Level
Materials and
Prep

C

Unit Level
Printable
Resources

B

Unit Level 3-D
statements

D

Unit Level
Assessment
Systems

Where are differentiation notes for Unit 2 lessons?

A

Unit Level
Materials and
Prep

C

Digital TG
Lesson Level

B

Unit Level
Science
Background

D

Teacher
Overview

In Chat

What are the focal
performance
expectations for your
unit?

Where can you find assessment recommendations for @Home units?

A

@Home Videos

C

@Home Student
Slides

B

@Home Student
Sheets

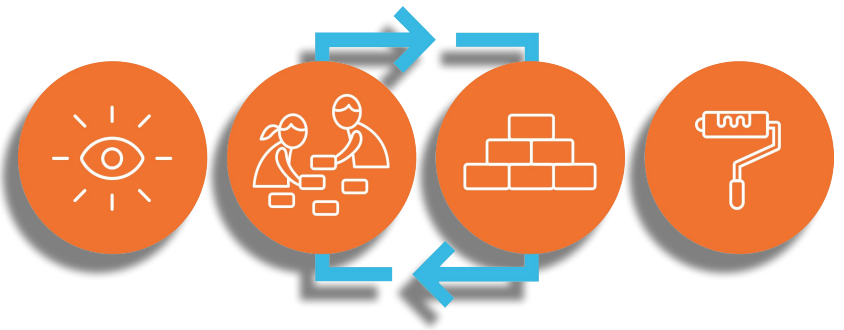
D

@Home Teacher
Overview

In Chat

**What is the Chapter
4-level Phenomenon?**

What does this Image represent?



A Amplify Science Approach

B How students build a complex explanation

C How students deepen their understanding

D All of these

Did We Meet Our Workshop Goals?

1. Make instructional decisions about remote or hybrid learning
2. Develop a plan for using @Home resources within your class schedule and instructional format.

A

yes

C

YES!

B

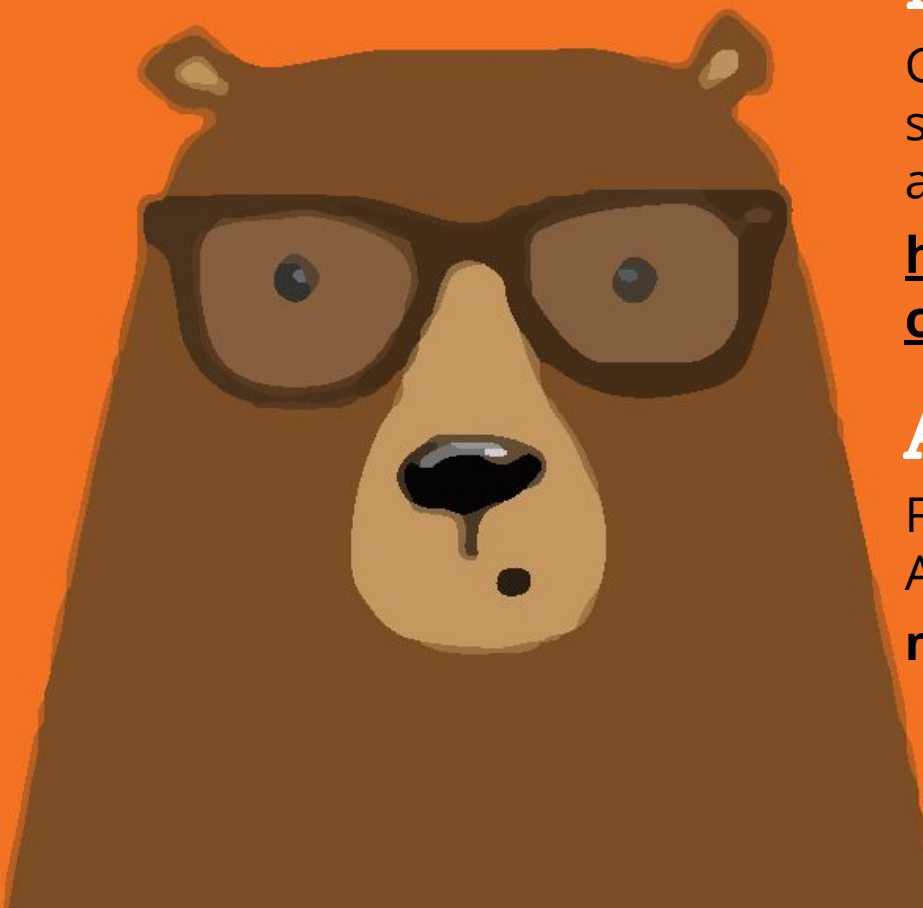
yes but still
working

D

No not quite



Questions?



NYC Program Guide

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

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

Amplify Help

Find lots of advice and answers from the Amplify team.

my.amplify.com/help

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