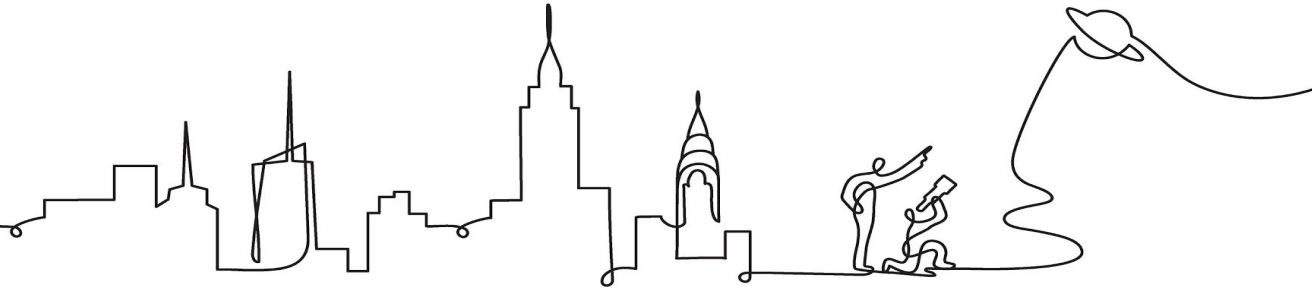# Amplify Science
## New York City

# Exploring the Amplify Science Curriculum: Digging Deeper
## Session 1: Grades K-2

Date xx
Presented by xx

# Amplify's Purpose Statement

**Dear teachers,**

You do a job that is nearly impossible and **utterly essential.**

**We are in your corner** – extending your reach, saving you time, and enhancing your understanding of each student.

**Thank you for working with us** to craft rigorous and riveting learning experiences for your classroom.

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

**Sincerely,**
**Amplify**

# Goals for session #1

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

❏ Explain the benefits & navigate to key resources related to transitioning to teaching with the standard Amplify Science curriculum

❏ Dig deeper into the Amplify Science formative assessment system & how it can be utilized to meet the needs of all learners

Amplify.

# Norms: Establishing a culture of learners

- **Take risks:** Ask any questions, provide any answers.
- **Participate:** Share your thinking, participate in discussion and reflection.
- **Be fully present:** Unplug and immerse yourself in the moment.
- **Physical needs:** Stand up, get water, take breaks.

# Plan for session 1

- Introduction

- Navigation

- Comparing @Home resources to standard curriculum

- Guidance for a responsive relaunch part 1

  - NYSSLS-designed

  - Figuring out phenomena

  - Formative assessment

- Closing

# Opening reflection

Reflect on your experiencing using Amplify Science.

What has gone well for you and/or your students?

What has been challenging?

What have you learned?

What do you wonder?

# Navigating the standard Amplify Science curriculum

## Pulse check: What's your comfort with the digital Teacher's Guide?

1: I have rarely or never navigated the digital Teacher's Guide

2: I have a little experience but I mostly feel lost

3: I can get around the Teacher's Guide but I don't feel that confident

4: I know what I'm doing but sometimes it's challenging to find things

5: I navigate with automaticity. I'm an expert.

# Navigating the standard Amplify Science curriculum

## Key aspects of navigating the digital Teacher's Guide

- Navigating to and between lessons
- Familiarity with the Lesson Brief
- Accessing the Unit Guide

# Unit structure

Unit

↓

Chapter

↓

Lesson

↓

Activity
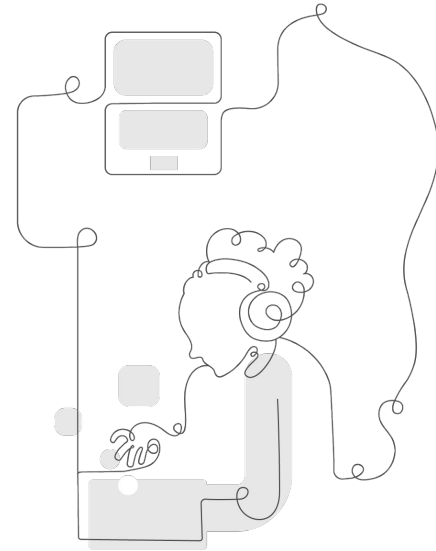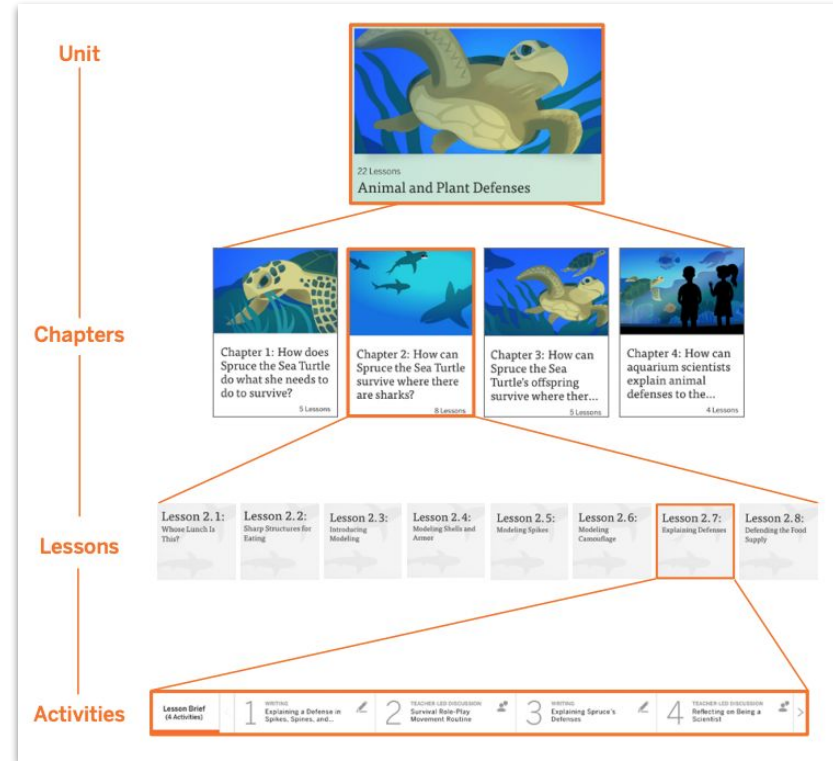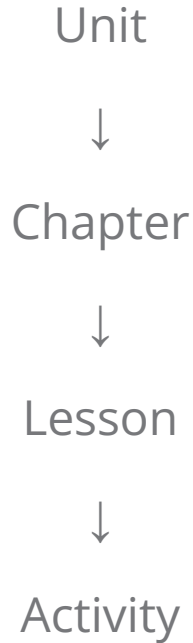
# Logging in (demo account)

## Safari or Chrome

1. Go to **learning.amplify.com**

2. Select **Log in with Google**

3. If you're already logged in with other Google accounts, click **Use another account**

4. Enter teacher demo account credentials
   - xxxxxxx@pd.tryamplify.net
   - Password: xxxx



Steps 1-2

Welcome to **Amplify**

G   Log In with Google

C   Log In with Clever

A.   Log In with Amplify

🔑   SSO login

Step 3

Choose an account

to continue to
**Amplify Curriculum Delivery Application**

T   Teacher Lambertsen
t.slambertsen@tryamplify.net

Sophia Lambertsen
slambertsen@amplify.com

Use another account

To continue, Google will share your name, email address, language preference, and profile picture with Amplify Curriculum Delivery Application. Before using this app, you can review Amplify Curriculum Delivery Application's **privacy policy** and **terms of service**.

Step 4

G Sign in with Google

Sign in

to continue to
Amplify Curriculum Delivery Application

Email or phone

Forgot email?

To continue, Google will share your name, email address, language preference, and profile picture with Amplify Curriculum Delivery Application. Before using this app, you can review Amplify Curriculum Delivery Application's **privacy policy** and **terms of service**.

Create account    Next

G Sign in with Google
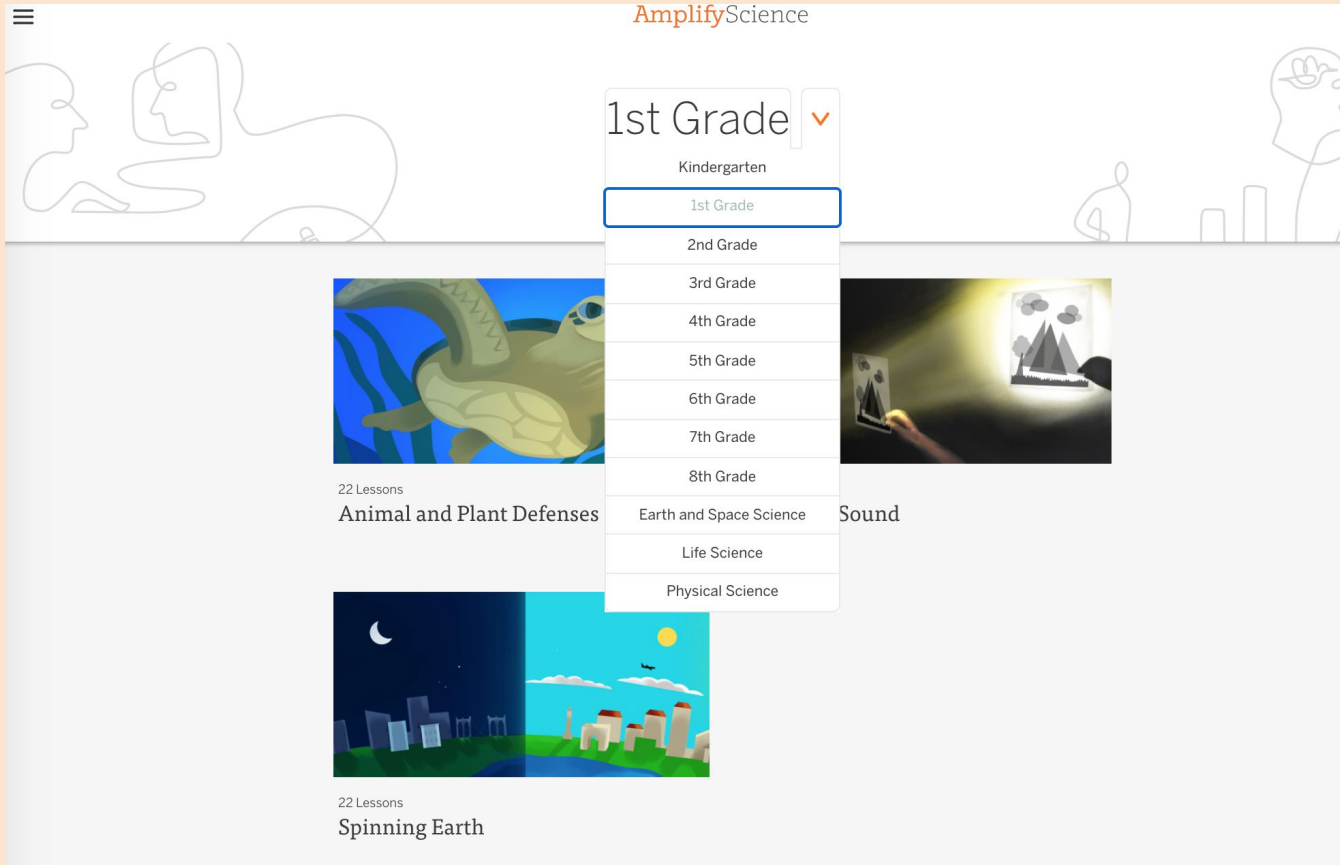
Hi Teacher

T nationalsci20@pd.tryamplify.net

Enter your password

☐ Show password

To continue, Google will share your name, email address, language preference, and profile picture with Amplify Curriculum Delivery Application. Before using this app, you can review Amplify Curriculum Delivery Application's **privacy policy** and **terms of service**.

Forgot password?    Next

# Hidden slide: Navigating to your grade level

# Hidden slide: Unit landing page

# Hidden slide: Chapter 1 landing page

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

⌄ JUMP DOWN TO CHAPTER OVERVIEW

## Lesson 1.1:
Pre-Unit Assessment

## Lesson 1.2:
Tortoise Parts

## Lesson 1.3:
Animal and Plant Structures
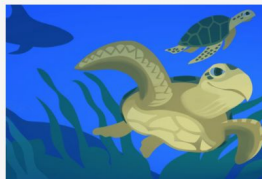
## Lesson 1.4:
Surviving by Not Being Eaten

## Lesson 1.5:
Explaining Sea Turtle Survival

Español

# Hidden slide: Lesson 1.1 Lesson Brief

# Hidden slide: Using arrows to navigate between lessons in order

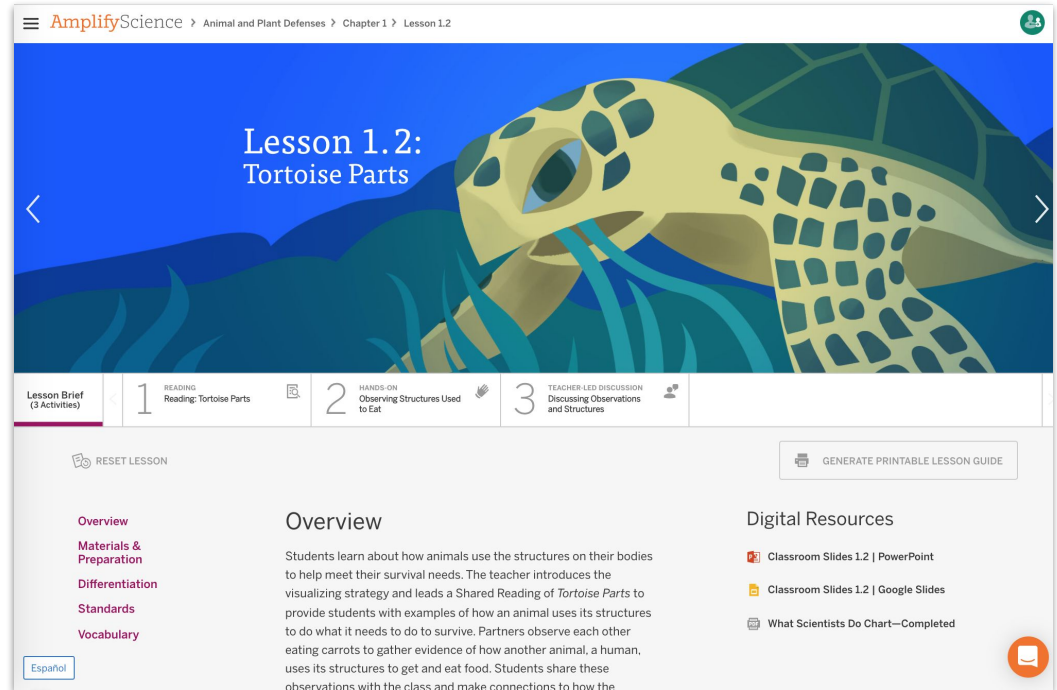# Hidden slide: Using the breadcrumb trail to navigate to a specific lesson
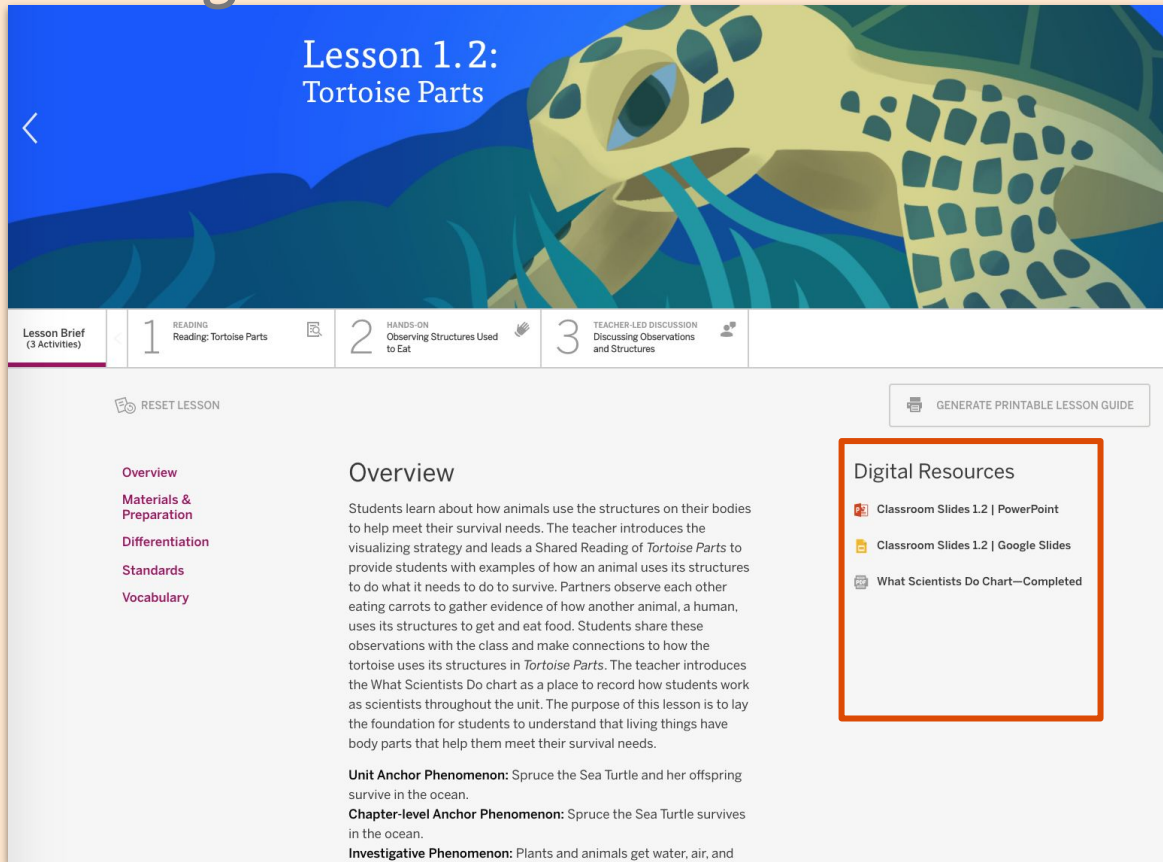
# Preparing to teach a lesson

## Lesson Brief

Use the Lesson Brief for information about lesson timing, materials and preparation, and differentiation suggestions.

# Hidden slide: Digital resources

# Hidden slide: Overview



Lesson 1. 2:
Tortoise Parts

| 1 READING Reading: Tortoise Parts | 2 HANDS-ON Observing Structures Used to Eat | 3 TEACHER-LED DISCUSSION Discussing Observations and Structures |

Lesson Brief
(3 Activities)

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

**Overview**
Materials & Preparation
Differentiation
Standards
Vocabulary

## Overview

Students learn about how animals use the structures on their bodies to help meet their survival needs. The teacher introduces the visualizing strategy and leads a Shared Reading of *Tortoise Parts* to provide students with examples of how an animal uses its structures to do what it needs to do to survive. Partners observe each other eating carrots to gather evidence of how another animal, a human, uses its structures to get and eat food. Students share these observations with the class and make connections to how the tortoise uses its structures in *Tortoise Parts*. The teacher introduces the What Scientists Do chart as a place to record how students work as scientists throughout the unit. The purpose of this lesson is to lay the foundation for students to understand that living things have body parts that help them meet their survival needs.

**Unit Anchor Phenomenon:** Spruce the Sea Turtle and her offspring survive in the ocean.
**Chapter-level Anchor Phenomenon:** Spruce the Sea Turtle survives in the ocean.
**Investigative Phenomenon:** Plants and animals get water, air, and

## Digital Resources

Classroom Slides 1.2 | PowerPoint

Classroom Slides 1.2 | Google Slides

What Scientists Do Chart—Completed

# Hidden slide: Lesson at a Glance and floating menu



AmplifyScience  ›  Animal and Plant Defenses  ›  Chapter 1  ›  Lesson 1.2

**Overview**

**Materials & Preparation**

**Differentiation**

**Standards**

**Vocabulary**

Lesson at a Glance

**1: Reading: Tortoise Parts** (20 min.)
The teacher introduces the Investigation Question that frames the work students will do in the next few lessons and leads a Shared Reading of *Tortoise Parts*. Students are introduced to the visualizing strategy to help them make sense of how tortoises do what they need to do to survive. *Tortoise Parts* introduces the idea that animals use specific body parts to meet their survival needs. Included in this activity is an On-the-Fly Assessment that provides an opportunity to assess students' initial use of the visualizing strategy.

**2: Observing Structures Used to Eat** (15 min.)
The teacher introduces the word observe to support students' understanding of the firsthand observations they make in this activity. Partners observe one another eating carrots to gather evidence about how animals use their structures to do what they need to do to survive.

**3: Discussing Observations and Structures** (10 min.)
Students share their observations from the Carrot Eating activity to identify the structures that humans use to get and eat the food they need to survive. The teacher introduces the What Scientists Do chart to help students understand the various things they are doing to answer questions in their work as scientists.

**Digital Resources**

Classroom Slides 1.2 | PowerPoint

Classroom Slides 1.2 | Google Slides

What Scientists Do Chart—Completed

^ BACK TO TOP

Español

We'd love to hear from you! Submit your feedback here.

# Hidden slide: Materials and preparation

# Hidden slide: Differentiation



≡ **Amplify**Science  >  Energy Conversions  >  Chapter 1  >  Lesson 1.2

## Differentiation

Overview

**Embedded Supports for Diverse Learners**

Materials &
Preparation

**Partner Reading.** Reading with a partner provides opportunities for
students to assist each other with reading—with using the reading
strategy modeled by the teacher, with decoding, and with
comprehension. Partner reading encourages discussion of the text
during reading, which aids comprehension and engagement.

Differentiation

Standards

Vocabulary

Unplugged?

**Supportive visuals in the book.** The diagrams and tables in *Systems*
are designed to clarify the meaning of the text and should support
students' comprehension of concepts and ideas.

### Potential Challenges in This Lesson

**Reading-centered.** Reading science texts is challenging, and the
strategy of synthesizing may be unfamiliar to many students.
Students who struggle with reading in general may struggle with the
reading in this lesson.

**Synthesizing across activities.** Synthesizing information from a
variety of sources is a complex cognitive task and can be challenging
for students. The synthesizing reading comprehension strategy may
be new to students. Some students may find it difficult to incorporate
new information from the reading into their growing understanding of
systems. Keep in mind that students will have many opportunities
over the course of the unit to learn to use this complex strategy.

˄ BACK TO TOP

**Specific Differentiation Strategies for English
Learners**

Español

### Digital Resources

Classroom Slides 1.2 | PowerPoint

Classroom Slides 1.2 | Google Slides

All Projections

Partner Reading Guidelines

Cherry Pitter System table (Completed)

Optional: Chapter 1 Home Investigation:
Blackout Interview copymaster

Energy Conversions Investigation Notebook,
pages 3–5

# Unit Guide

The Unit Guide is a collection of resources to support planning and day-to-day instruction in the unit.

You can access the Unit Guide on the Unit landing page below the chapter buttons.

# Questions?

Amplify.

# Capitalizing on Amplify Science in a responsive relaunch

## Amplify Science...

- Is **NYSSLS-designed**
- Engages students in figuring out **phenomena**
- Has a robust system of **formative assessment**
- Has a strong emphasis on **literacy** development
- Is for **all** students

### Capitalizing on Amplify Science in a responsive relaunch

**Guidance for instructional leaders and teachers**

The learning disruptions of the past year due to COVID-19 have created wide disparities in the amount and quality of science teaching and learning that has taken place in schools. The resulting unfinished learning in science will vary in each school and classroom, and for each individual student. This document highlights five key features of Amplify Science that can be leveraged in responsive relaunch plans:

1. Amplify Science is NGSS-designed.
2. In Amplify Science units, students are figuring out phenomena.
3. Amplify Science has a robust system of formative assessment.
4. Amplify Science has a strong emphasis on literacy development.
5. Amplify Science is for all students.

The recommendations outlined in the following pages are intended to support instructional leaders and teachers as they envision what science teaching and learning will look like in the upcoming back-to-school season and beyond.

authored by THE LAWRENCE HALL OF SCIENCE

**Amplify**Science

"As you transition back to in-person learning, it's time to shift back to the standard Amplify Science curriculum to fully meet the NGSS."

-Capitalizing on Amplify Science in a responsive relaunch

Amplify.

# Comparative experience

## @Home resources and the standard Amplify Science curriculum

As we compare the versions of the model lesson, consider the ways in which the standard curriculum provides a **deeper and more equitable learning experience** for all students.

# Amplify Science@Home

## Resources for remote and hybrid teaching
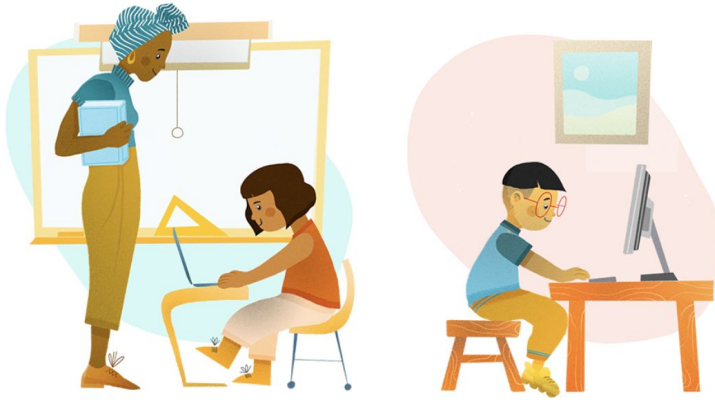


Amplify Science@Home
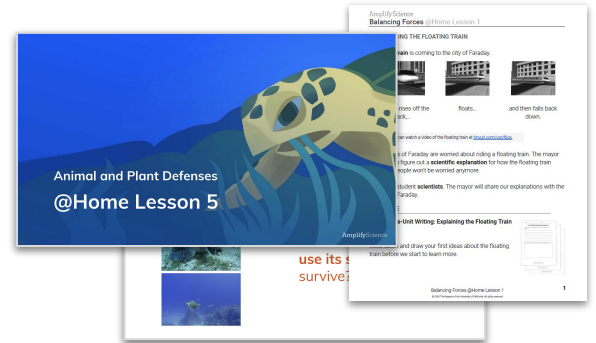
@Home Units
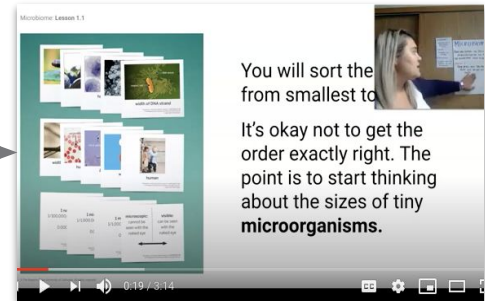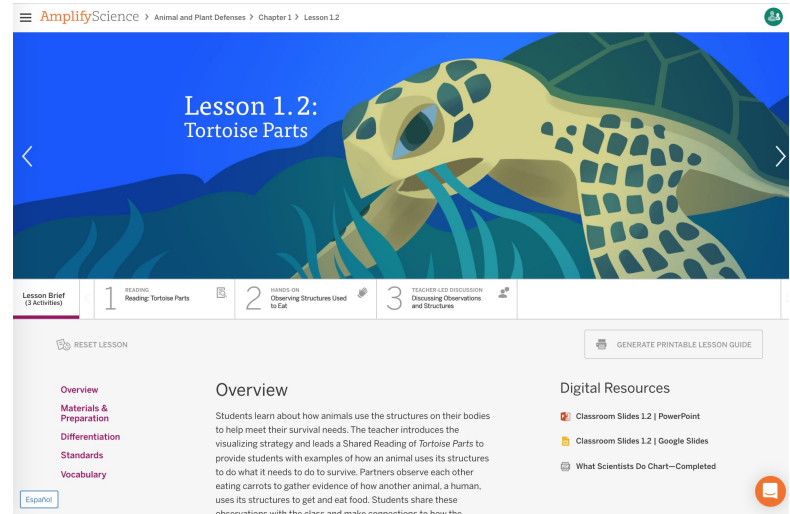
@Home Videos

# Animal & Plant Defenses

The purpose of this lesson is to lay the foundation for students to understand that living things have body parts that help them meet their survival needs.

## Standard Curriculum Lesson 1.2

1. Reading: Tortoise Parts

2. Observing Structures Used to Eat

3. Discussing Observations & Structures

# Animal & Plant Defenses

## Standard Curriculum Lesson 1.2

1. Reading Tortoise Parts

2. Observing Structures Used to Eat

3. Discussing Observations & Structures

## @Home Lesson 2

1. Shared reading of Tortoise Parts

2. Observe household members & self-reflect

# Animal & Plant Defenses Lesson 1.2: **Activity 1**

**Standard curriculum**

**@Home Lesson**

Guided use of visualization strategy ⟶ Independent use of visualization strategy



Lesson 1.2: Tortoise Parts                    Activity 1

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



Animal and Plant Defenses @Home Lesson 2

We can visualize, or make a movie in our minds, about the sharp, beaky mouth biting leaves and ripping the leaves off the plant.

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

# Animal & Plant Defenses Lesson 1.2: **Activity 2**

**Standard curriculum**          **@Home Lesson**

Guided observation of structures ⟶  Independent observation of structures

# Animal & Plant Defenses Lesson 1.2: **Activity 3**

## Standard curriculum

Scaffolded discussion of observations

## @Home Lesson

Independently conducted reflections

Lesson 1.2: Tortoise Parts

Activity 3

What did you observe when your partner was eating a carrot?

Animal and Plant Defenses @Home Lesson 2

**Observing Structures We Use to Eat**

1. **Partner A** eats a piece of hard food. **Partner B** observes.

2. **Partners** switch.

3. **Partner B** eats a piece of hard food. **Partner A** observes.

What did you observe when your partner was eating?

# Reflection

## @Home resources and the standard Amplify Science curriculum

How does the version of the lesson from the standard curriculum provide a **deeper and more equitable learning experience** for all students?

# Questions?

Amplify.

# Capitalizing on Amplify Science in a responsive relaunch

## Amplify Science...

- Is **NYSSLS-designed**
- Engages students in figuring out **phenomena**
- Has a robust system of **formative assessment**
- Has a strong emphasis on **literacy** development
- Is for **all** students

# Amplify Science...

## is NYSSLS-designed

**Key points:**

- Students progress in their ability to figure out using three dimensions across multiple years.

- Disciplinary Core Ideas spiral across grade bands (K-2, 3-5, 6-8).

- Amplify Science units are not dependent on specific science concepts from previous grades.

**Key recommendations:**

- Focus on standards and **units at your grade level** instead of revisiting "missing" content.

# Amplify Science

## is designed for NYSSLS

Navigate to the **Standards and Goals** document in your unit's Unit Guide.

Skim the following subsections:

- Trajectory of Core Ideas
- Prerequisite Knowledge

# Amplify Science

## engages students in figuring out phenomena

**Key points:**

- Figuring out phenomena increases student motivation and makes learning relevant.

- Students construct increasingly complete explanations of anchor phenomena throughout Amplify Science units.

**Key recommendations:**
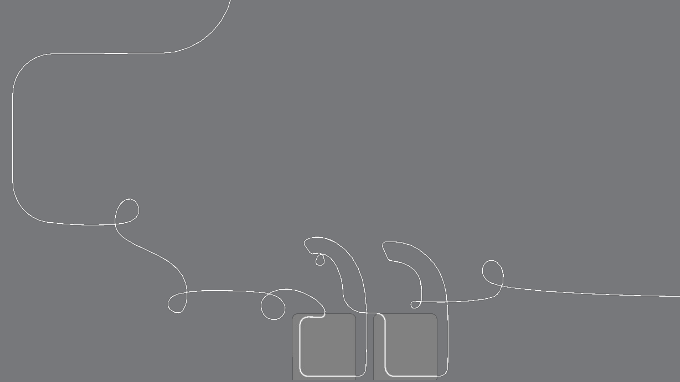
- Prioritize **teaching units fully** so students can come to a complex explanation of the unit phenomenon.

# Key takeaway

Teaching **complete units at your grade level** is the best way to ensure your students progress along the Next Generation Science Standards as you return to onsite teaching.

Amplify.

# Questions?

Amplify.

# Amplify Science

## has a robust system of formative assessment

**Key points:**

- Formative assessments in Amplify Science allow frequent insight into student learning in all three dimensions.

- Formative assessments include "Now what" suggestions for providing more support when needed.

**Key recommendations:**

- Use unit resources to get familiar with the Assessment System. Formatively assess your students and adjust instruction as needed.

# Progress Build

## A unit-specific learning progression

Level 3

Level 2

Level 1

Prior knowledge

Deep, causal understanding
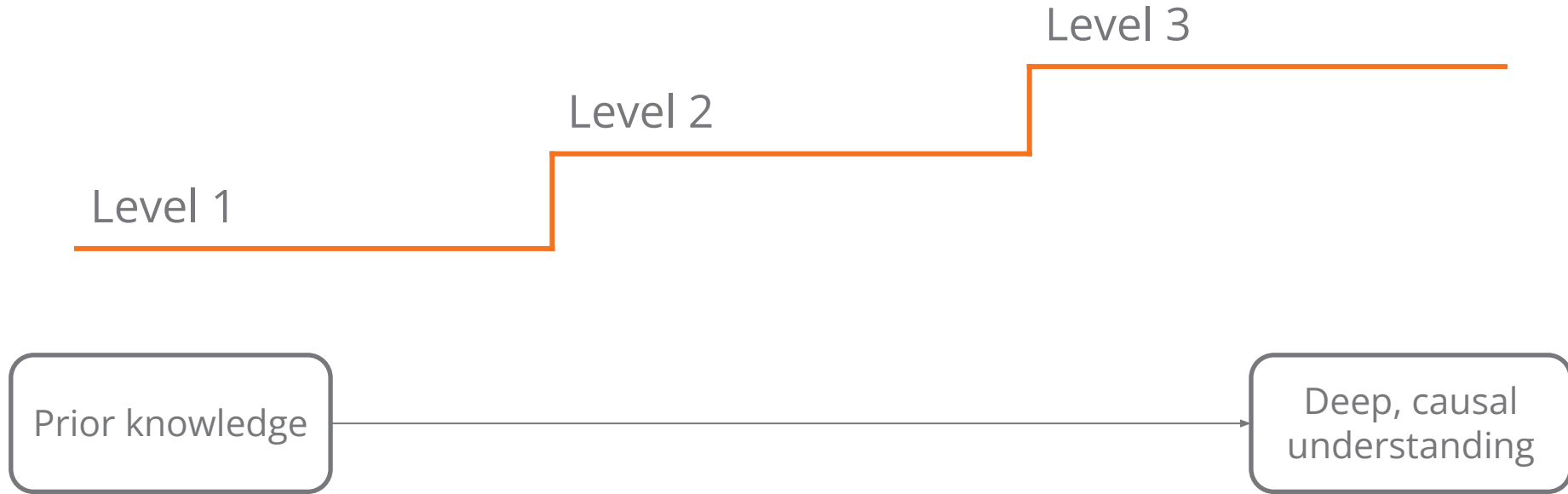
# On-the-Fly Assessments and Student Self-Assessments

Pre-Unit Assessment

Critical Junctures

End-of-Unit Assessment

Level 3

Level 2

Level 1

Prior knowledge → Deep, causal understanding

**Amplify.**
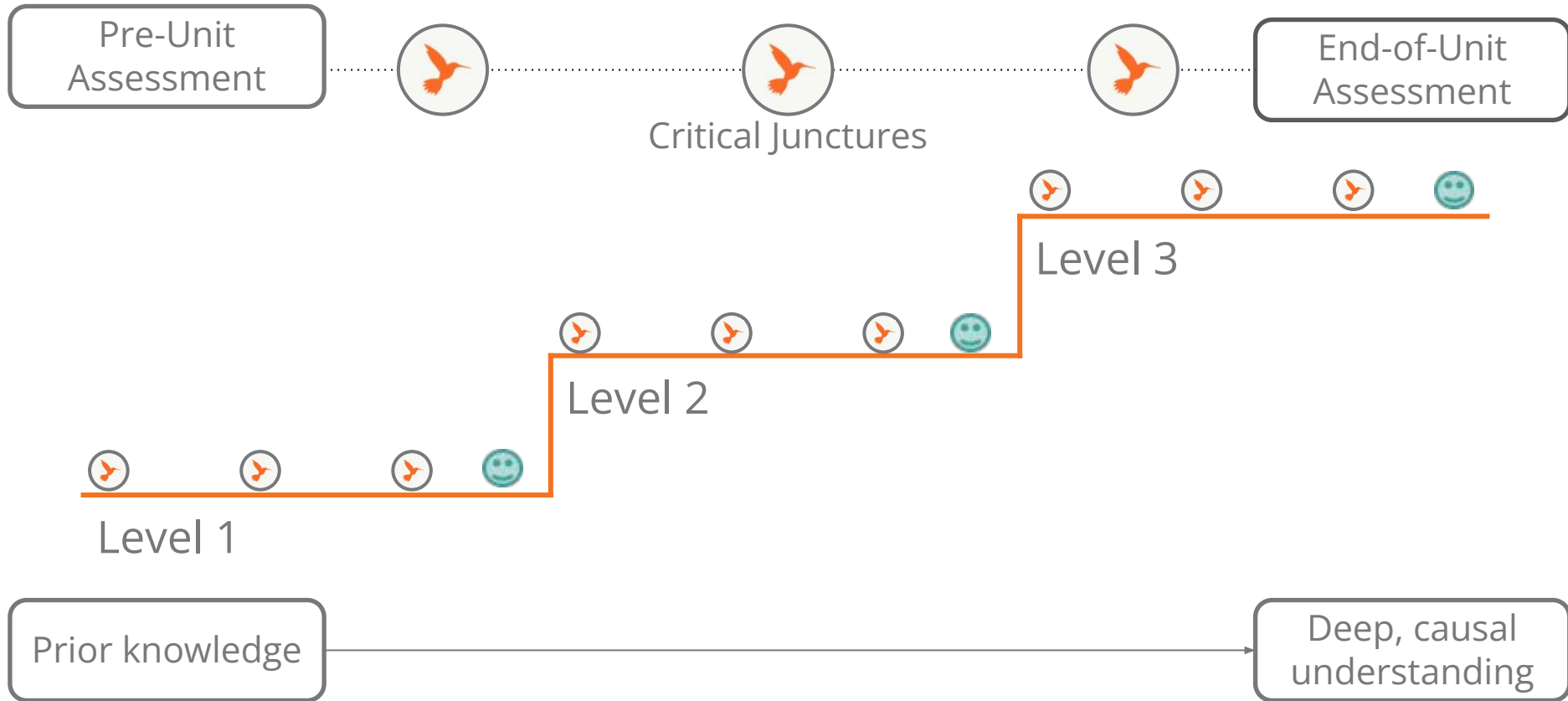
# What is formative assessment?

Formative assessment is a cycle of eliciting, interpreting, and taking action on information about student learning.

Amplify.

# Design Principles of Formative Assessment

- **Credible:** information from the assessment is trustworthy
- **Actionable:** information is at a level of specificity such that a teacher can use it to bolster instruction
- **Timely:** information comes at a time when a teacher is able to take action and when a student can productively leverage feedback

Amplify.

# Assessment as a Three Dimensional System
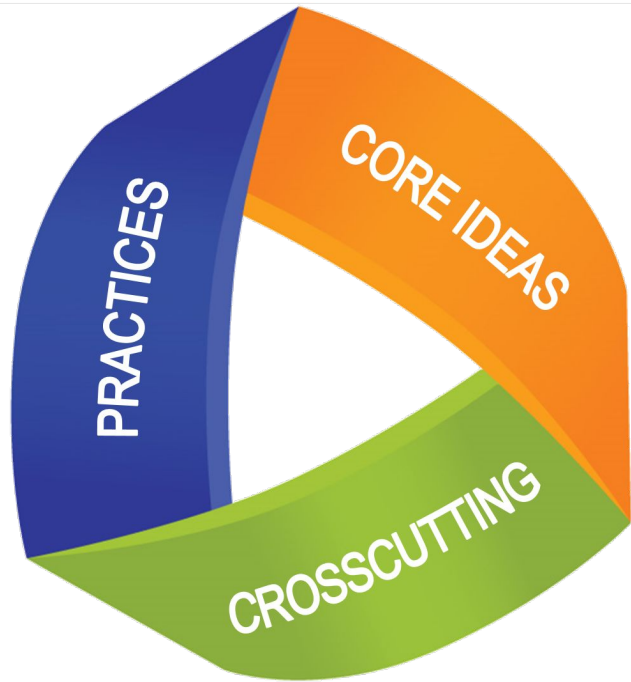


Lesson 2.1, Activity 4:
Student Drawing and Discussion: The Function of Plant Parts

**Assessment Type:**
On-the-Fly Assessment

**Evaluation Guidance:**

- Look For/Now What? Notes

**DCI:**

- LS2.A: Interdependent Relationships in Ecosystems

**SEPs:**

- Practice 2: Developing and Using Models

- Practice 4: Analyzing and Interpreting Data

- Practice 7: Engaging in Argument from Evidence

- Practice 8: Obtaining, Evaluating, and Communicating Information

**CCCs:**

- Systems and System Models

- Structure and Function

Amplify.

# Animal & Plant Defenses Progress Build

### Level 3

Animals' and plants' offspring have similar, though not identical, structures to their parents that work in the same ways.

### Level 2

Many animals and plants have body structures with qualities that make them good for stopping animals from finding and/or eating them.

### Level 1

To survive, animals and plants must not be eaten by animals that try to eat them for food.

Pre-unit assessment

Critical Junctures

End-of-Unit Assessment

Amplify.

# Situating an Assessment

**Lesson 1.2 Purpose:** The purpose of this lesson is to lay the foundation for students to understand that living things have body parts that help them meet their survival needs.

> **Progress Build Level 1:**
> To survive, animals and plants must not be eaten by animals

**Amplify.**

# Lesson 1.2 Overview: Activity 1

**1: Reading: Tortoise Parts (20 min.)** ✈

**The teacher introduces the Investigation Question that frames the work students will do in the next few lessons and leads a Shared Reading of Tortoise Parts. Students are introduced to the visualizing strategy to help them make sense of how tortoises do what they need to do to survive. Tortoise Parts introduces the idea that animals use specific body parts to meet their survival needs. Included in this activity is an On-the-Fly Assessment that provides an opportunity to assess students' initial use of the visualizing strategy.**

2: Observing Structures Used to Eat (15 min.)

The teacher introduces the word observe to support students' understanding of the firsthand observations they make in this activity. Partners observe one another eating carrots to gather evidence about how animals use their structures to do what they need to do to survive.

3: Discussing Observations and Structures (10 min.)

Students share their observations from the Carrot Eating activity to identify the structures that humans use to get and eat the food they need to survive. The teacher introduces the What Scientists Do chart to help students understand the various things they are doing to answer questions in their work as scientists.

**Amplify.**

## Lesson 1.2, Activity 1

**On-the-Fly Assessment 1: Visualizing Tortoise Structures in Use**

**Look for:** Students' descriptions of their visualizations of the tortoise using its various structures presents an opportunity to informally assess their initial ability to visualize based on what they see and read. Visualizing information read or seen in books is the focal sense-making strategy for this unit. In general, students should describe visualizations that reflect the elements in the image and text. For example, a student might say something like *I saw the big toenails ripping and pushing the dirt behind the tortoise.*

Look-for

**Now what?** As students share what they visualized, take time to repeat one or two examples of visualizing that drew on the text and images, and emphasize those connections. For example, you might say something like *We read about the tortoise's big toenails and can see its feet in the dirt in this picture. You visualized those big toenails pushing that dirt backward, behind the tortoise. Good visualizing starts with the things we see and read, and uses them to imagine something more.*

Amplify.

# Collecting Data

- How do you typically collect and record student data?

- What strategies have you successfully used for collecting data in a remote learning setting ?

Amplify.

# Data Collection Tool Sample

**Unit Name:**
**Lesson & Activity #:**

**Look for 1**:
**Look for 2**: .

| Student Name | Look for 1 | Look for 2 | Notes |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Amplify.

# Model Analysis: 1.2 Activity 1

| Analyzing student data: refer to the Look for section of the Lesson's assessment and refer to your observation notes. | | Taking action based on student data: refer to the Now what section of the lesson's assessment and consider how you might adjust instruction in your classroom. | |
|---|---|---|---|
| **Which misconception?** | **Which students?** | **When?** | **How?** |
| ☑ Key Concept<br>☑ Practice<br>☐ Crosscutting Concept<br><br>Notes:<br><br>Students should be able to visualize based on what they see & read. | Tristian<br><br>Trent<br><br>Wanda<br><br>Zena | ☑ In the moment<br>☐ In upcoming activity<br>☐ Outside of lesson<br><br>Notes:<br><br>During the activity itself. | ☑ Keep an eye on certain students<br>☑ Provide additional instruction<br>☐ Revisit an activity<br><br>Notes:<br><br>Coach students listed as they continue to practice & hear other visualizations drawing on both text & images. |

# Planning for an Upcoming Assessment

1. Choose an upcoming assessment for your unit.

2. Plan using the template or your note catcher.

| Unit: <br> Lesson: | | | |
|---|---|---|---|
| **Analyzing student data:** refer to the Look for section of the Lesson ___ assessment. *(If using the @Home Units refer to the chapter assessment considerations).* | | **Taking action based on student data:** refer to the Now what section of the ___ assessment and consider how you might adjust instruction in your classroom. | |
| **How will I collect data?** | **Which misconception?** | **When?** | **How?** |
| | ❏ Key Concept <br> ❏ Practice <br> ❏ Crosscutting Concept <br><br> Notes: | ❏ In the moment <br> ❏ In upcoming activity <br> ❏ Outside of lesson <br><br> Notes: | ❏ Keep an eye on certain students <br> ❏ Provide additional instruction <br> ❏ Revisit an activity <br><br> Notes: |

# Assessment System

## Key takeaways: On-the-Fly and Critical Juncture Assessments

- Gather data about conceptual understanding, 3-D learning, literacy skills, and collaboration

- Embedded into instruction

- "Look for" defines what's being assessed

- "Now what?" suggestions for providing differentiated support

# Amplify Science

## has a strong emphasis on literacy development

**Key points:**

- Amplify Science supports students with scientific reading, writing, speaking, and listening

- Literacy and discourse are key aspects of the work professional scientists do

**Key recommendations:**

- Use the standard curriculum as written to develop students' disciplinary literacy

- Attend to the CCSS-ELA standards addressed in Amplify Science lessons

# Questions?
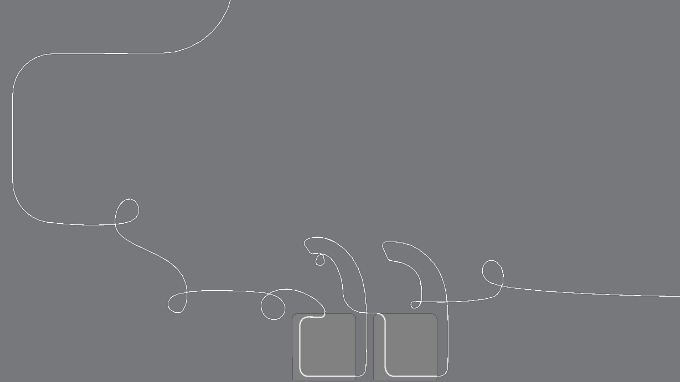
# Session 1 goals

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

☑ Explain the benefits & navigate to key resources related to transitioning to teaching with the standard Amplify Science curriculum

☑ Dig deeper into the Amplify Science formative assessment system & how it can be utilized to meet the needs of all learners

Amplify.

# Closing reflection

## Based on our work today, share:

**Head:** something you'll keep in mind

**Heart:** something you're feeling

**Feet:** something you're planning to do

# Additional resources and ongoing support

**Customer Care**

Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-10PM EST and weekends 10AM-6PM EST.

help@amplify.com

800-823-1969

Amplify Chat

# 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.
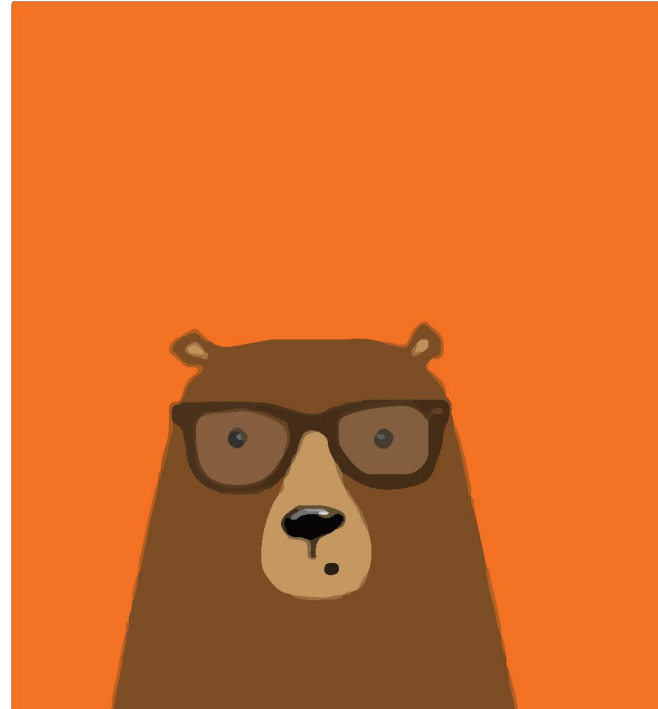
UPDATE: Summer 2020

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 S_____ have access to the many updates and upgrades in ou_____ your regular credentials to login and begin your su_____ curriculum until late August/early September whe_____ 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.

# Please provide us feedback!

**URL:**  https://www.surveymonkey.com/r/5DQW2T6

**Presenter name:**

**Session Title**:
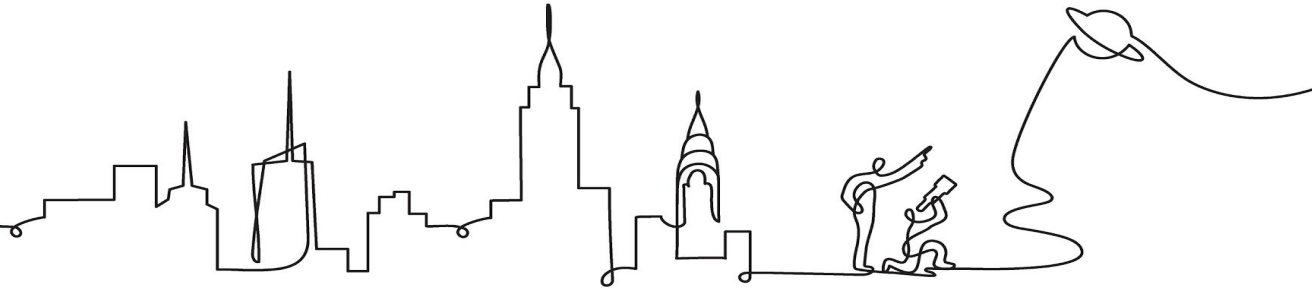
Amplify.

Amplify.

Thank you & be well!

# Amplify Science
## New York City

# Exploring the Amplify Science Curriculum: Digging Deeper
## Session 2: Grades K-2

Date xx
Presented by xx

# Welcome back! Opening reflection

## Reflect & share your thoughts on Jamboard:

- ❏ Do you agree? Why or why not?
- ❏ What would you add to this quote? Why?
- ❏ What would you take away from this quote? Why?

### Who are our Diverse Learners?

*"Diverse learning is not based on race or dependent on a deficit model. Students who are considered gifted are also diverse learners. All students are diverse and unique, in their own right. Let's agree that diverse learning recognizes that all students have unique learning needs and we educators must be prepared to provide multiple entry points for all learners to access the rigor of the goals and standards."*

*Anonymous Educator*
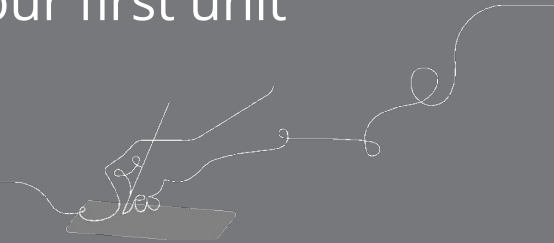
# Norms: Establishing a culture of learners

- **Take risks:** Ask any questions, provide any answers.
- **Participate:** Share your thinking, participate in discussion and reflection.
- **Be fully present:** Unplug and immerse yourself in the moment.
- **Physical needs:** Stand up, get water, take breaks.

# Goals for session #2

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

- ❏ Explore how the tools & activities in Amplify Science support equity, relevance, and engagement for all learners.

- ❏ Leverage successes and learnings from remote and hybrid teaching as you begin planning your first unit for back to school.

Amplify.

# Plan for session 2

- Welcome back!
- Guidance for a responsive relaunch part 2
  - Supporting diverse learners
  - CR-SE
  - SEL
- Sensemaking
- Closing

# Amplify Science

## is for all students

Empower student scientists by establishing a **culture of figuring out** in your classroom.



**Tips for establishing a culture of figuring out**
To promote equity, relevance, and engagement

- Elicit and leverage **students' prior knowledge, personal experiences, and cultural backgrounds**
  - Find space and time where students can share their experiences and ideas related to the unit phenomenon or problem that they will be seeking to explain or solve.
  - Have students return to their funds of knowledge at key moments of the figuring out process for the purpose of building on their ideas, using their connections as a source of evidence, or to notice if their ideas have changed over time.
  - Think about how to attribute ideas from students who might not see themselves as contributors to the conversation.
- Value **student questions**
  - Utilize the embedded question-asking opportunities in the unit to elicit questions from students.
  - Document, return to, and sort student questions at key moments, such as the beginning of the unit when the unit phenomenon is introduced and at the beginning and end of each chapter.
- Connect to **local and relevant phenomena**
  - Welcome in students' interest in and experience with local and everyday phenomena, and help draw connections to what they're figuring out throughout the year about the unit phenomena.
  - Compare and contrast the unit phenomenon to local phenomena.
  - Encourage students' explorations and observations of everyday phenomena at home or in their communities.
  - Identify community resources that can help students explore phenomena in their community.
- Allow for a **variety of sensemaking** types and paces
  - Attend to how different students thrive with different modalities, or need less or more time with them.
  - Use the storyline in the unit to teach sequentially but allow for flexibility based on student need.
- Take on the role of an **interested skeptic**[1]
  - Students might not be intrigued by a phenomenon right away because they believe they already know how or why it happens. Help students become dissatisfied with what they can explain.[2]
  - Ask questions such as: "Is that how a scientist would do it?", "Is that consistent with what we read about?", or "Do you agree with your partner's idea?"

[1] Sara Goodman, knowatom.com
[2] Using Phenomena in NGSS-Designed Lessons and Units

Tips for a Culture of Figuring Out by The Learning Design Group
© 2021 The Regents of the University of California

# Amplify Science

## is for all students

**Key points:**

- Multimodal instruction provides multiple entry points into complex science ideas, and allows for multiple means of expression.

- Amplify Science prioritizes representation of diverse scientists.

**Key recommendations:**

- Leverage lesson-specific **differentiation resources** to support all learners in your class.

The Amplify Science curriculum was developed with supporting diverse learning needs in mind.

# Differentiation strategies to support ALL students



t.rsinha-das@tryamplify.net

Log Out

Go To My Account ⚙

**Classroom Language Settings**

ELA Resources | Interim Assessments

LA Science Program Guide

Program Hub

Science Program Guide

FLORIDA

Map

Help

---

**Amplify**Science

Amplify Science

**Welcome**

Program developers

Designed for the NGSS

Program components

Scope and Sequence

Phenomena, standards, and progressions

Assessments

Science and literacy

Access and equity

**Resources**

---

**Access and equity**

Universal Design for Learning

Culturally and linguistically responsive

Differentiation strategies

– English learners

– Students with disabilities

– Standard English learners

– Girls and young women

– Advanced learners and gifted learners

– Students living in poverty, foster children and youth, and migrant students

Lesson-level differentiation

Amplify.

# Diverse learner needs

| Student population | Strategies for support |
|---|---|
| English learners | |
| Students with disabilities | |
| Standard English learners | |
| Girls and young women | |
| Advanced learners and gifted learners | |
| Students living in poverty, foster children and youth, and migrant students | |

- In pairs, choose a **student population.**
- Jot down strategies you've read about from the **Program Guide** & those from your **own practice**.

# Questions?

Amplify.

# Culturally Responsive-Sustaining Education

## Principles of the framework

**Welcoming and affirming environment**

**High expectations and rigorous instruction**

**Inclusive curriculum and assessment**

**Ongoing professional learning**

# Read, reflect, & discuss

## 4 principles of CR-SE

- ❏ Take a few moments to review these principles.
- ❏ Reflect on how you already incorporate these principles into your regular practice.
- ❏ Share in the chat!

# Culturally Responsive-Sustaining Education in Amplify Science

## Collaborate in break-out rooms

❏ Each group will be randomly assigned 1 common element of equitable teaching & learning.
❏ Read respective blurb.
❏ Prepare a slides with words & images that best summarizes how Amplify Science supports each element.  Be creative!

# Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences, and Cultural Backgrounds

## Unit-specific document

# Read & reflect

## Eliciting & leveraging student's prior knowledge & experiences

❑ Skim your first unit's "Eliciting & Leveraging Students' Prior Knowledge, Personal Experiences, & Cultural Backgrounds" document.

❑ Share one example in the chat of how you plan to leverage funds of knowledge students may share in your first unit.

# Social Emotional Learning

## 5 Core Competencies

- Identified by the Collaborative for Academic, Social, & Emotional Learning (CASEL)
- Widely accepted across the country & adopted by NYS



Figure 1: Framework for Systemic Social and Emotional Learning.
©CASEL 2017

# Read, reflect, & discuss

## 5 competencies of SEL

❏ Take a few moments to review these competencies.

❏ Reflect on how you already incorporate these competencies & skills into your instruction.

❏ Share in the chat!

# Social & Emotional Learning in Amplify Science

## Collaborate in break-out rooms

- ❏ Each group will be randomly assigned 1 competency.

- ❏ Read respective blurb.

- ❏ Prepare a slide with words & images that describes how Amplify Science supports each competency. Be creative!

**Amplify** Science

Social and Emotional Learning in Amplify Science
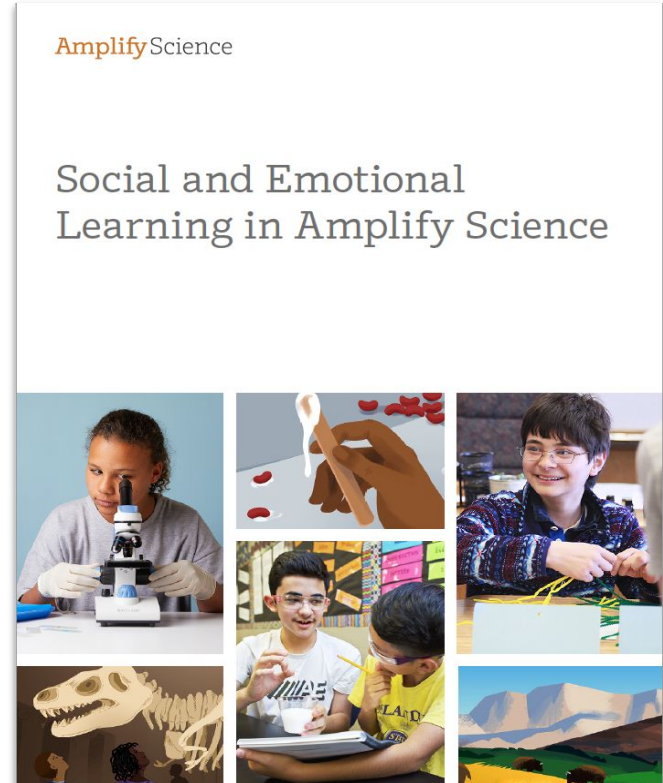
# Key takeaway

Formative assessments, explicit literacy instruction, lesson-specific differentiation suggestions, & supports related to CR-SE & SEL are some of the **built-in tools** for ensuring your students have equitable access to rigorous science learning.

Amplify.

# Plan for the day

- Introduction

- Navigation

- Comparing @Home resources to the standard curriculum

- Guidance for a responsive relaunch

- **Sensemaking**

- Closing

Questions?

Amplify.
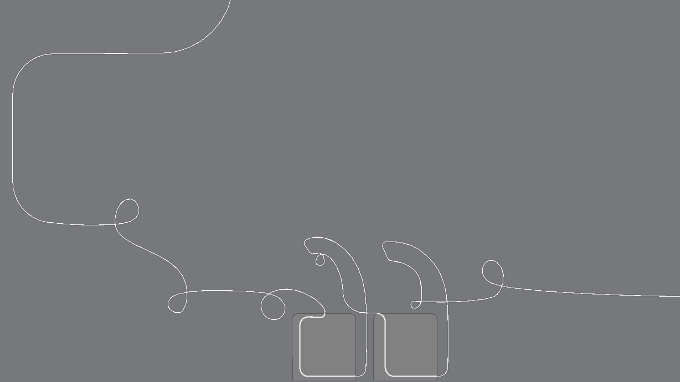
# Sensemaking discussion prompts

1. How can we use what we've learned during our time **teaching remotely** as we transition back to onsite teaching?

2. What can we do to **establish a culture of figuring out** in our classrooms?

3. How might this **first year back in the classroom** look different than the years that follow?

4. What are our **next steps** in general, based on what we've learned and discussed today?

# Plan for session 2

- Welcome back!
- Guidance for a responsive relaunch part 2
  - Supporting diverse learners
  - CR-SE
  - SEL
- Sensemaking
- **Closing**

# Questions?

Amplify.

# Session 2 goals

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

☑ Explore how the tools & activities in Amplify Science support equity, relevance, and engagement for all learners.

☑ Leverage successes and learnings from remote and hybrid teaching as you begin to plan your first unit for back to school.

Amplify.

# Closing reflection

Based on our work today, share:

**Head:** something you'll keep in mind

**Heart:** something you're feeling

**Feet:** something you're planning to do

# Additional resources and ongoing support

## Customer Care

Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-10PM EST and weekends 10AM-6PM EST.

help@amplify.com

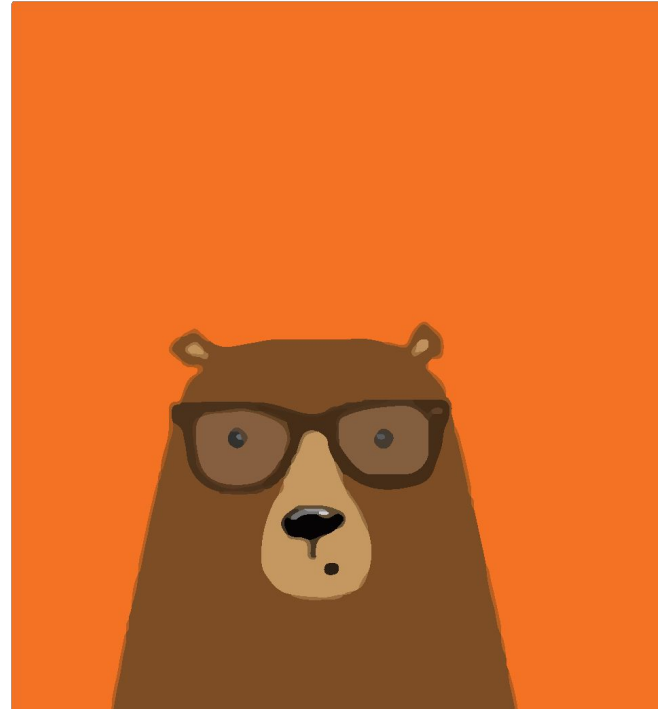800-823-1969

Amplify Chat

# 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 S[...] have access to the many updates and upgrades in ou[...] your regular credentials to login and begin your su[...] curriculum until late August/early September whe[...] 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!
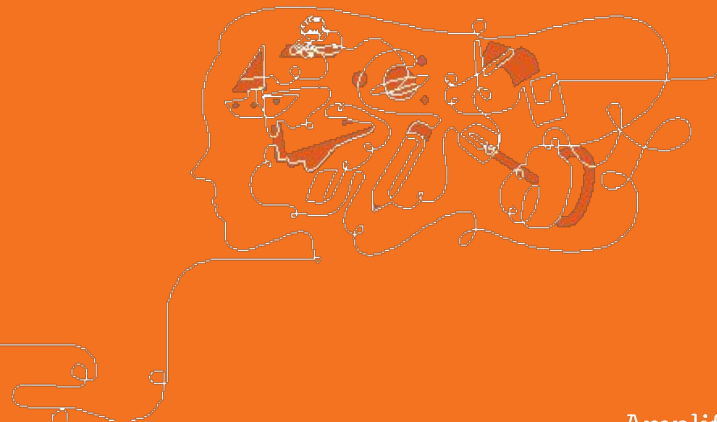
## Site Resources
- Login information
- Pacing guides
- Getting started guide
- NYC Companion Lessons
- **Resources from PD sessions**
- And much more!

Amplify.

# Please provide us feedback!

**URL:** https://www.surveymonkey.com/r/5DQW2T6

**Presenter name:**

**Session Title:**

Amplify.

Amplify.

Thank you & be well!