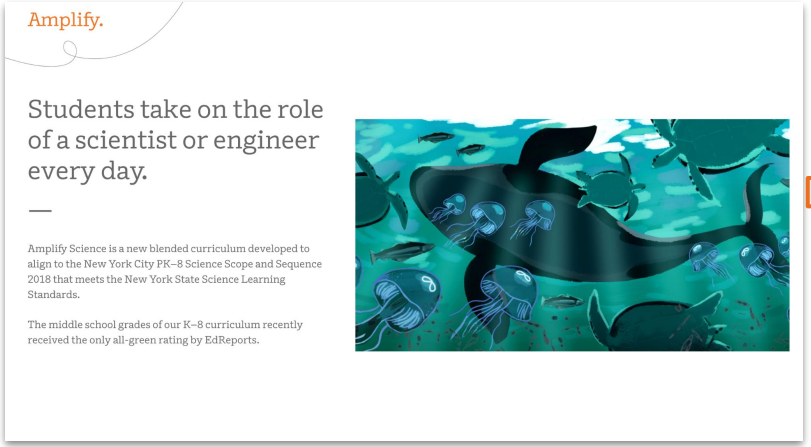
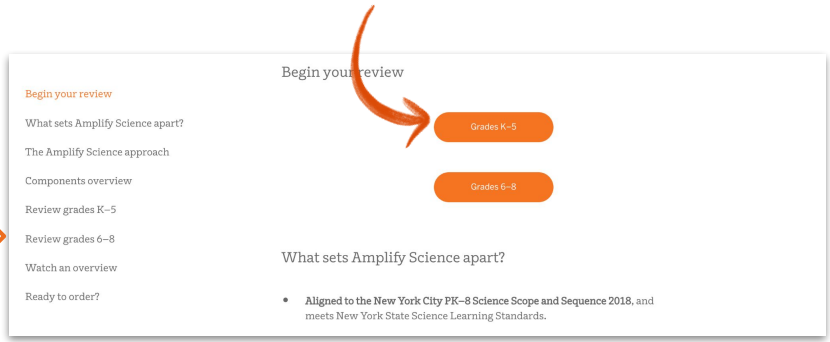
Welcome to Amplify Science!

Do Now: Open auto-login site (or use your permanent account credentials) & explore Unit 2 as we wait to begin

Go to **https://amplify.com/amplify-science-nyc-doe-review/**





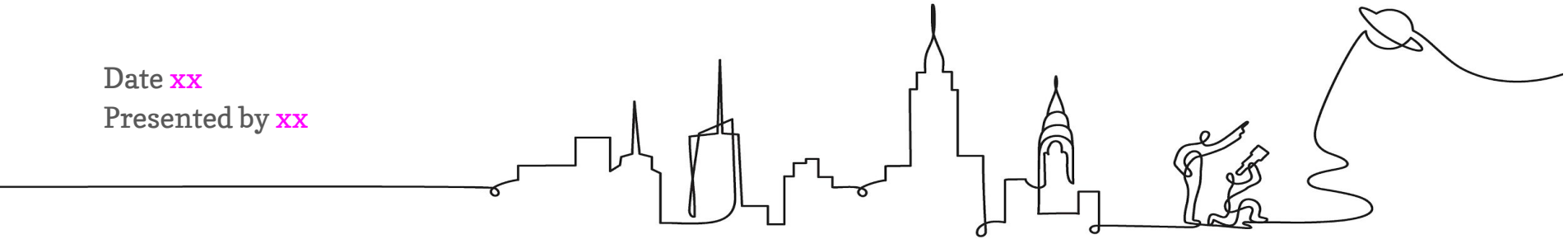
Click your grade band & then follow prompts

Amplify Science
New York City

3-Dimensional Learning in the Amplify Science K-5 Curriculum

Grade 2

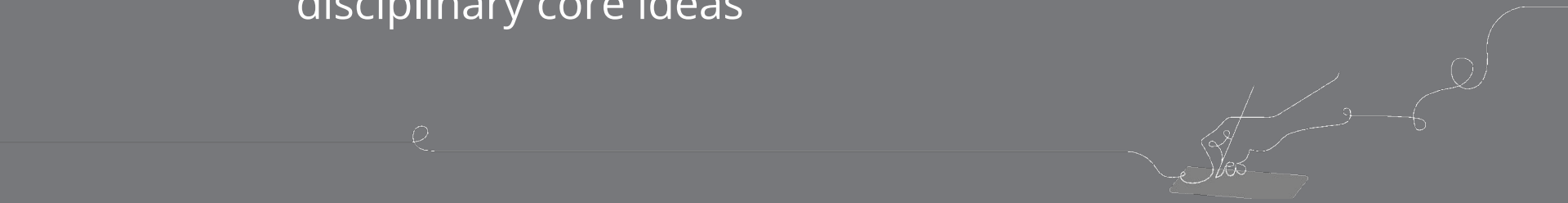
Date xx
Presented by xx



Goals for the session

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

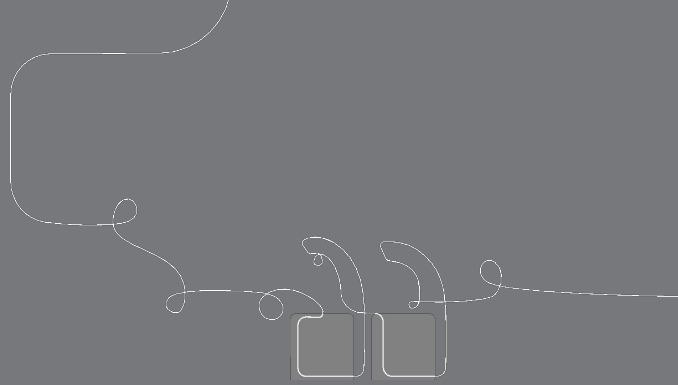
- ❑ Unpack three-dimensional learning across Unit 2
- ❑ Analyze how students leverage focal science & engineering practices & cross-cutting concepts to figure out the unit 2 phenomenon & its associated disciplinary core ideas

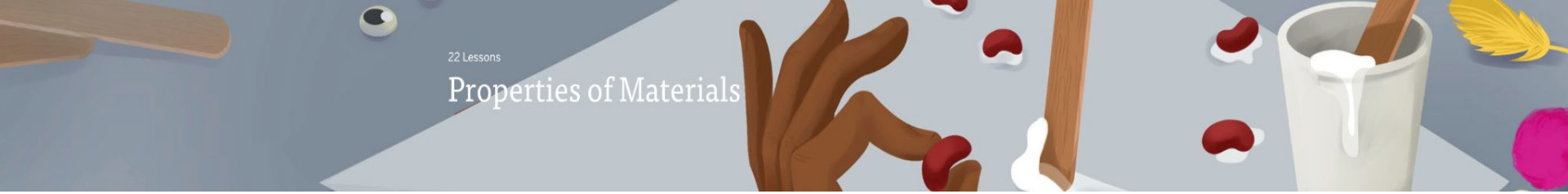


Norms: Establishing a culture of learners

- **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.

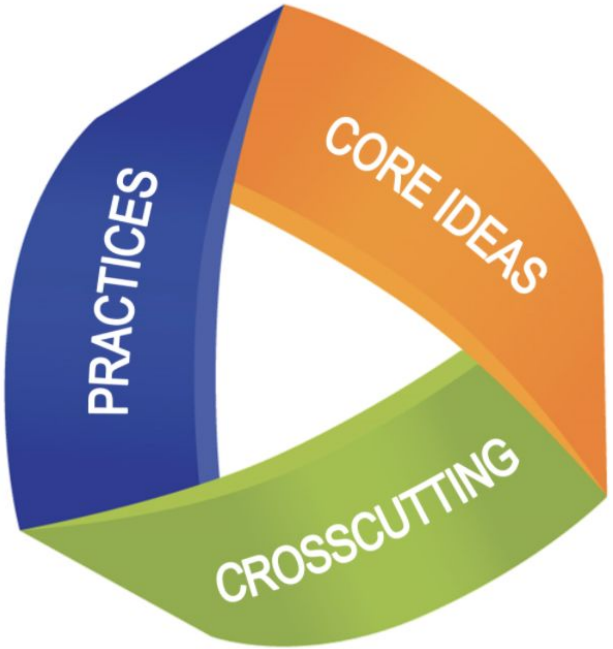
Questions?





Plan for the session

- **Opening reflection**
- Navigation refresher
- NYSSLS & the unit's phenomenon
- Three dimensions of the unit
  - Disciplinary core ideas
  - Science & engineering practices
  - Cross-cutting concepts
- Lesson planning
- 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?

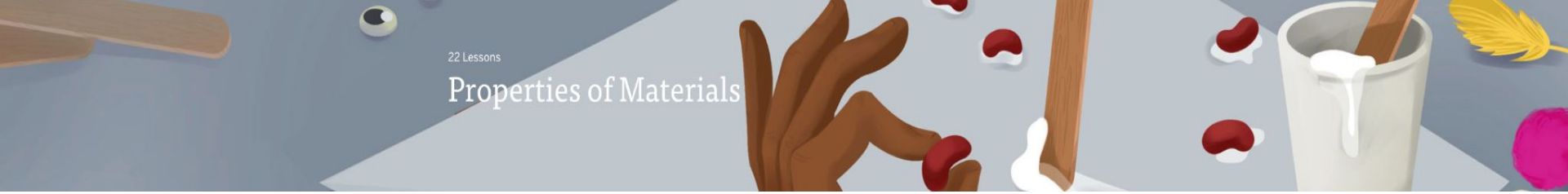
1: I have rarely or never navigated the digital Teacher's Guide

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.



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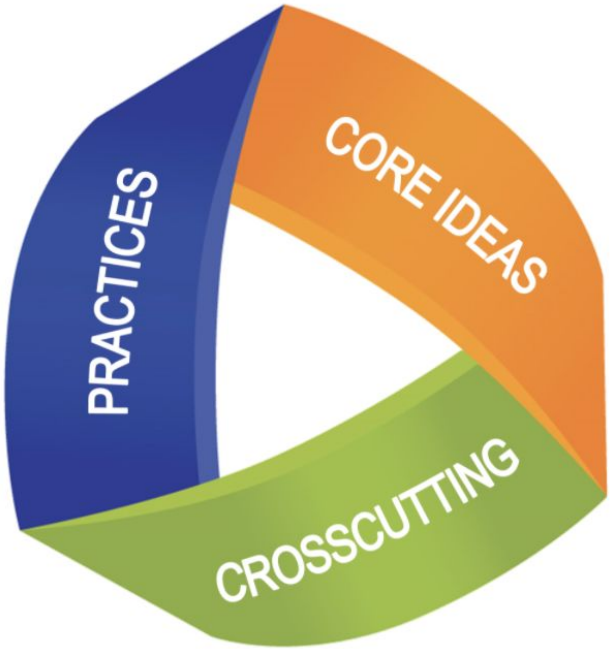
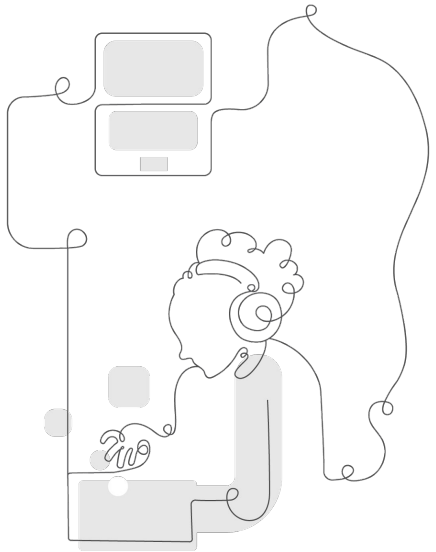


Navigating the standard Amplify Science curriculum

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

↓

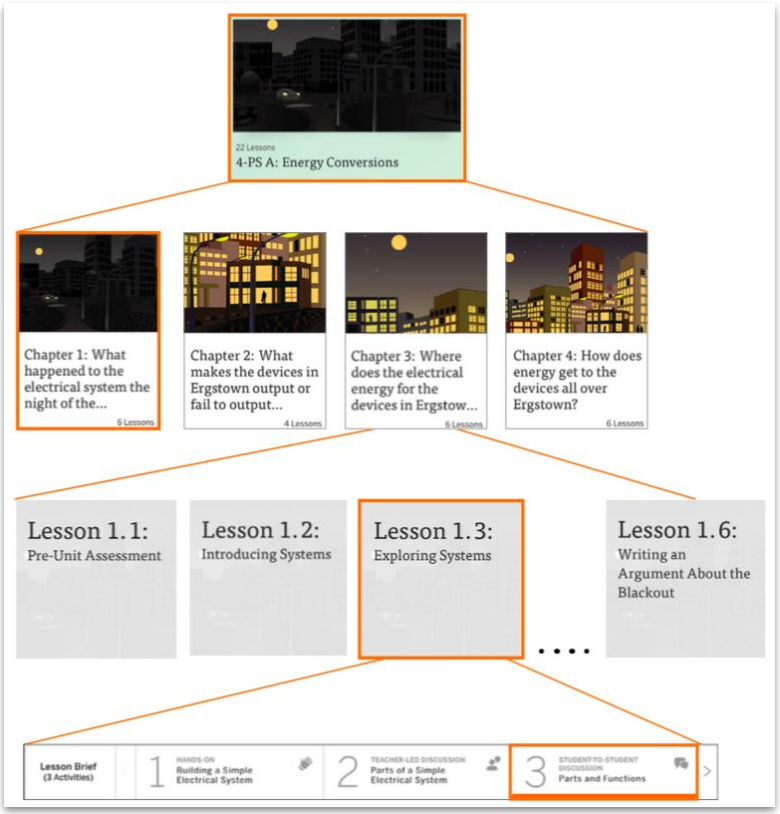
Chapter

↓

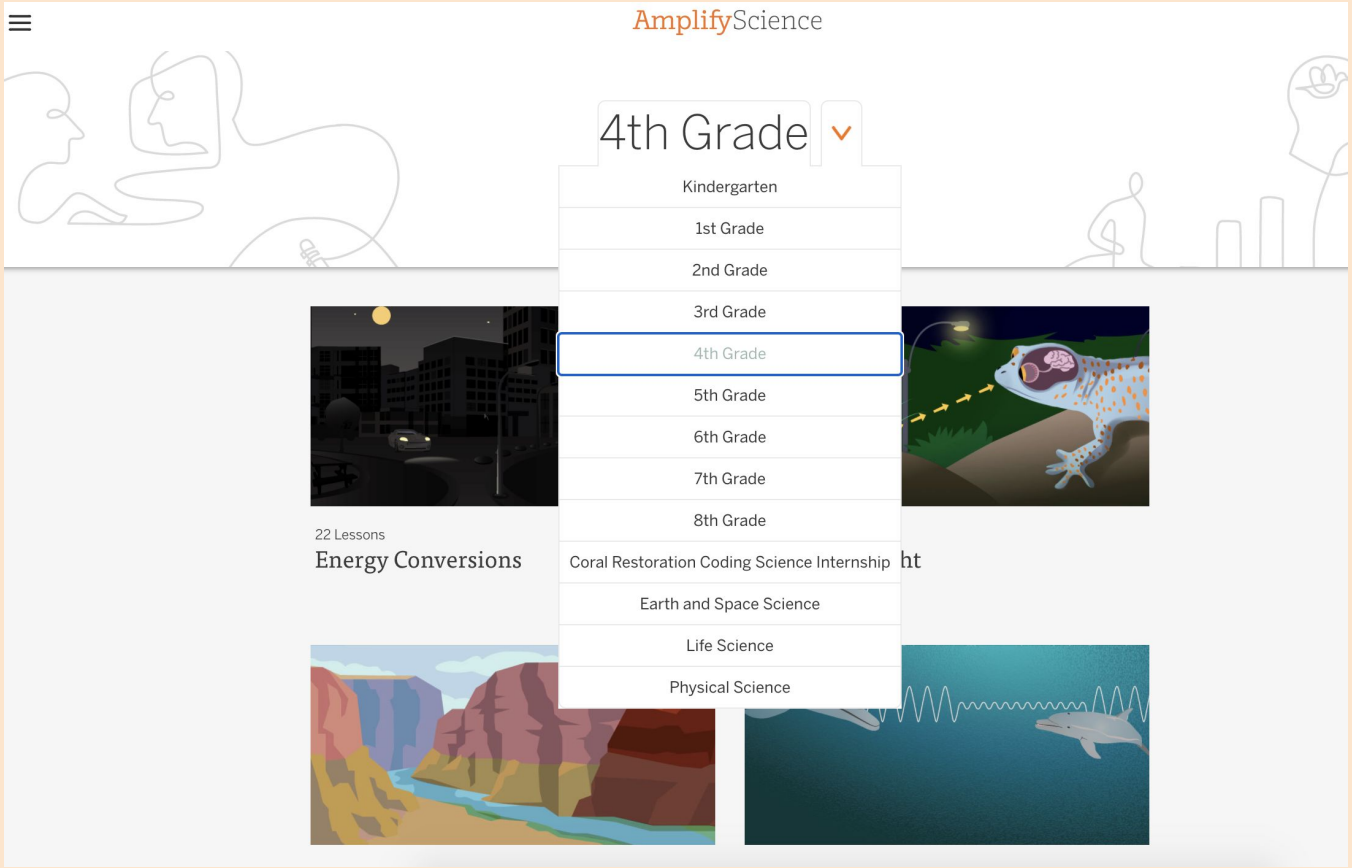
Lesson

↓

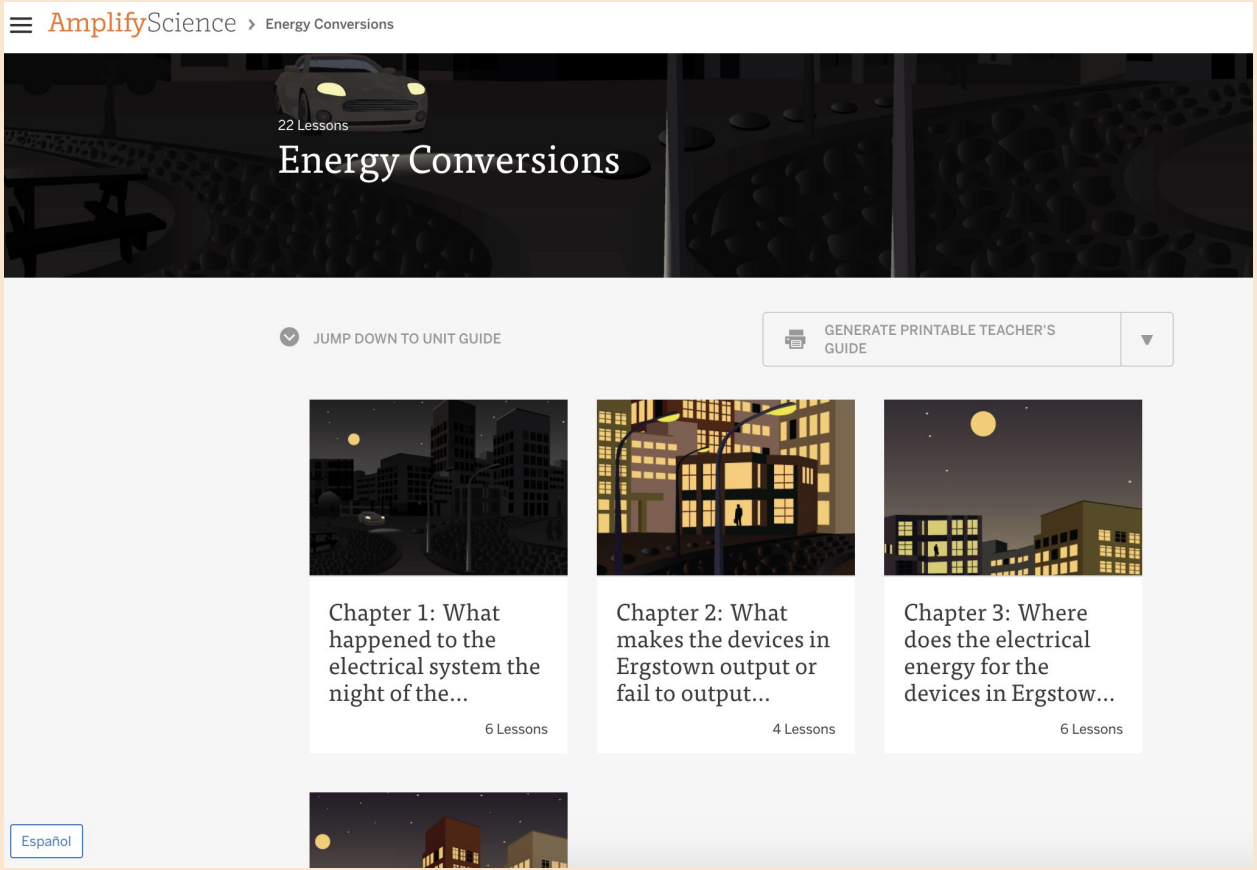
Activity



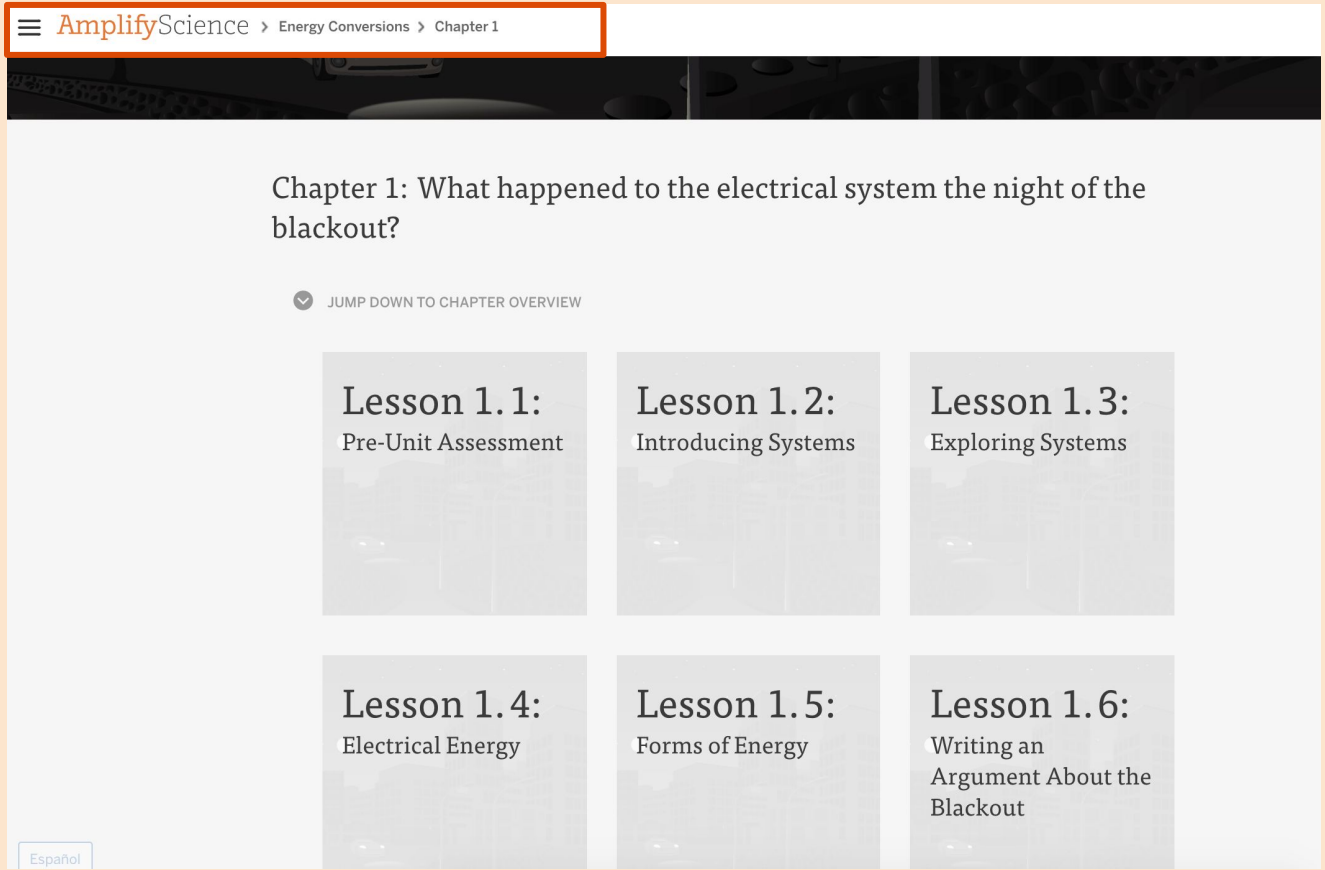
Hidden slide: Navigating to your grade level



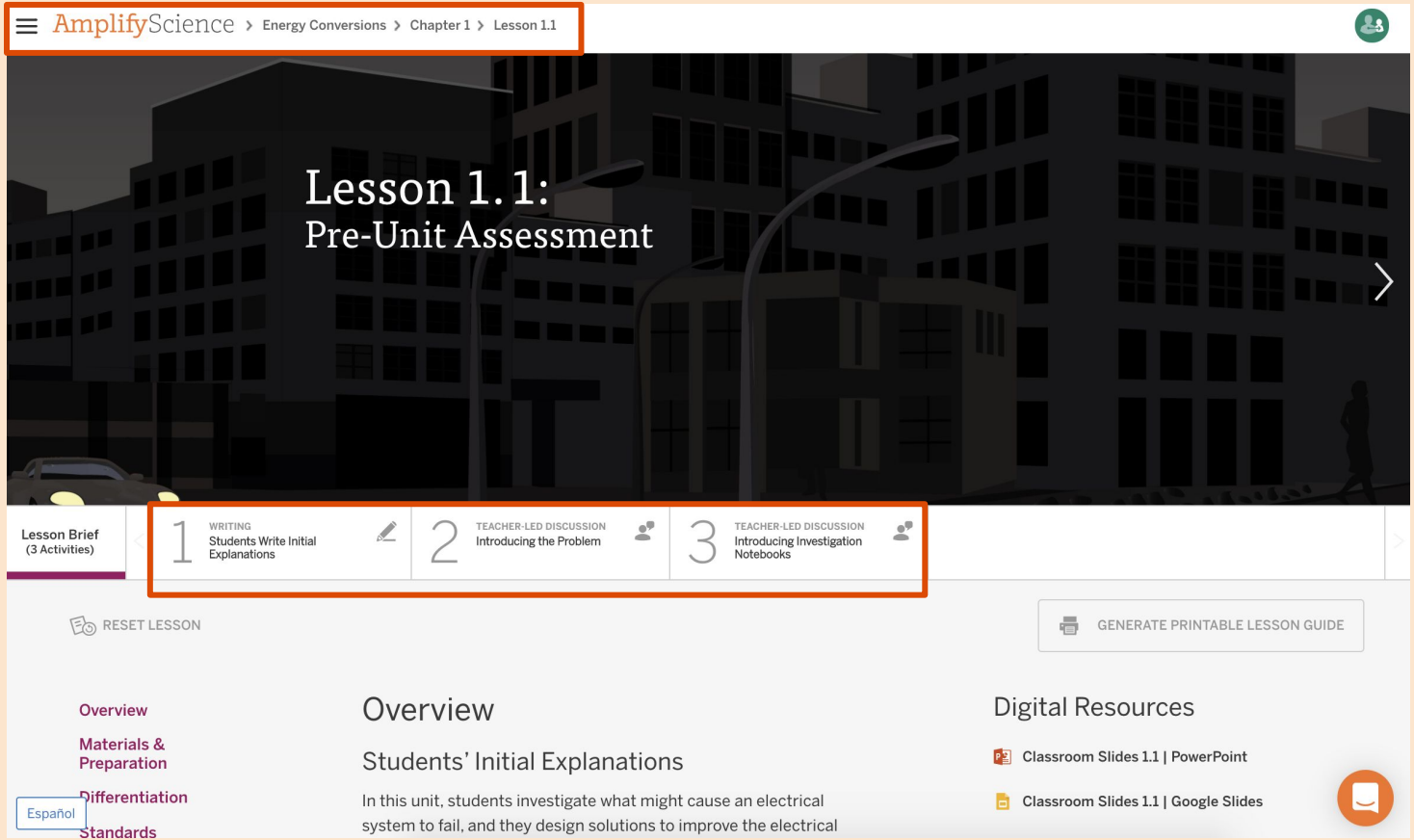
Hidden slide: Unit landing page



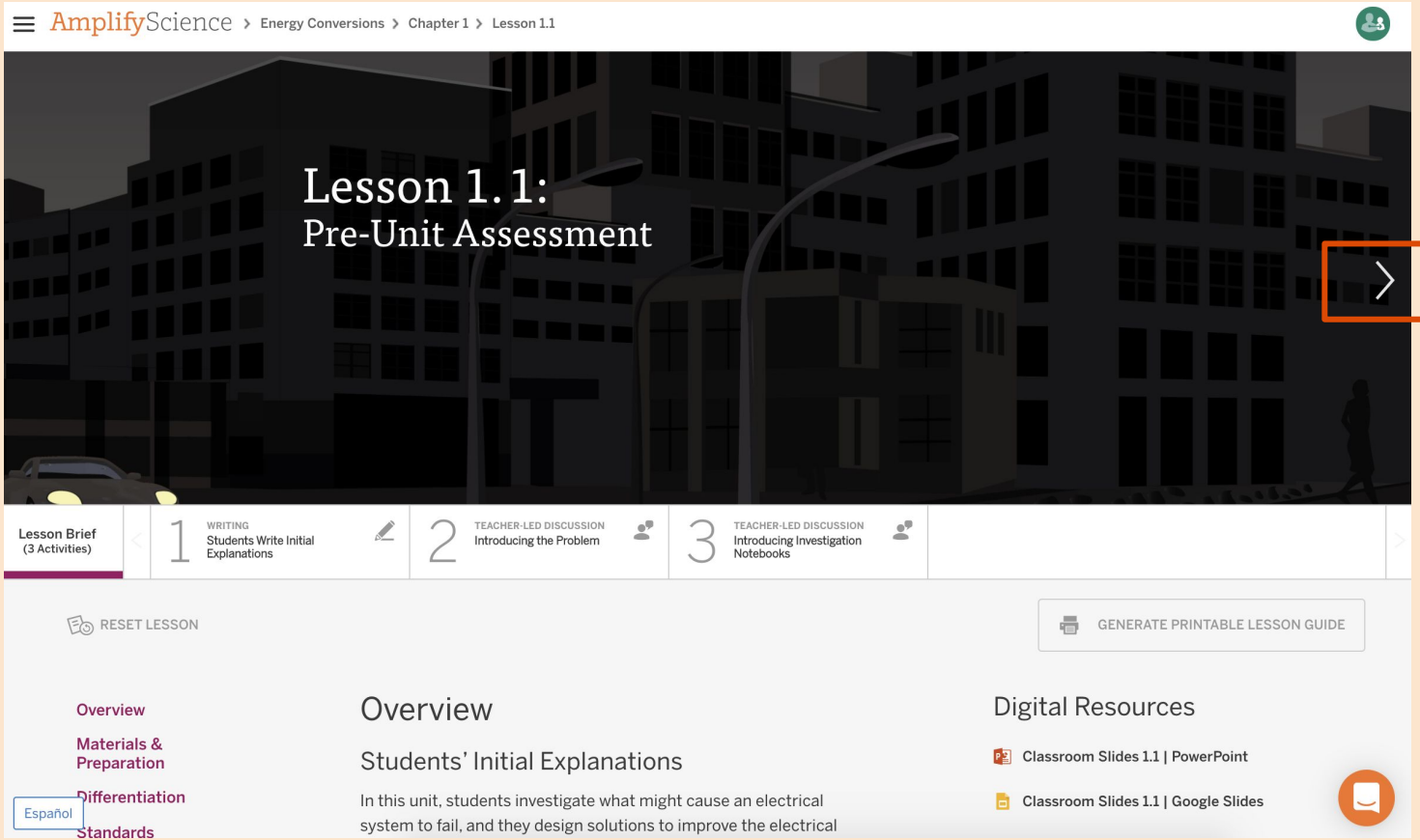
Hidden slide: Chapter 1 landing page



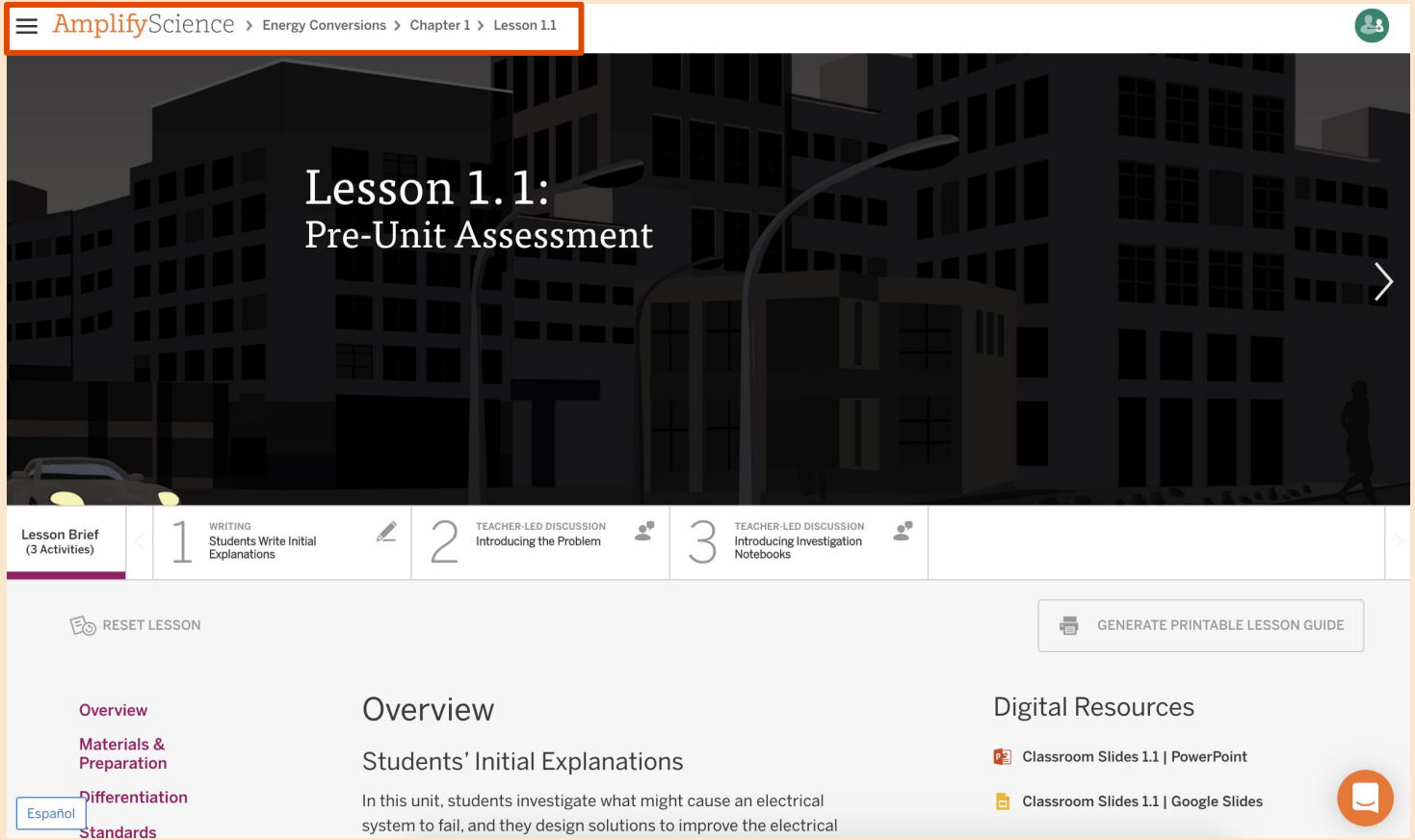
Hidden slide: Lesson 1.1 Lesson Brief



Hidden slide: Using arrows to navigate between lessons in order



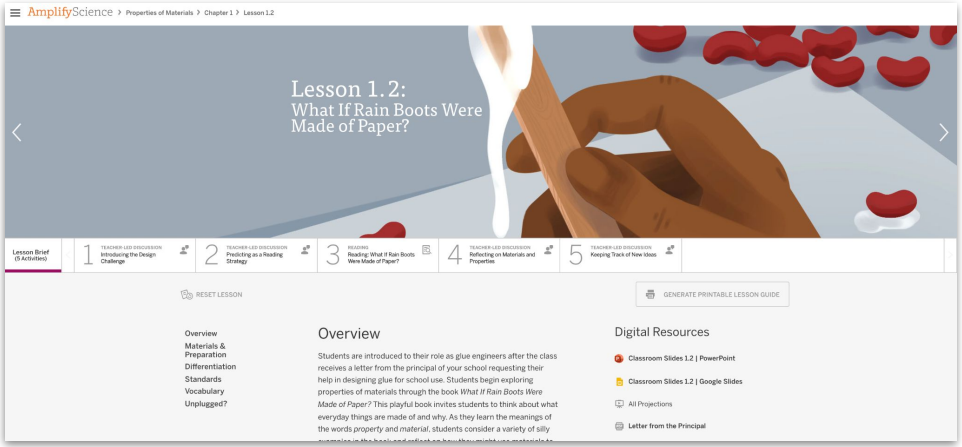
Hidden slide: Using the breadcrumb trail to navigate to a specific lesson



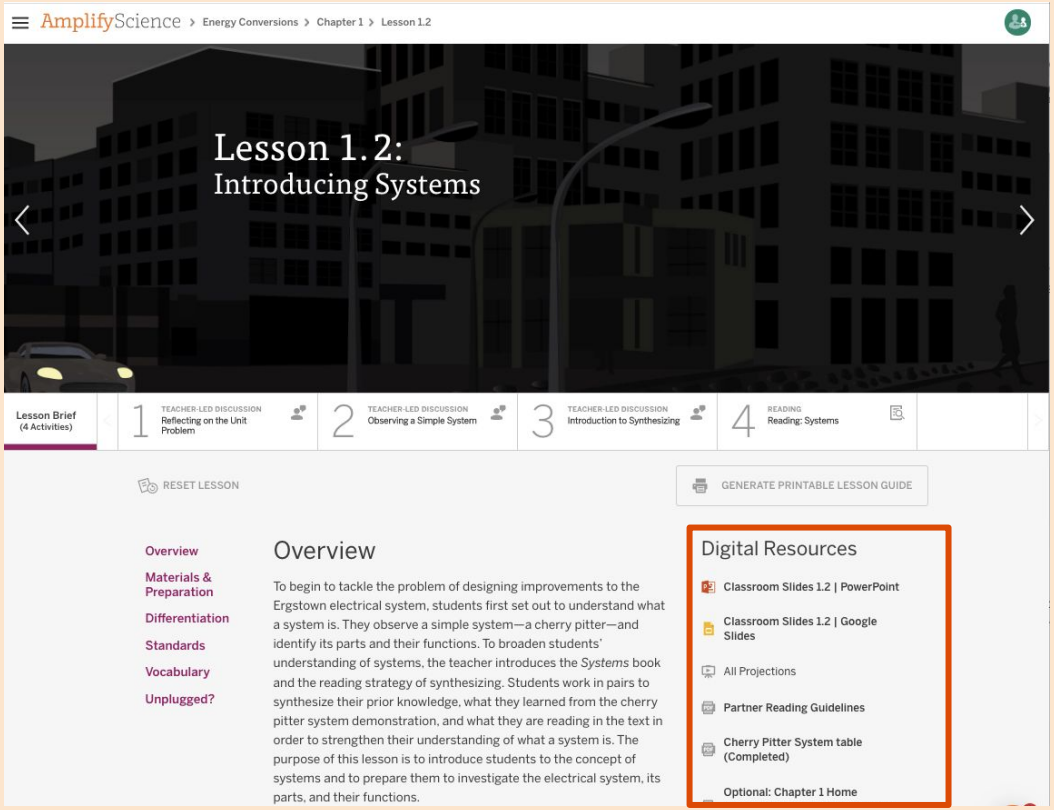
Preparing to teach a lesson

Lesson Brief

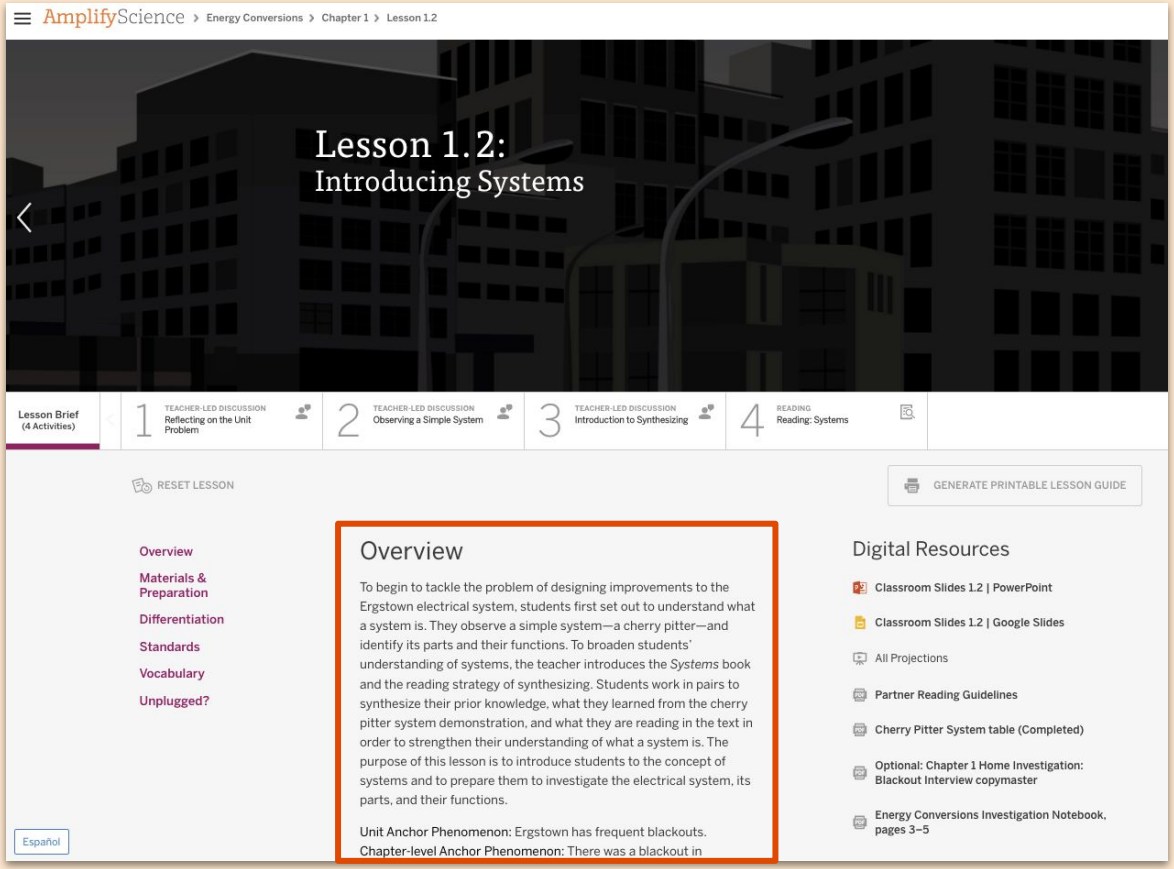
Use the Lesson Brief for information about lesson timing, materials and preparation, and differentiation suggestions.



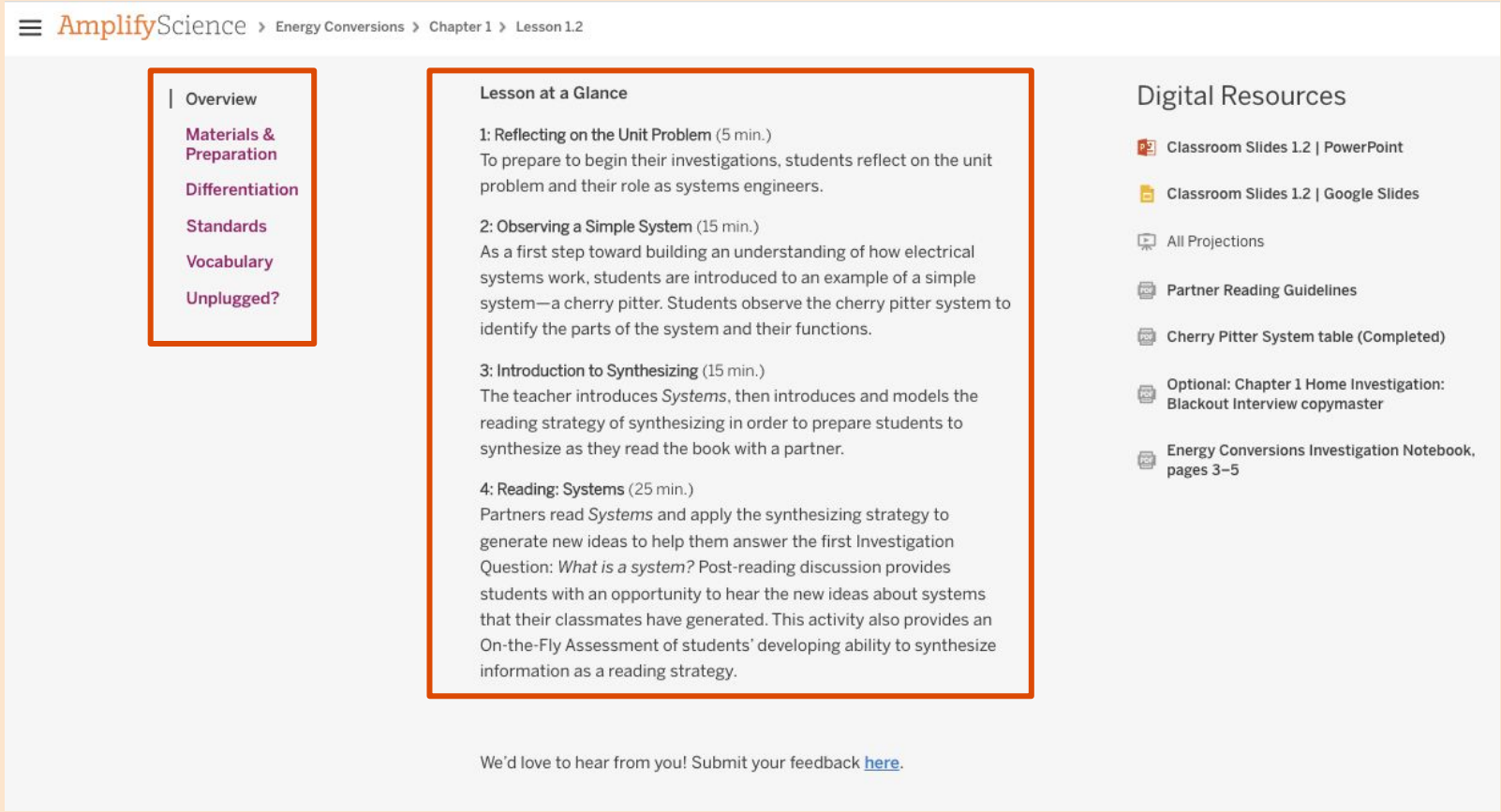
Hidden slide: Digital resources



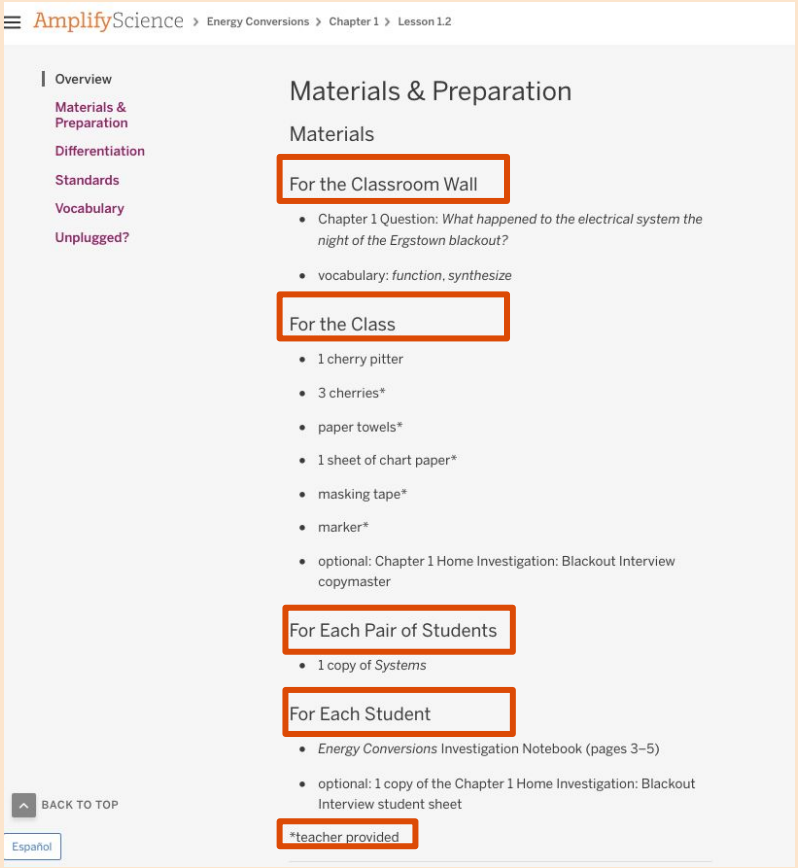
Hidden slide: Overview

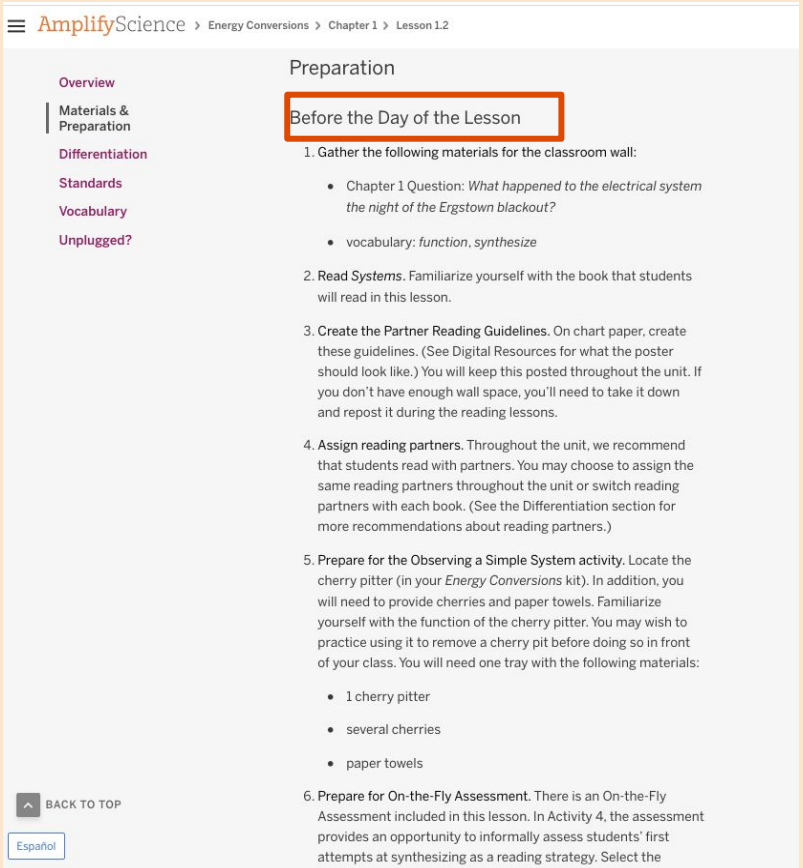


Hidden slide: Lesson at a Glance and floating menu

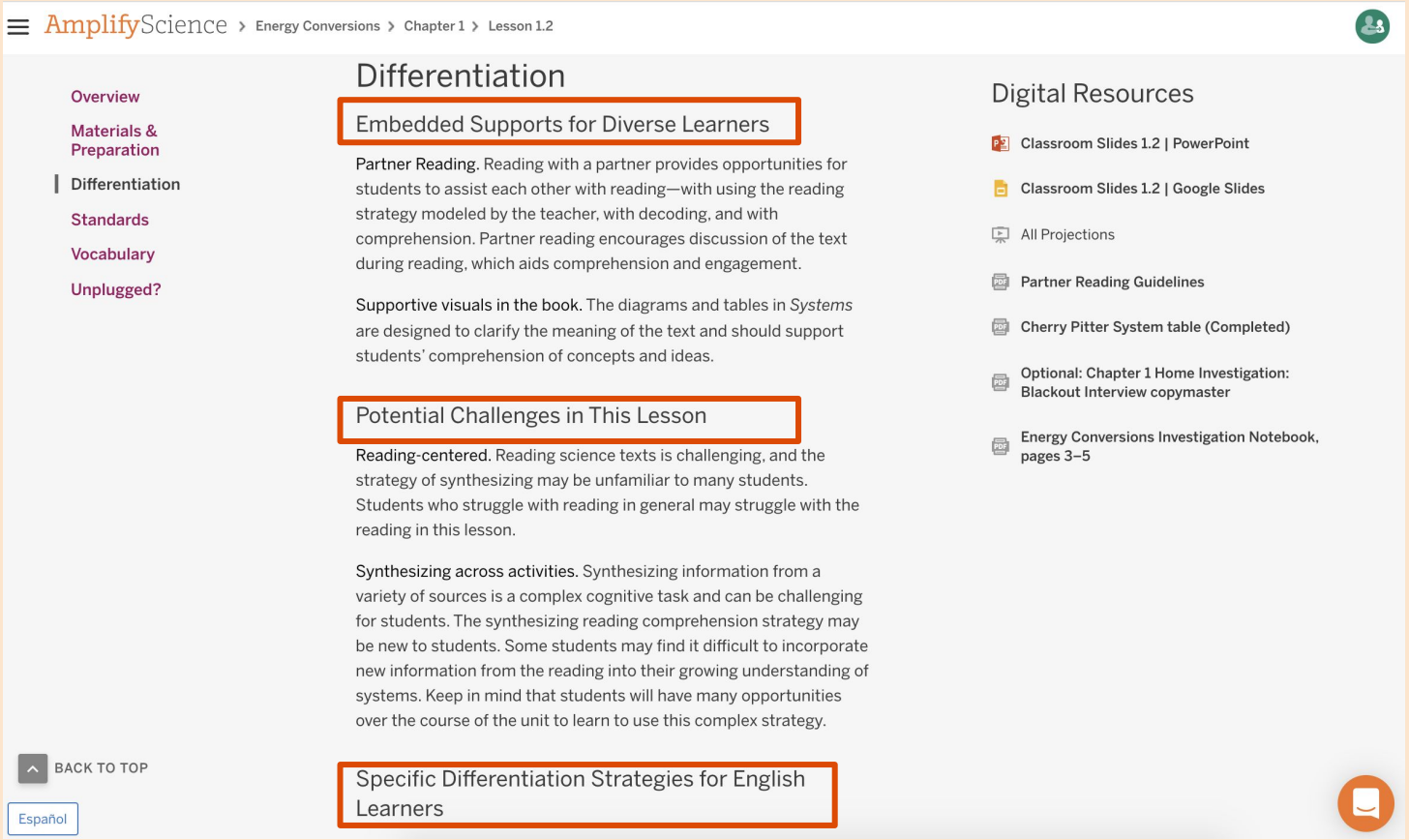


Hidden slide: Materials and preparation





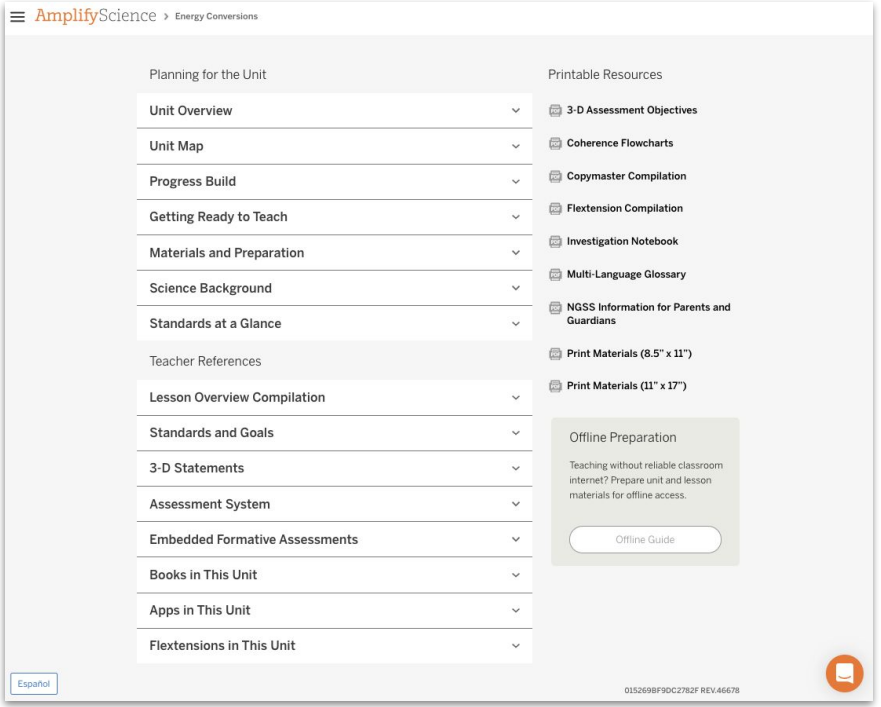
Hidden slide: Differentiation



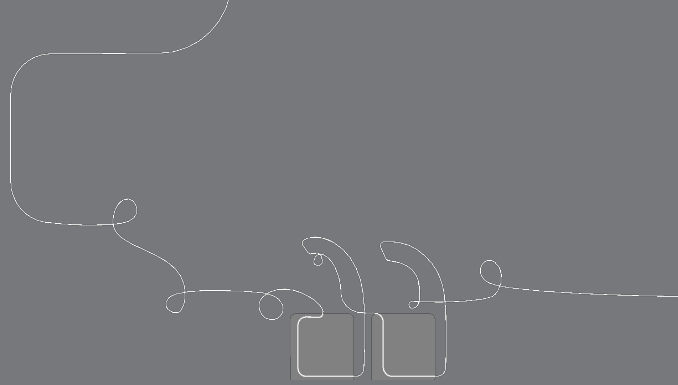
Unit Guide

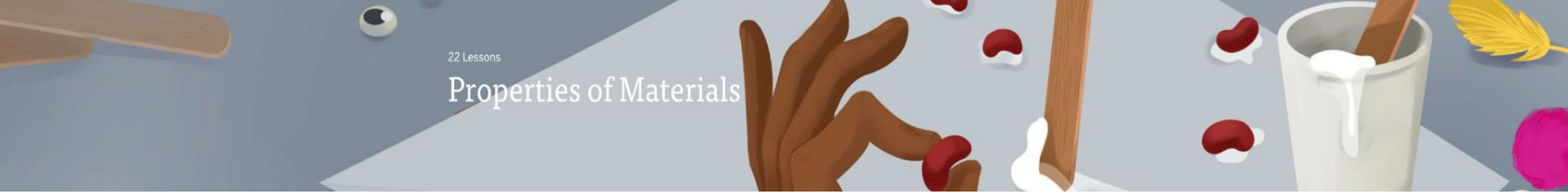
The Unit Guide is a collection of resources to support planning and day-to-day instruction in the unit.

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



Questions?





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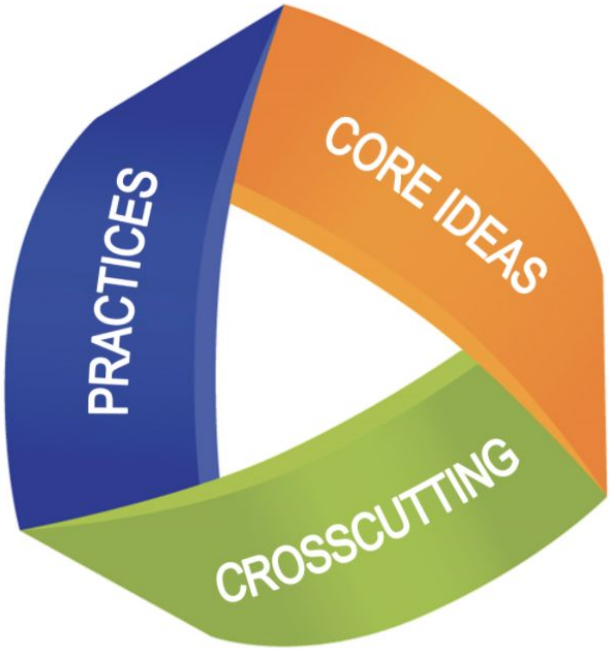
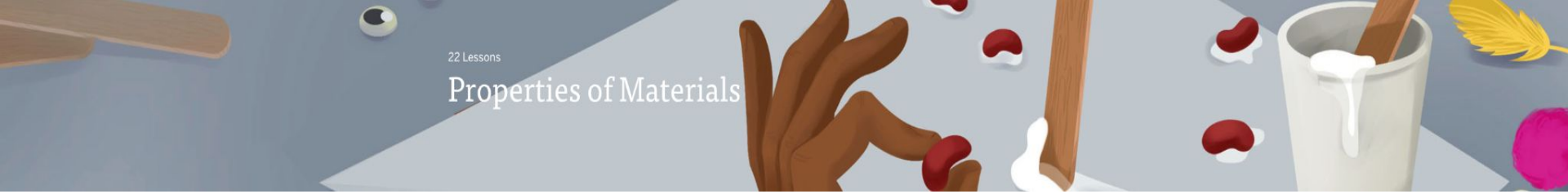




Summary of unit phenomenon

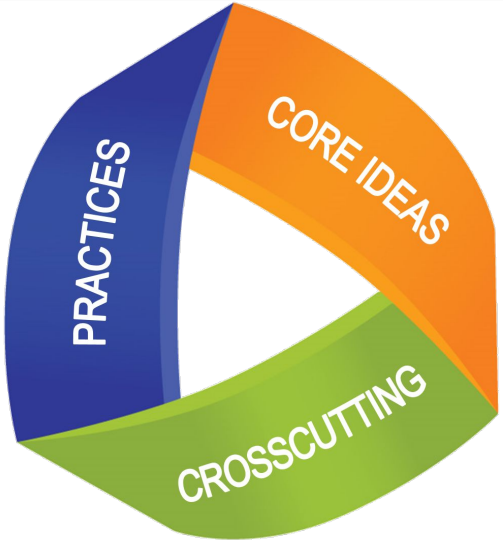
How can we design a glue mixture that is better than what the school uses now?

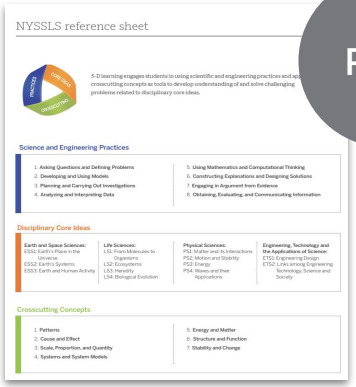
As glue engineers, students are challenged to create a glue for use at their school that meets a set of design goals. Students present an evidence-based argument stating why their glue mixture would solve their school's need for a better glue.

NGSS/NYSSLS: KWL Chart

What I Know	What I Want to Know	What I Learned

Three dimensions of NYSSLS




NYSSLS reference sheet

Science and Engineering Practices

1. Asking Questions and Defining Problems
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 and Designing Solutions
7. Engaging in Argument from Evidence
8. Obtaining, Evaluating, and Communicating Information

Disciplinary Core Ideas

Earth and Space Sciences:
ESS1: Earth's Place in the Universe
ESS2: Earth's Systems
ESS3: Earth and Human Activity

Life Sciences:
LS1: From Molecules to Organisms
LS2: Ecosystems
LS3: Heredity
LS4: Biological Evolution

Physical Sciences:
PS1: Matter and Its Interactions
PS2: Motion and Stability
PS3: Energy
PS4: Waves and their Applications

Engineering, Technology and the Applications of Science:
ETS1: Engineering Design
ETS2: Links among Engineering Technology, Science and Society

Crosscutting Concepts

1. Patterns
2. Cause and Effect
3. Scale, Proportion, and Quantity
4. Systems and System Models
5. Energy and Matter
6. Structure and Function
7. Stability and Change

Pg. 2

Disciplinary Core Ideas

- Describe core ideas in the science discipline (DCI)

Science and Engineering Practices

- Describe behaviors scientists and engineers engage in (SEP)

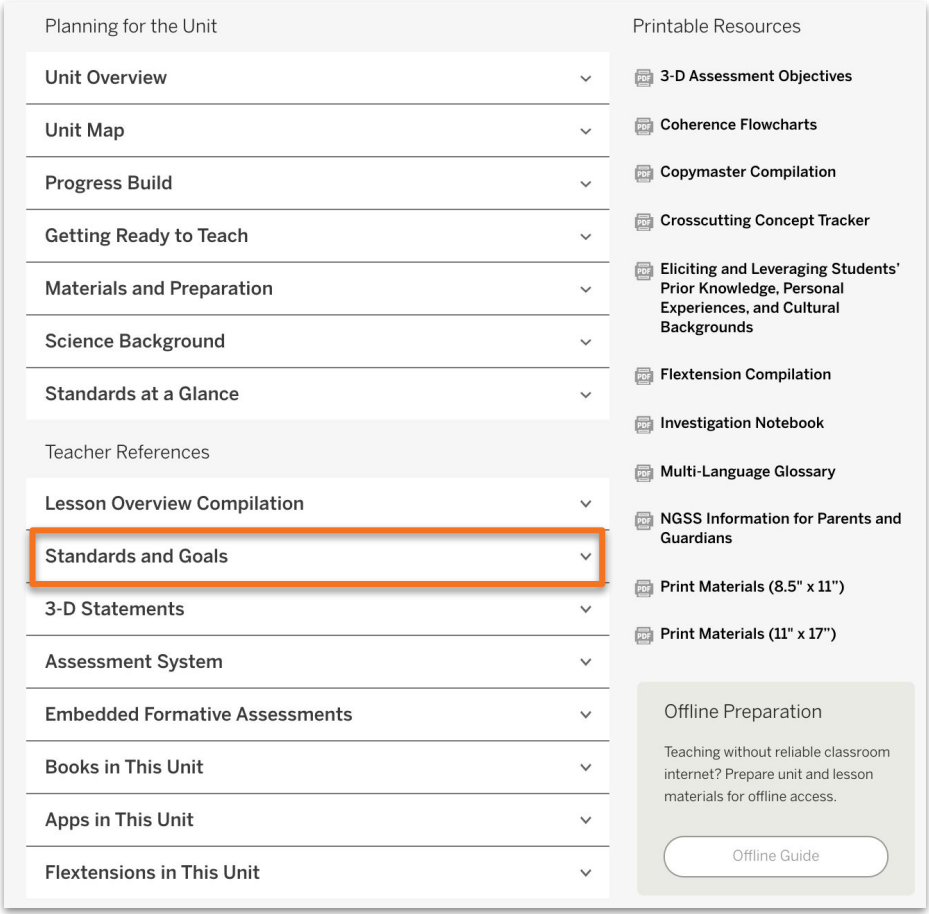
Crosscutting Concepts

- Describe concepts linking the different domains of science (CCC)

3-dimensions of this unit

Standards & Goals document

This document summarizes opportunities to engage with the science & engineering practices, which core ideas the unit addresses, & how students utilize the cross-cutting concepts in various modalities.

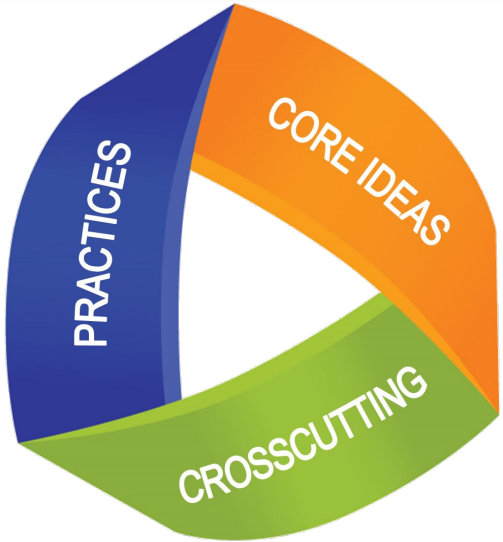


Focal dimensions of the unit

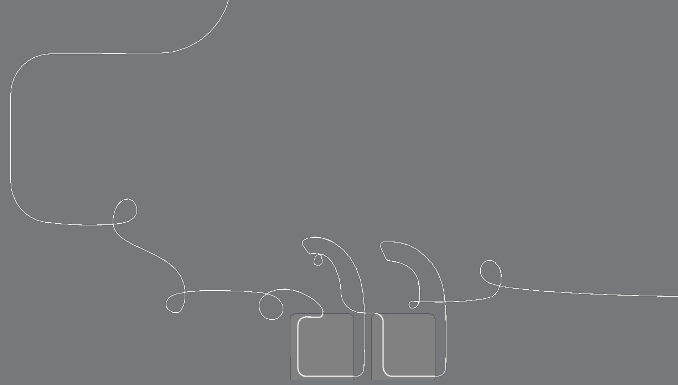
DCIs, SEPs, & CCCs

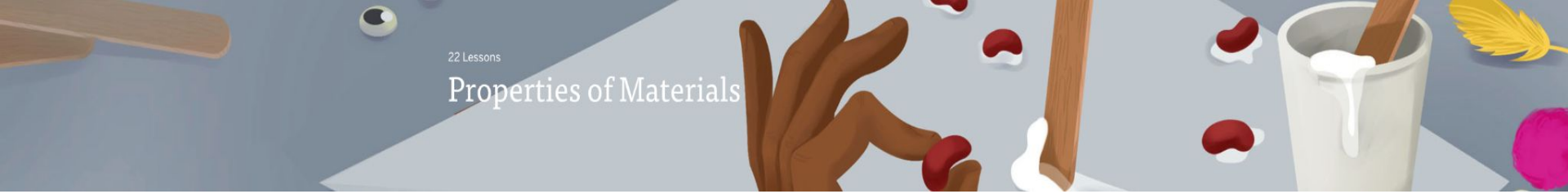
Open the unit's Standards & Goals document.

What are the unit's focal disciplinary core ideas, science & engineering practices, & cross-cutting concept(s)?



Questions?





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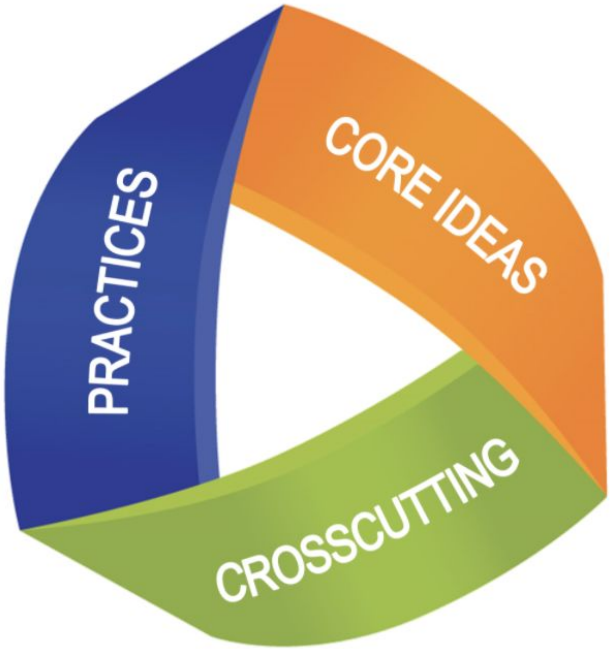
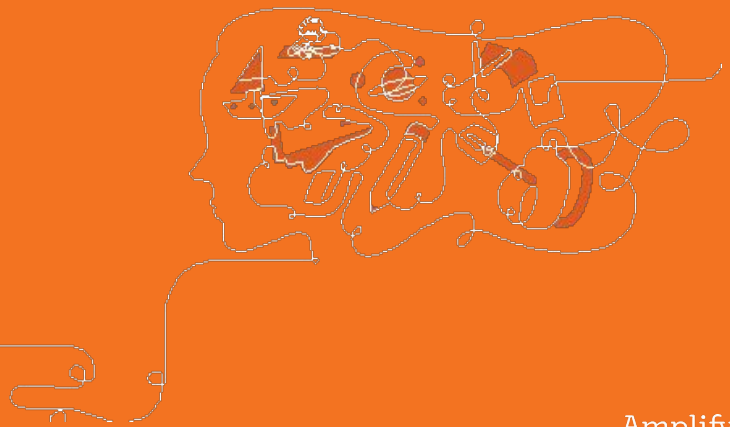


Disciplinary Core Ideas in this unit

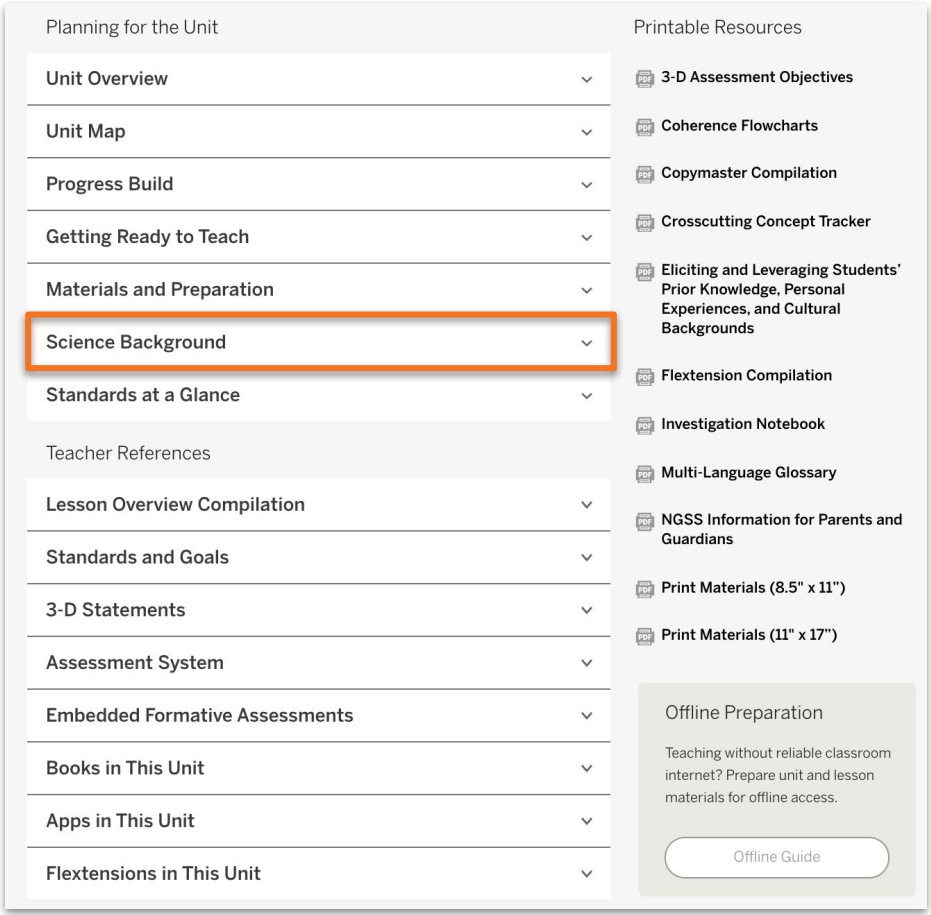
Digging deeper collaboratively



The Disciplinary Core Ideas

Science background document

The science background document provides an adult-level primer of key science content that is related to the disciplinary core ideas of the unit.

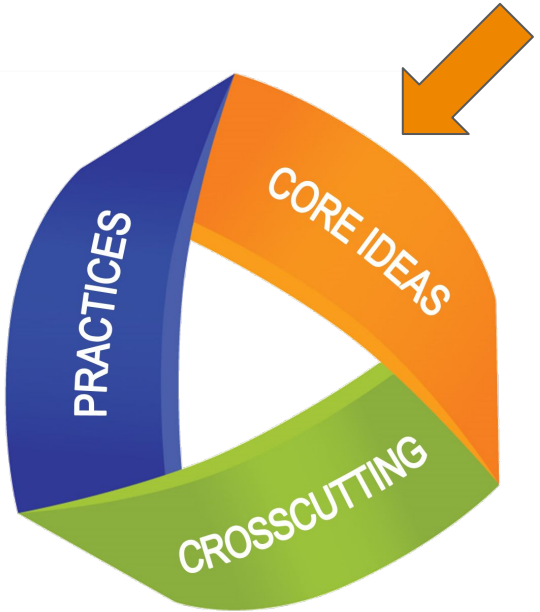


Science Background

Digging into the science content further

In breakout rooms, utilize the science background document to create a Google Slide poster of your assigned disciplinary core idea.

Be creative! Assign a spokesperson to “present” to the whole group.

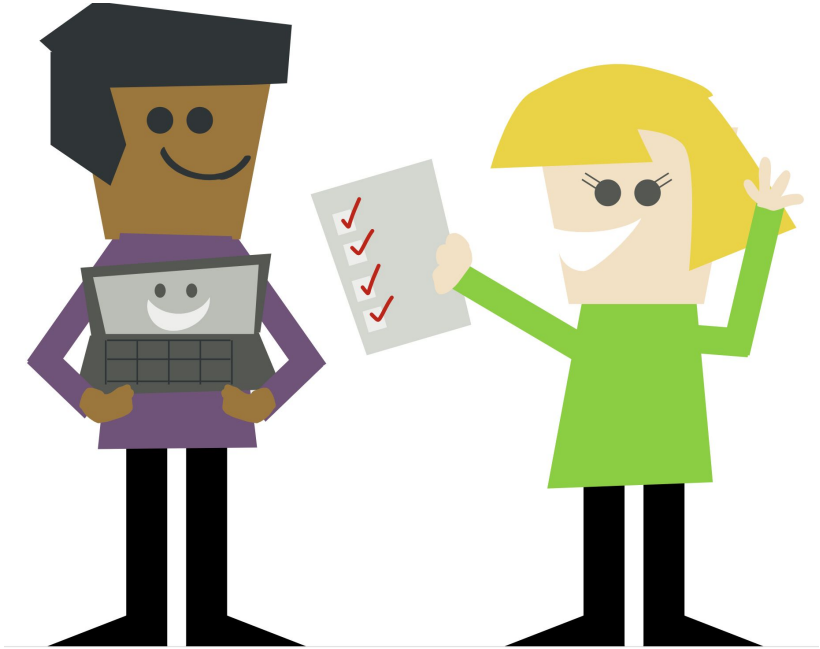


Whole group “presentations”

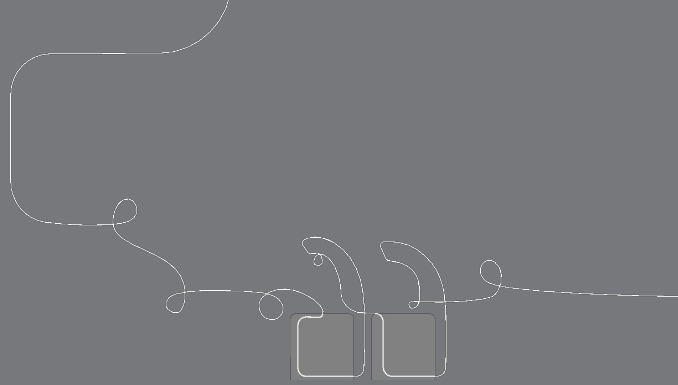
Disciplinary core ideas - digging deeper

Each group will showcase their Google Slides poster & highlight the main conceptual takeaways as it relates to their focal disciplinary core idea.

As you listen, take note of concepts you may need some refreshing on.

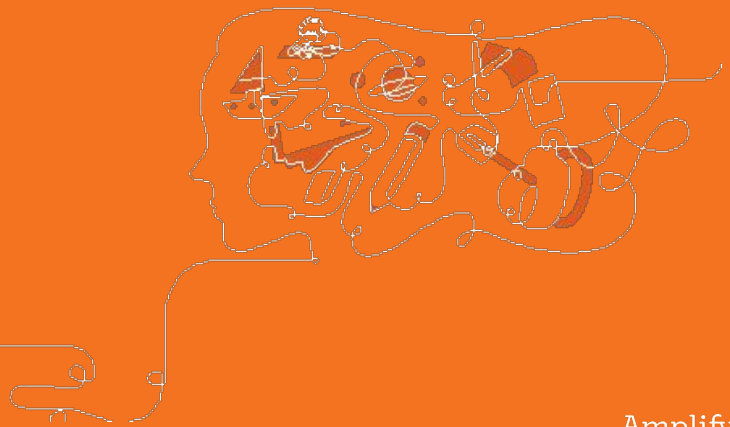


Questions?



Science & Engineering Practices in this unit

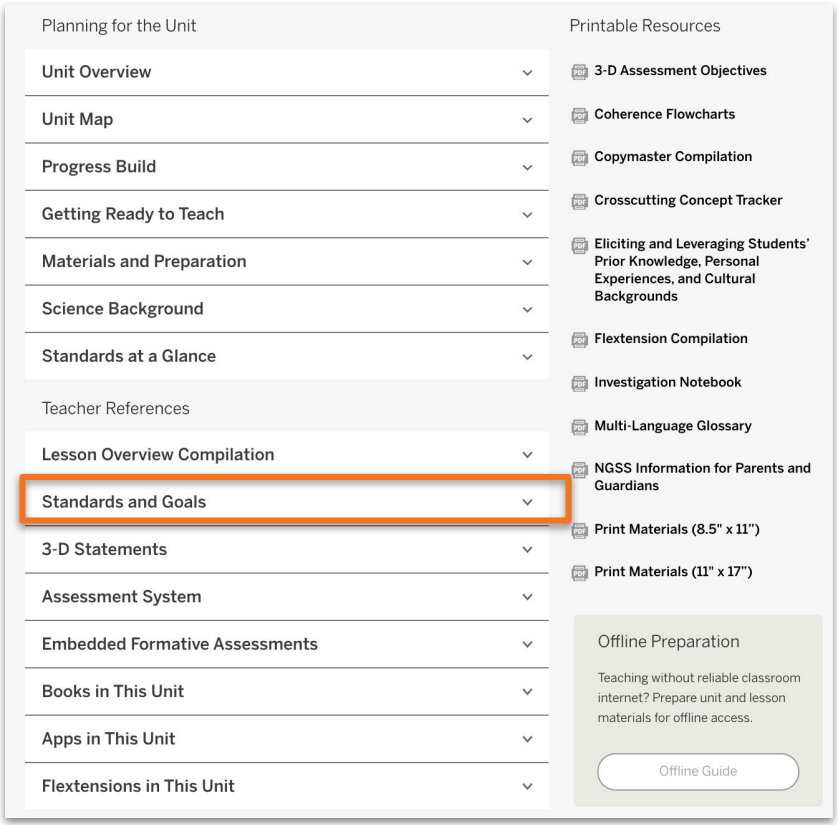
Digging deeper collaboratively



The science & engineering practices

Standards & Goals document

The standards & goals document outlines the specific opportunities students have to engage with most of the science & engineering practices of the unit.



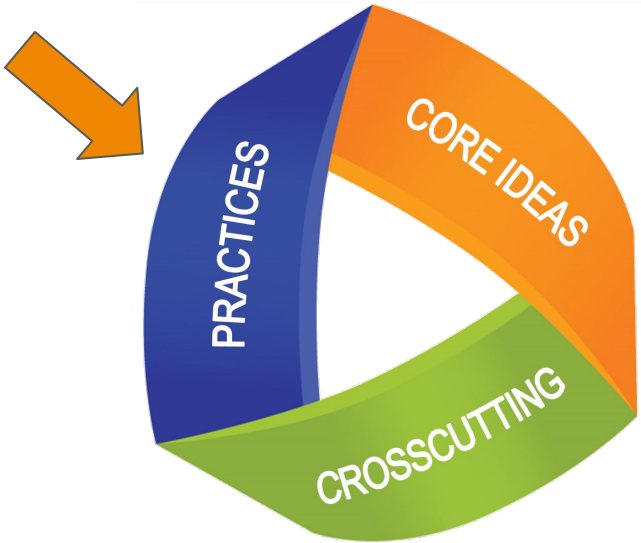
Standards & Goals

Digging into the science & engineering practices further

In breakout rooms, utilize the standards & goals document to create a visual summary of how students engage with your assigned science & engineering practice in a specific lesson.

The coherence flowchart may be useful in locating a specific lesson.

Be creative! Assign a spokesperson to “present” to the whole group.

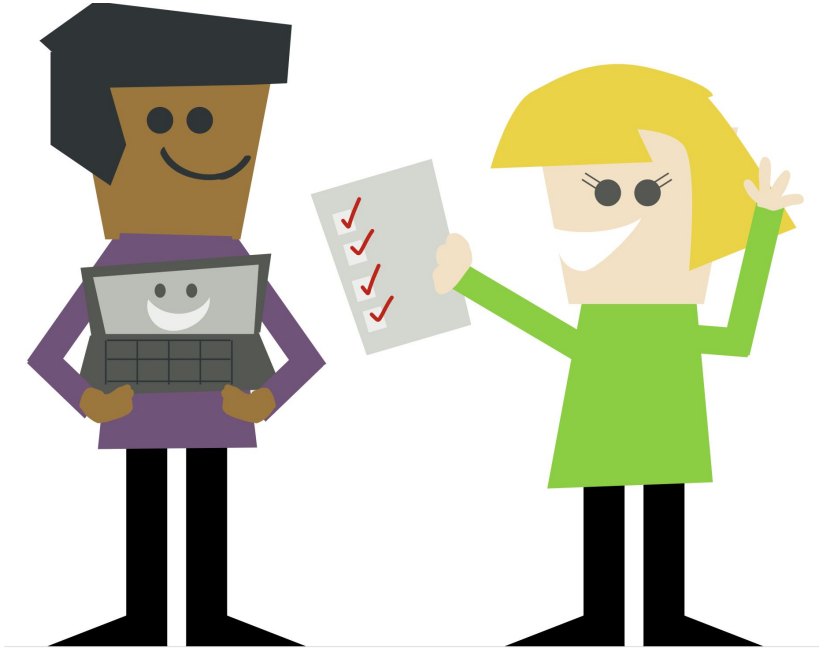


Whole group “presentations”

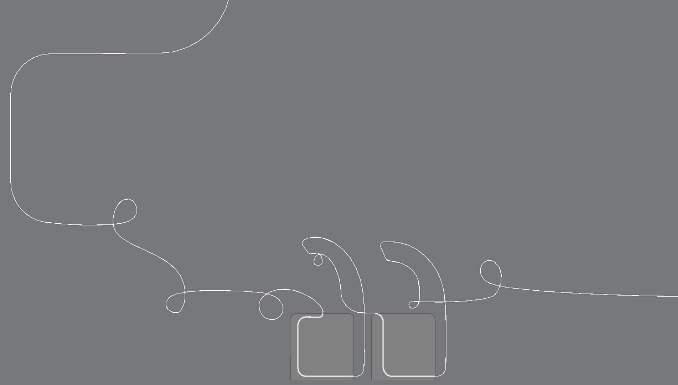
Science & engineering practices (SEP) - digging deeper

Each group will showcase their visual summary of their chosen lesson & highlight the main takeaways as it relates to the incorporation of their assigned science & engineering practice.

As you listen, take note of how you may consider scaffolding students’ engagement in this SEP for the lesson presented.



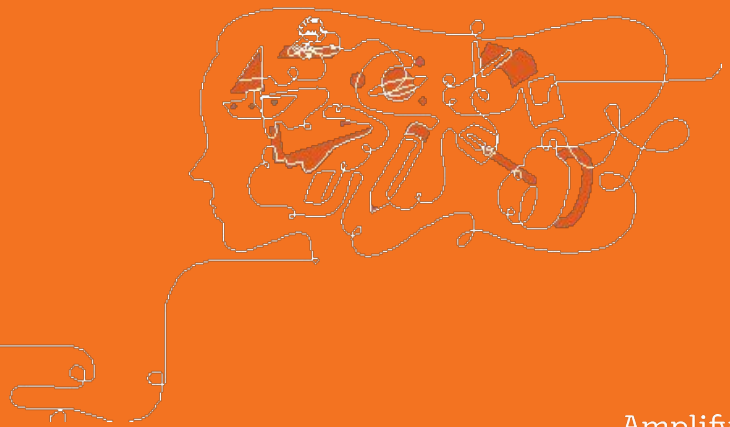
Questions?



BREAK

Cross-cutting concepts in this unit

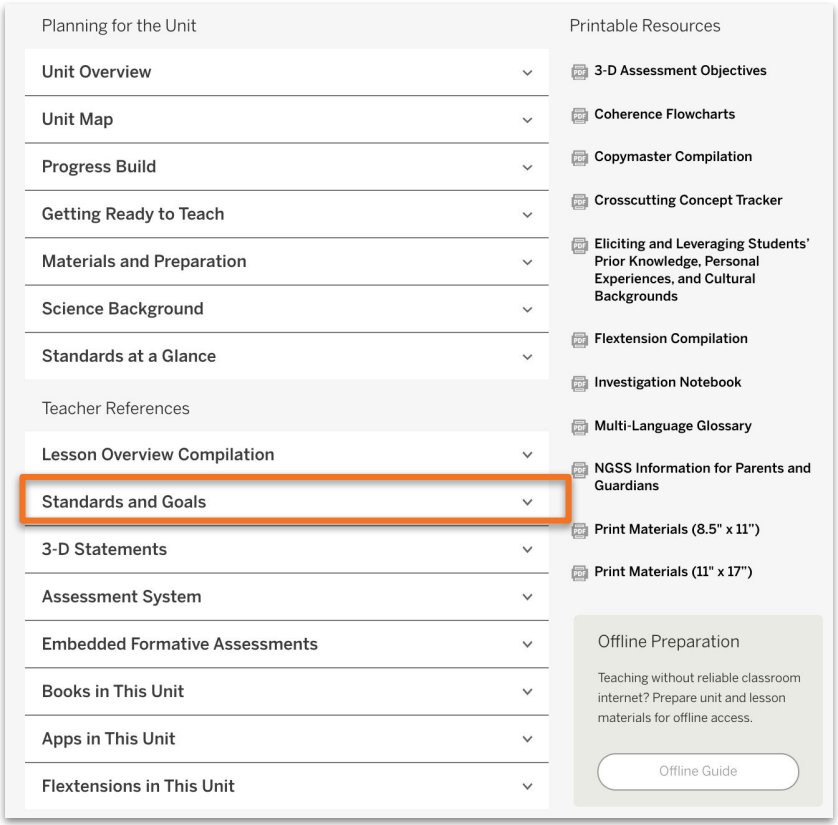
Digging deeper collaboratively



The cross-cutting concepts

Standards & Goals document

The standards & goals document describes how students utilize the focal cross-cutting concept in a variety of modalities throughout the unit.



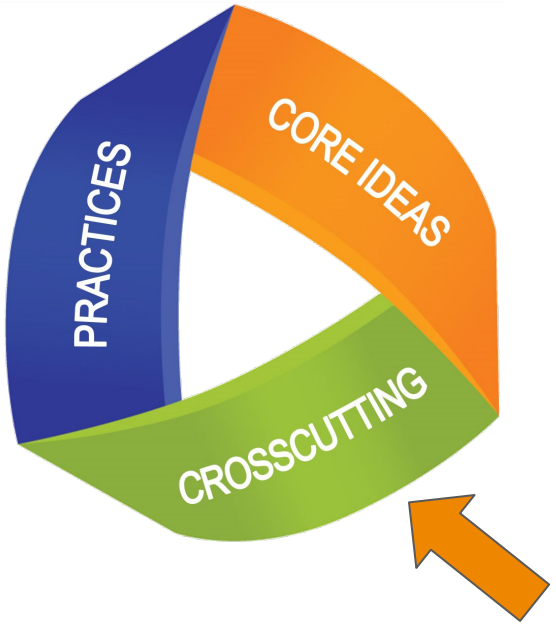
Standards & Goals

Digging into cross-cutting concepts further

In breakout rooms, utilize the standards & goals document to create a visual graphic organizer of how students engage with your assigned modality as it relates to the CCC in a specific lesson.

The coherence flowchart may be useful in locating a specific lesson.

Be creative! Assign a spokesperson to “present” to the whole group.

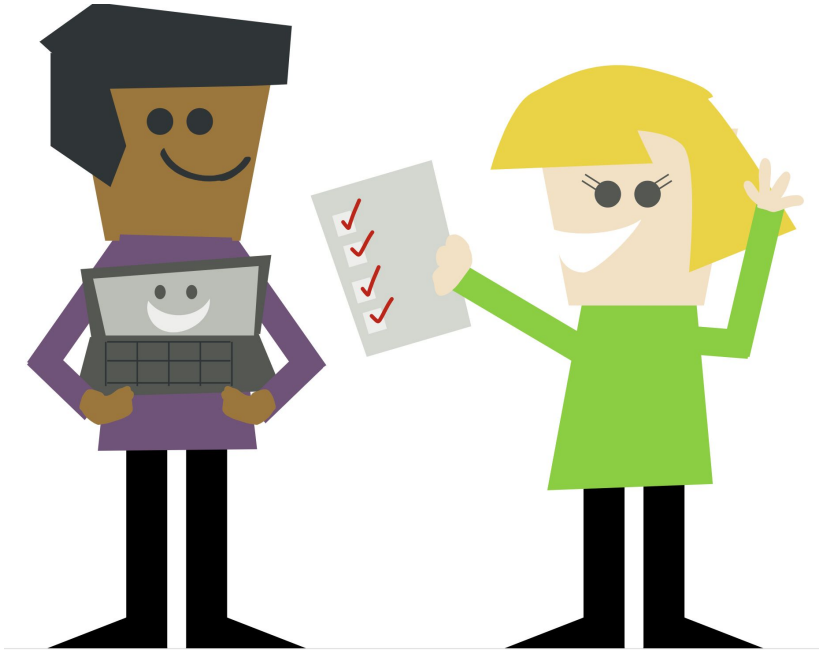


Whole group “presentations”

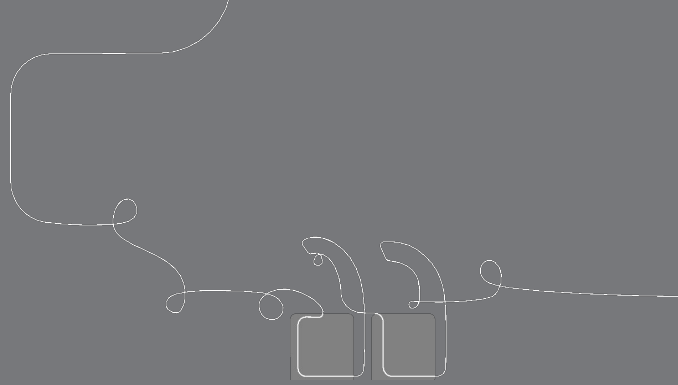
Cross-cutting concepts (CCC) - digging deeper

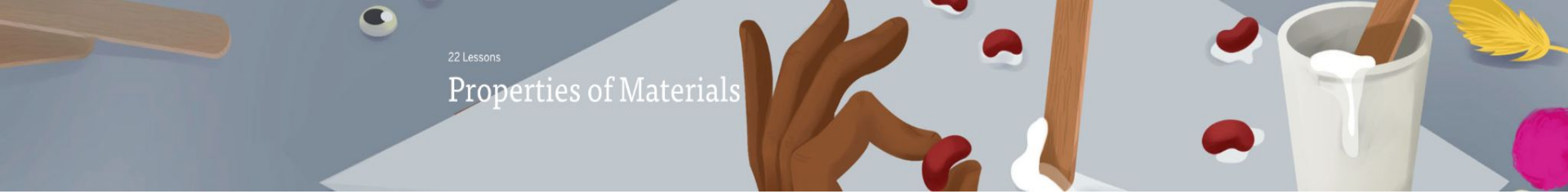
Each group will showcase their visual graphic organizer of their chosen lesson & highlight the main takeaways as it relates to student utilization of the CCC in the specific assigned modality.

As you listen, take note of how you may consider scaffolding students’ utilization of the CCC for the lesson presented.



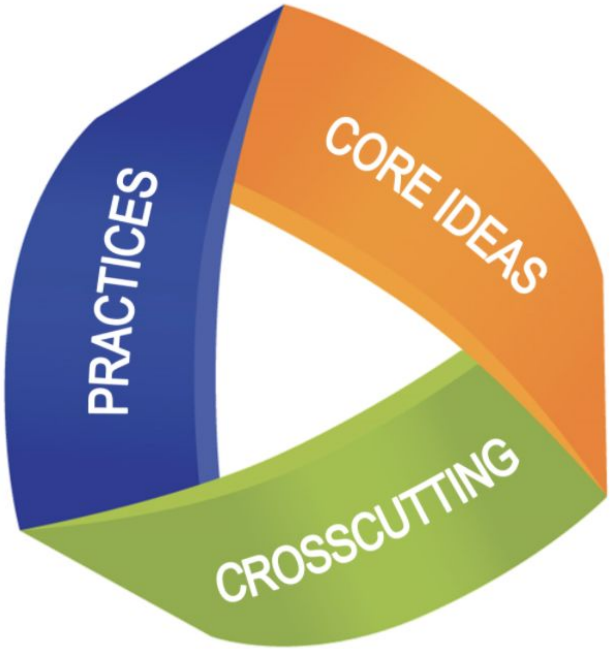
Questions?





Plan for the session

- Opening reflection
- Navigation refresher
- NYSSLS & the unit's phenomenon
- Three dimensions of the unit
  - Disciplinary core ideas
  - Science & engineering practices
  - Cross-cutting concepts
- **Lesson planning**
- Closing



Lesson planning

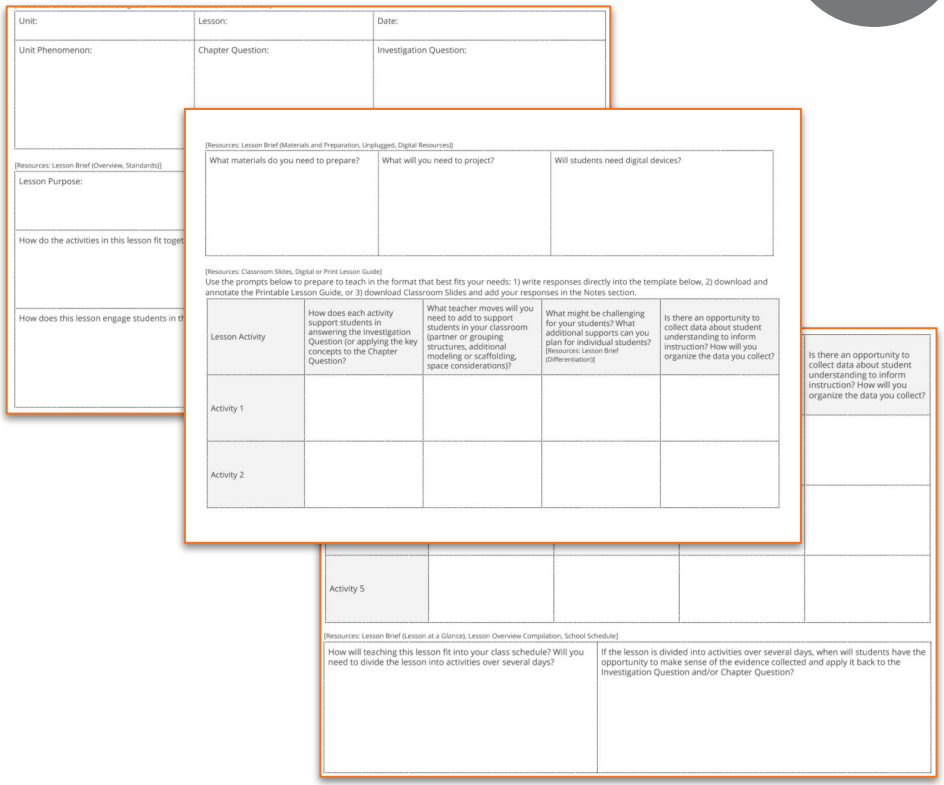
Individual work-time

Pgs. 3-5

We were able to get a preview of some lessons in this unit, specifically as they relate to the focal 3-dimensions of the NYSSLS.

Now it's time to take a look at other lessons of your choice.

Feel free to use the lesson planning template provided.



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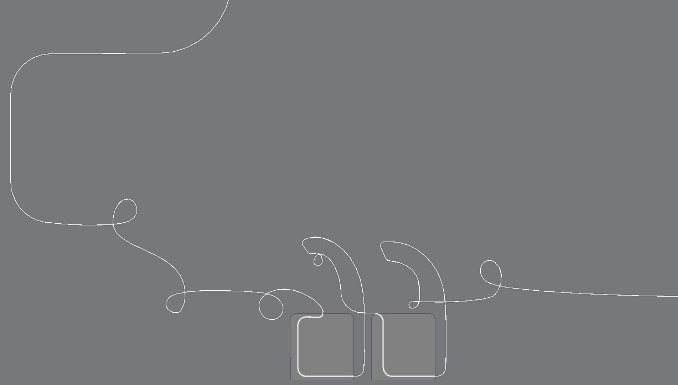

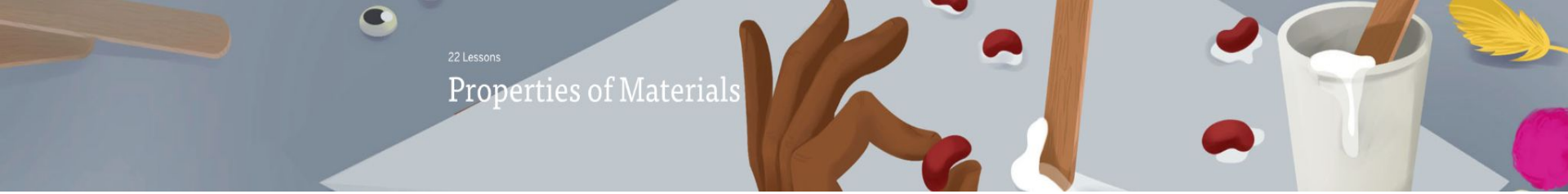

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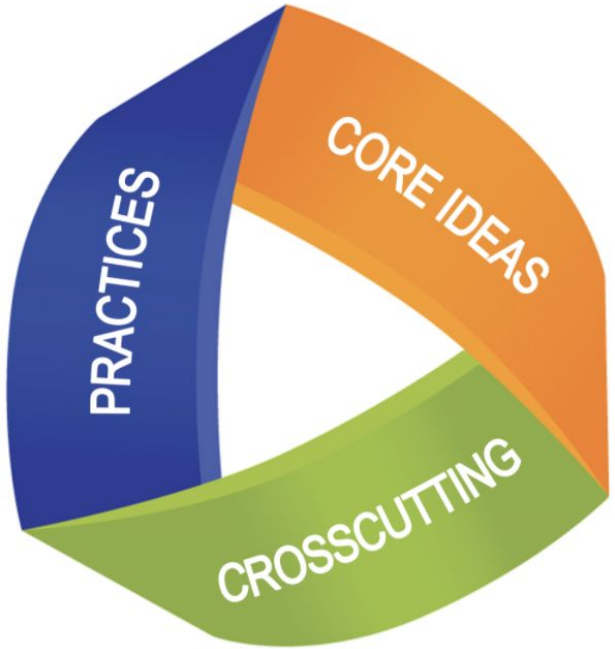


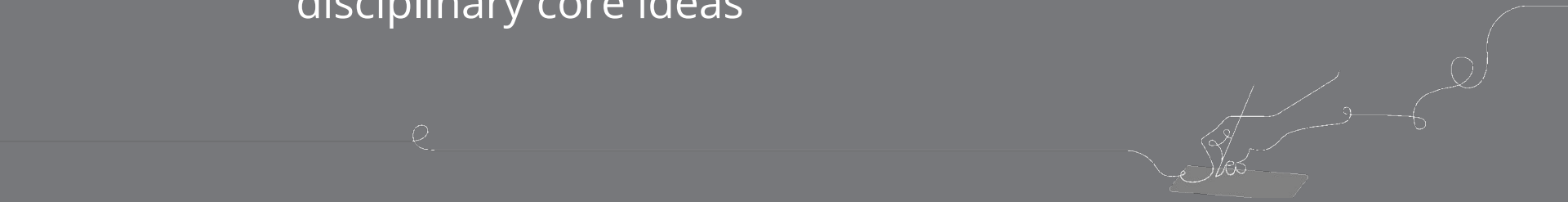
NGSS/NYSSLS: KWL Chart

What I Know	What I Want to Know	What I Learned

Goals for the session

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

- ☑ Unpack three-dimensional learning across Unit 2
- ☑ Analyze how students leverage focal science & engineering practices & cross-cutting concepts to figure out the unit 2 phenomenon & its associated disciplinary core ideas



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

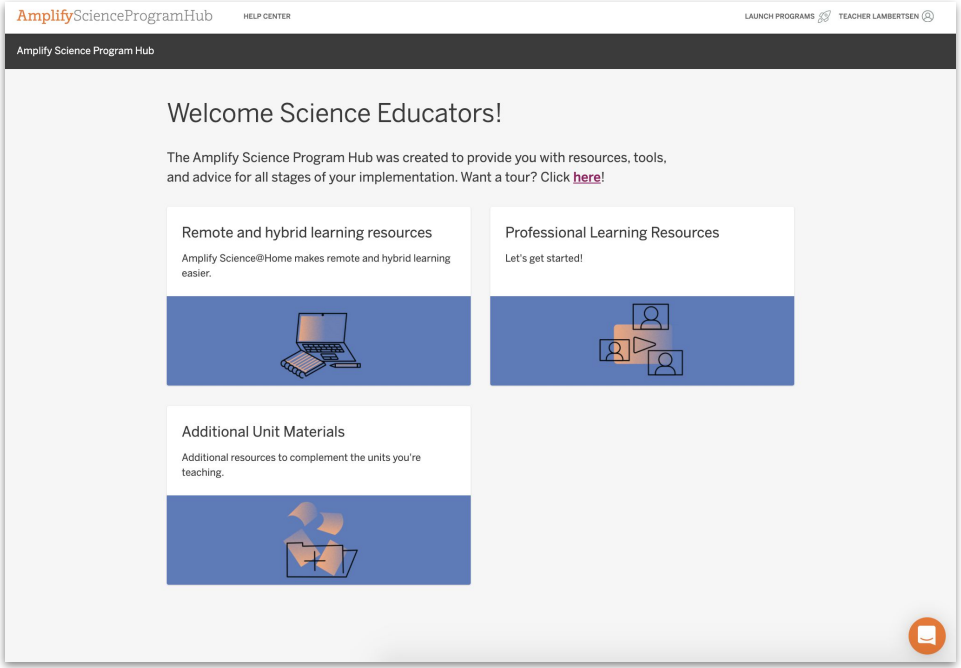
800-823-1969

Amplify Chat

Program Hub

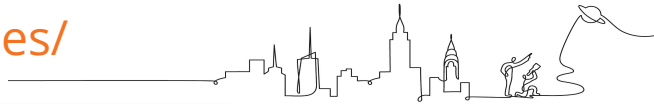
Use the Amplify Science Program Hub to find useful resources for implementing Amplify Science, including unit overview videos and planning tools.

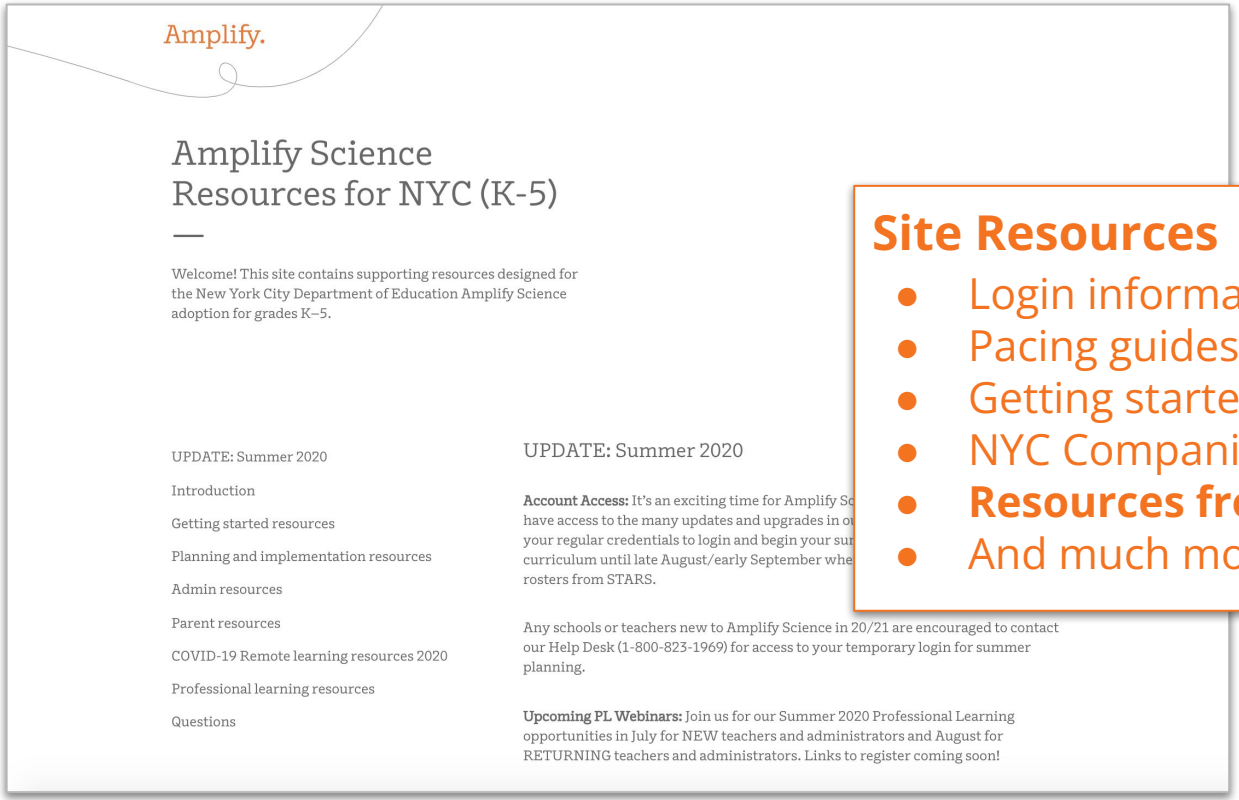
The Program Hub also contains remote and hybrid learning resources.



New York City Resources Site

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

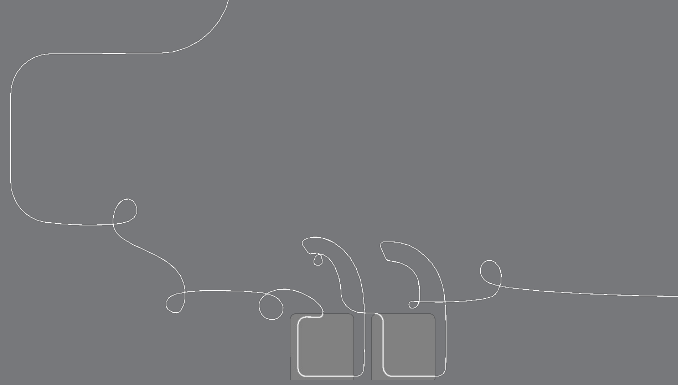




Site Resources

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

Final questions?

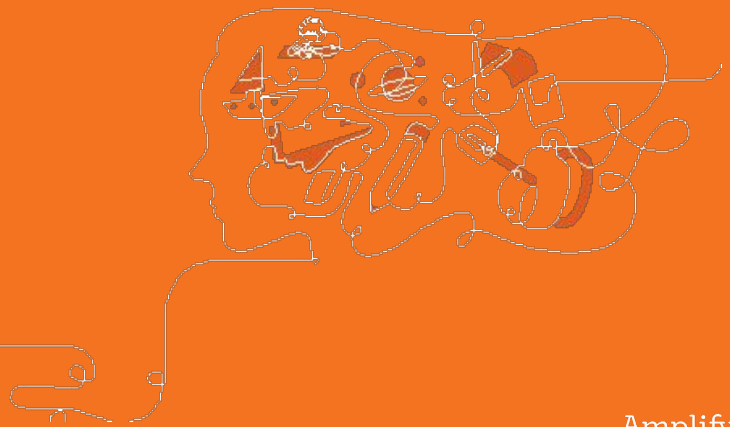


Please provide us feedback!

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

Presenter name:

Session Title: Three-Dimensional Learning in the Amplify Science K-5 Curriculum



Amplify.

Thank you & be well!