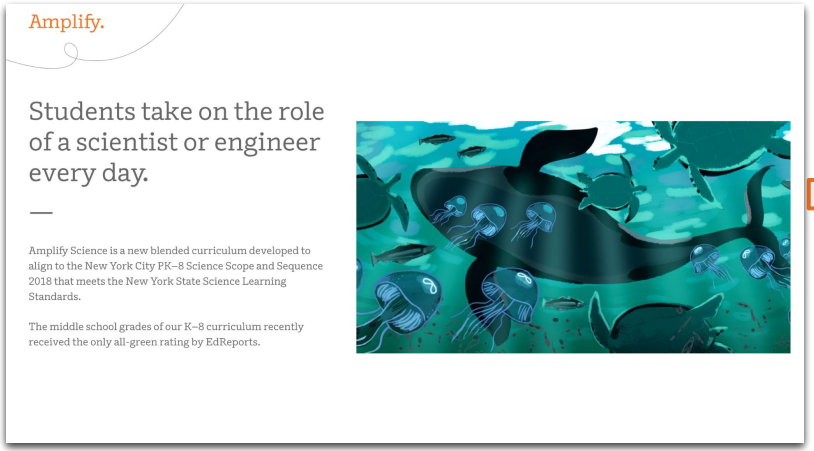
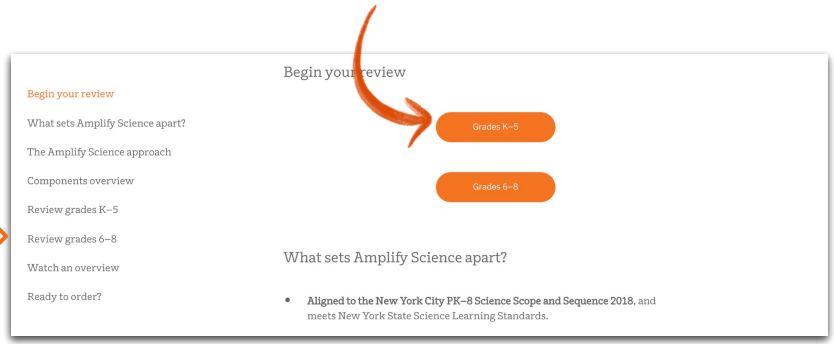
Welcome to Amplify Science!

Do Now: Open auto-login site & explore as we wait to begin

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



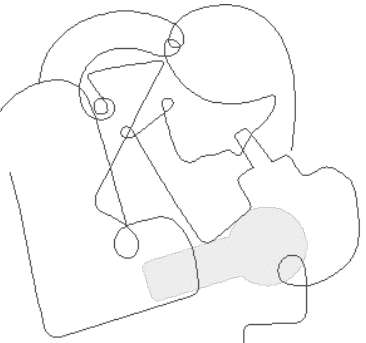


Click your grade band & then follow prompts

Amplify Science

Introduction to Amplify Science for Administrators

Grades K-5



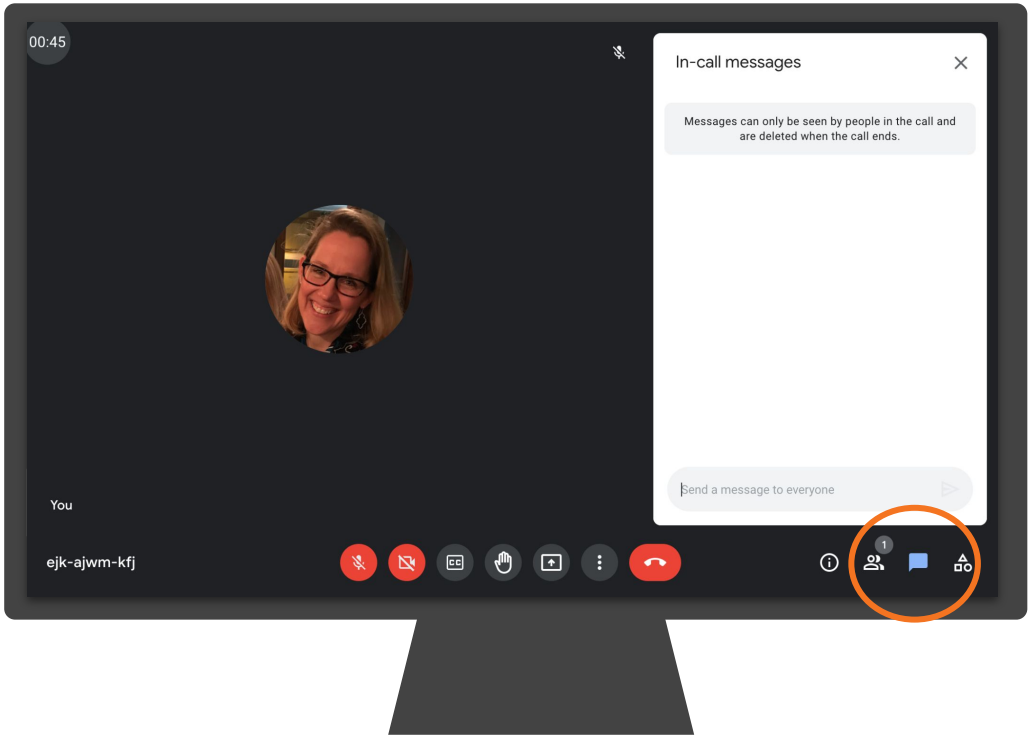
School/District Name
Date
Presented by Your Name

PLPG CERTIFIED PROVIDER

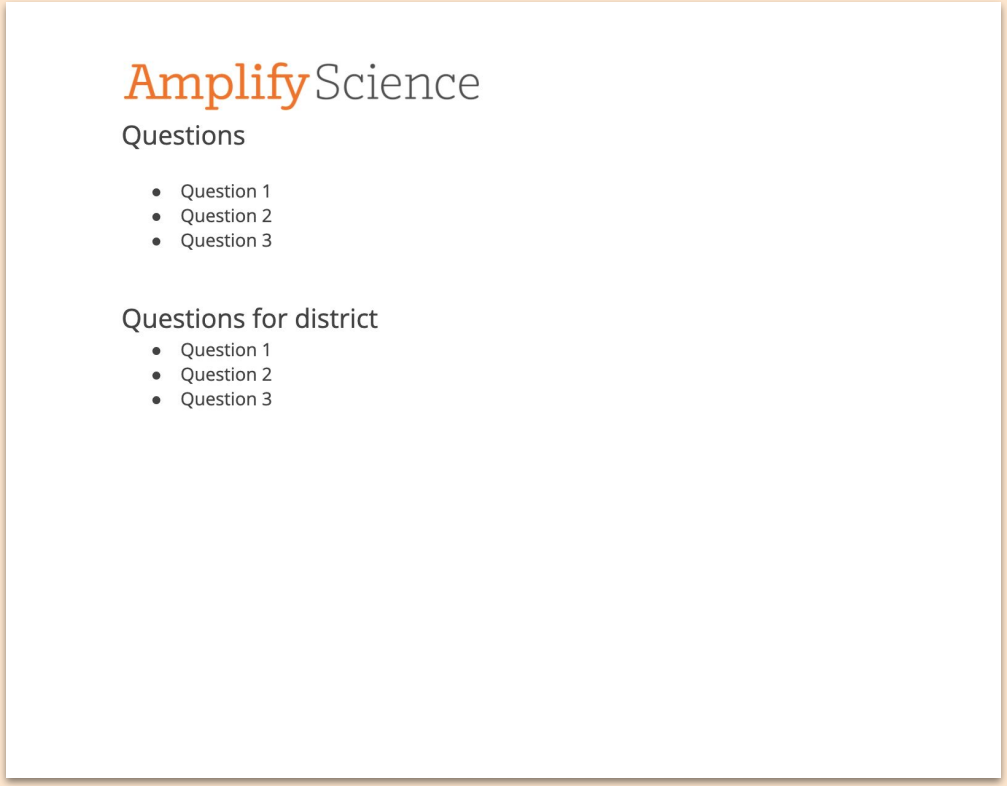
Ice Breaker!

Who do we have in the room today?

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



Hidden slide: Establishing a questions routine



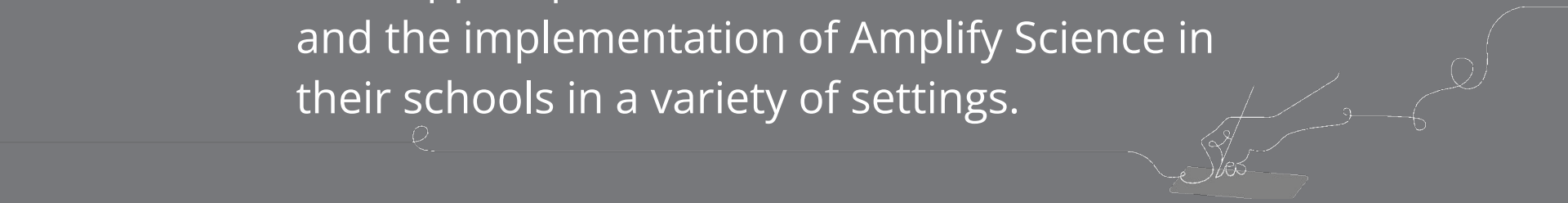
Norms: Establishing a culture of learners

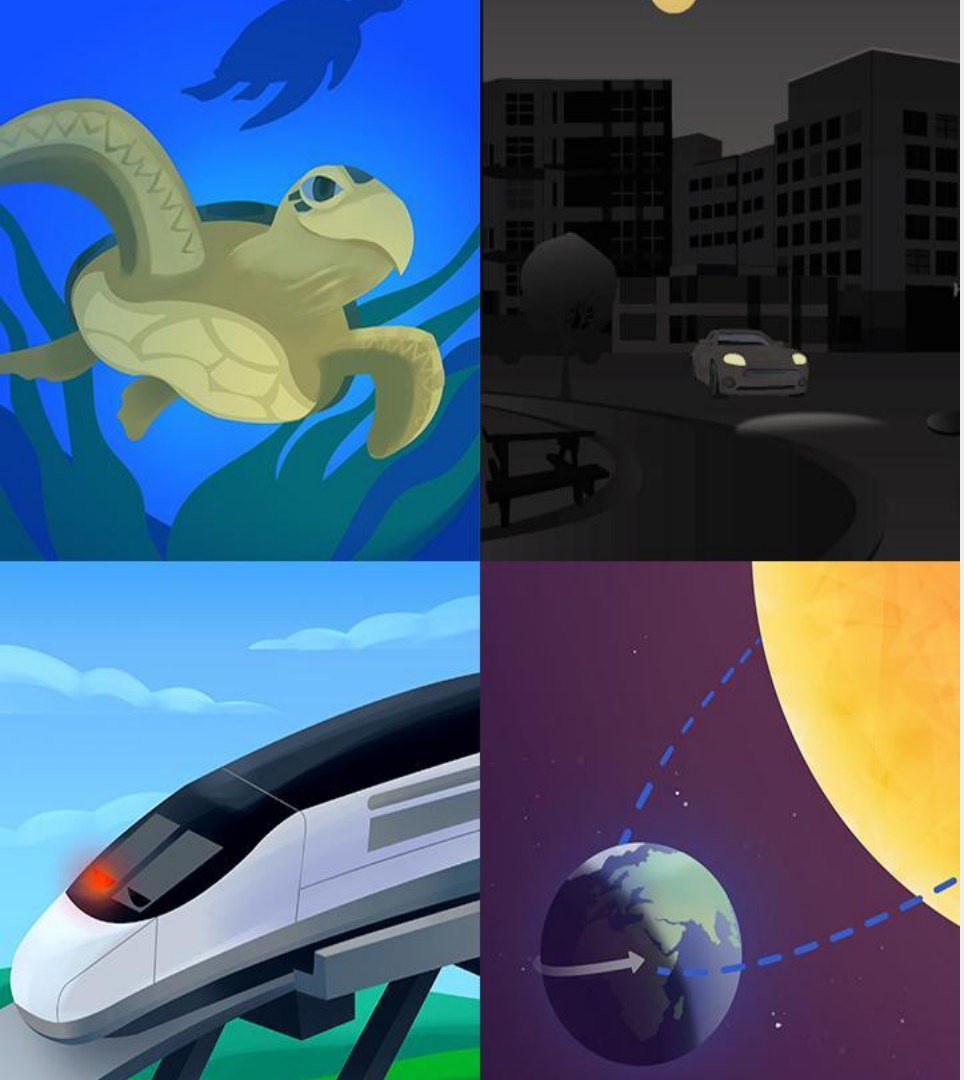
- **Take risks:** Ask any questions, provide any answers.
- **Participate:** Share your thinking, participate in discussion and reflection.
- **Be fully present:** Unplug and immerse yourself in the moment.
- **Physical needs:** Stand up, get water, take breaks.

Overarching goals

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

- ❏ Recognize how lessons engage students in the three dimensions of the NYSSLS through phenomenon-based instruction.
- ❏ Understand the ways in which administrators can support phenomenon-based instruction and the implementation of Amplify Science in their schools in a variety of settings.

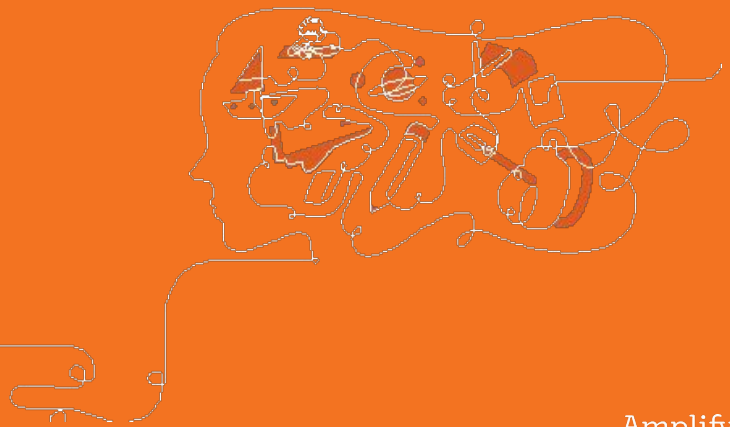




Plan for the day

- **Introduction and framing**
- Teaching and learning in Amplify Science
- Supporting instruction
- Supporting implementation
- Closing

Introducing Amplify Science



THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

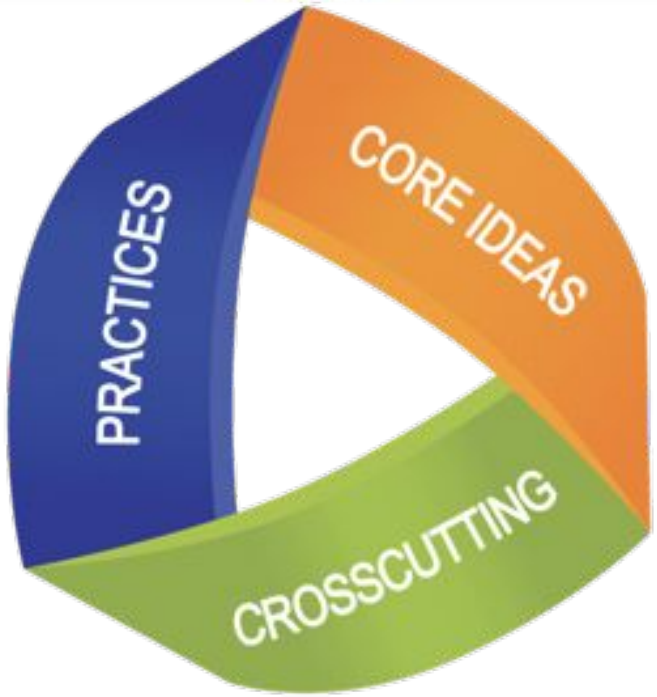
+ Amplify.

Amplify Science

New York State Science Learning Standards

Evaluate your knowledge

- On a scale of 0-5, how would you rate your familiarity with the NYSSLS?



3-D learning

Reflection

Disciplinary Core Ideas

- Molecules needed by the cells

Science and Engineering Practices

- Which practices did you use to figure out these ideas?

Crosscutting Concepts

- Which crosscutting concepts were useful to make sense out of what you figured out?

Three dimensions of NGSS reference

3-D learning engages students in using scientific and engineering practices and applying crosscutting concepts as tools to develop understanding of and solve challenging problems related to disciplinary core ideas.

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**

Course curriculum structure

Grade K

- Needs of Plants and Animals
- Pushes and Pulls
- Sunlight and Weather

Grade 1

- Animal and Plant Defenses
- Light and Sound
- Spinning Earth

Grade 2

- Plant and Animal Relationships
- Properties of Materials
- Changing Landforms

Grade 3

- Balancing Forces
- Inheritance and Traits
- Environments and Survival
- Weather and Climate

Grade 4

- Energy Conversions
- Vision and Light
- Earth's Features
- Waves, Energy, and Information

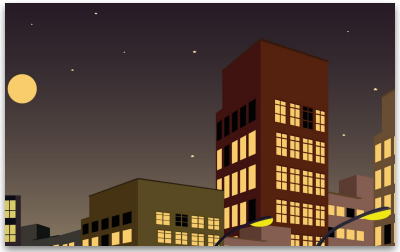
Grade 5

- Patterns of Earth and Sky
- Modeling Matter
- The Earth System
- Ecosystem Restoration

Key takeaways:

- There are 22 lessons per unit
- Lessons at grades 2-5 are 60 minutes long
- Lessons at grades K-1 are 45 minutes long

Year at a Glance: Grade 4

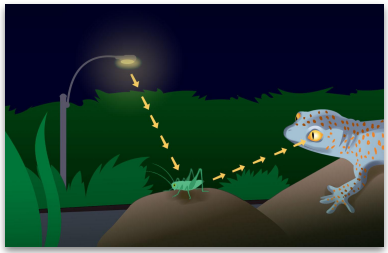


Energy Conversions

Domain: Physical Science

Unit type: Engineering Design

Student role: System engineers

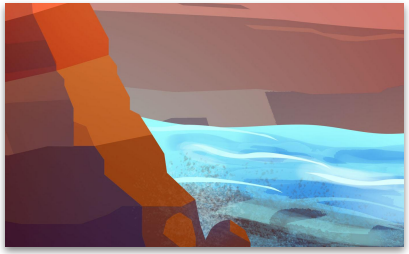


Vision and Light

Domain: Life Science

Unit type: Investigation

Student role: Conservation biologists

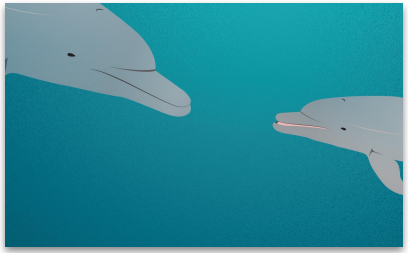


Earth's Systems

Domain: Earth and Space Science

Unit type: Argumentation

Student role: Geologists



Waves, Energy, and Information

Domain: Physical Science

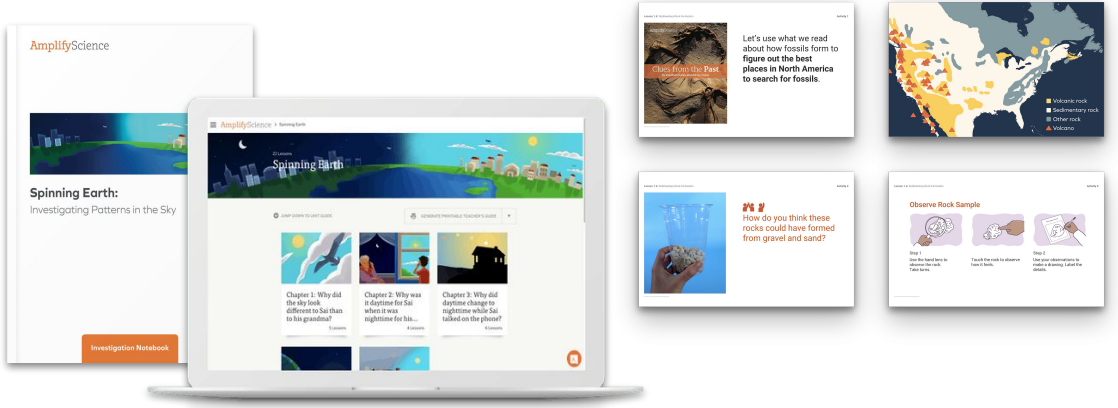
Unit type: Modeling

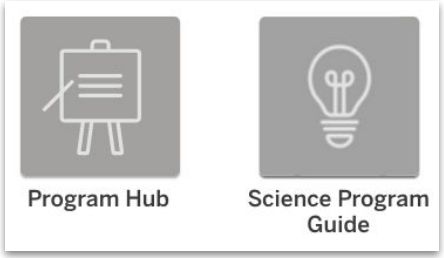
Student role: Marine scientists

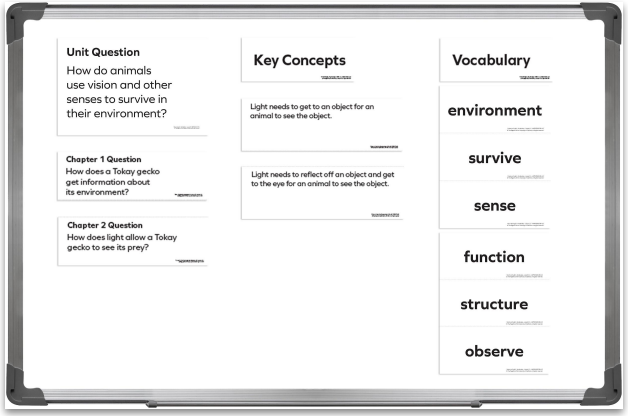
K-5 Program components

Teacher materials

- Teacher's Guide
- Classroom Slides
- Classroom wall materials
- Embedded assessments
- Program Guide
- Program Hub
- Amplify Help Site



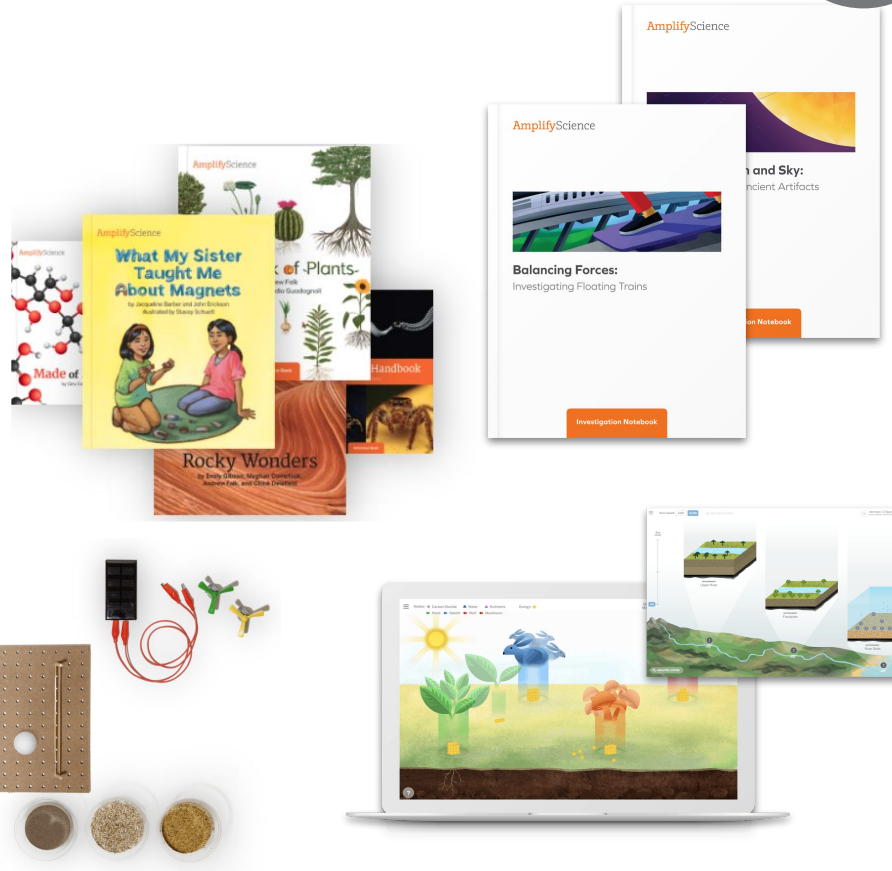




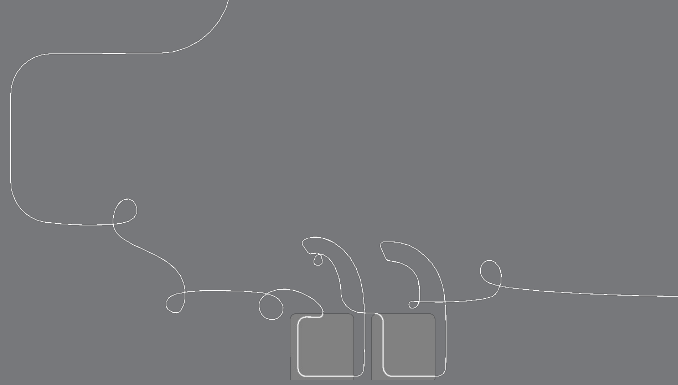
K-5 Program components

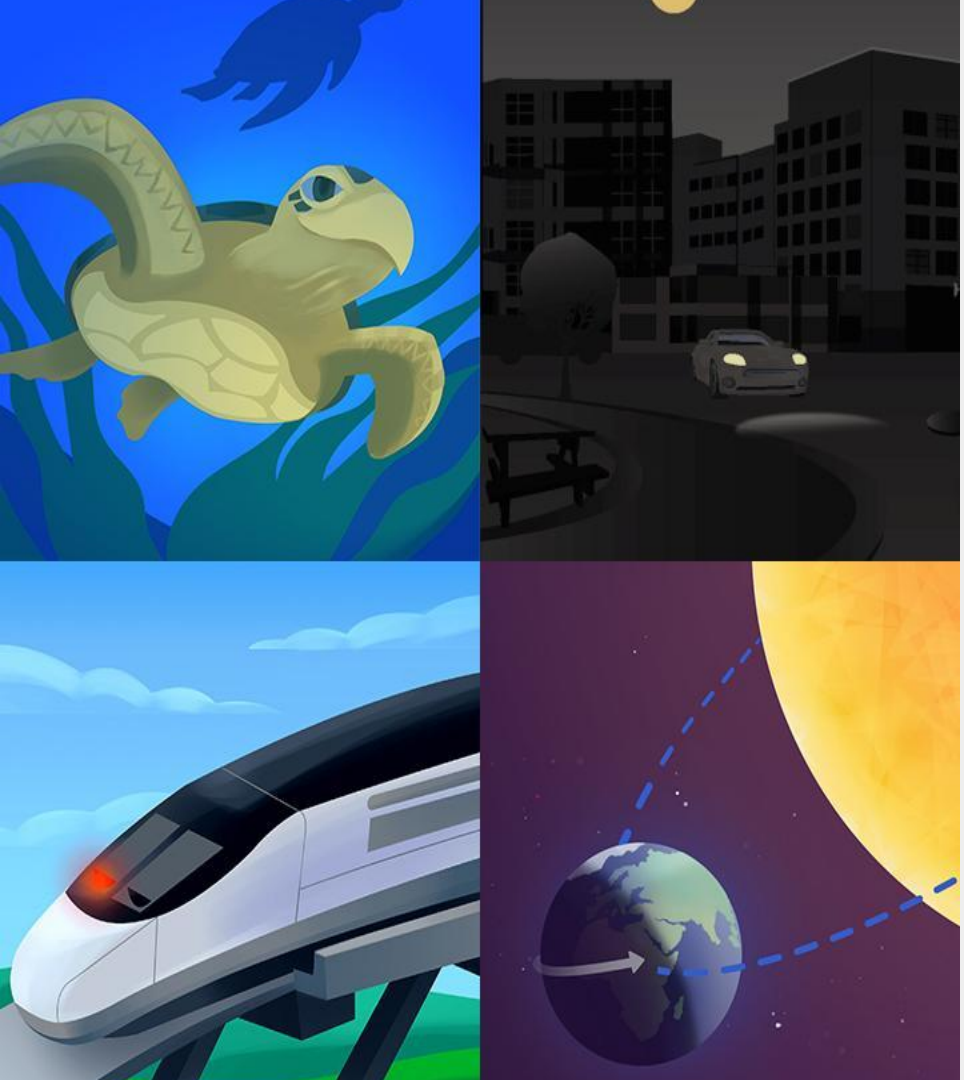
Student materials

- Hands-on materials
- Investigation Notebooks
- Student books
- Digital Applications



Questions?

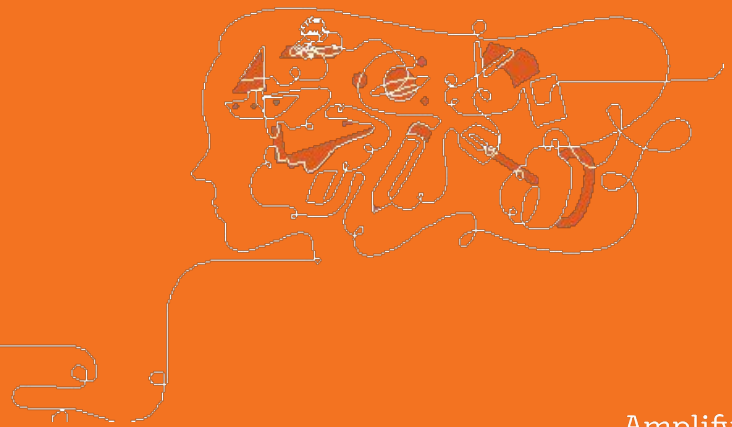




Plan for the day

- Introduction and Framing
- **Teaching and learning in Amplify Science**
- Supporting instruction
- Supporting implementation
- Closing

Teaching and learning in Amplify Science



Amplify.

New York State Science Learning Standards

Phenomenon-based learning and teaching

A scientific phenomenon is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.

Comparing topics and phenomena

Topic-based	Phenomenon-based
Ocean habitats	A sea turtle can survive in an ocean habitat where sharks live

New York State Science Learning Standards

How might learning be different?

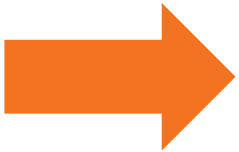
Topic-based	Phenomenon-based
Ocean habitats	A sea turtle can survive in an ocean habitat where sharks live.
Electric circuits	A flashlight won't turn on, even though it used to work.
Mixtures and solutions	One substance dissolved in water but another substance didn't.

Comparing topics and phenomena

A shift in science instruction

from learning about

(like a student)



to figuring out

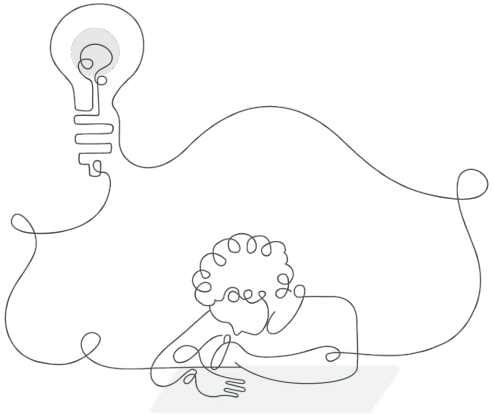
(like a scientist)

Previewing the unit

Introducing the phenomenon

Amplify Science units are designed around complex phenomena that drives student learning through the unit.

Pay attention to the phenomenon, or observable event, students will figure out in this unit.



The unit we're beginning is called *Energy Conversions: Blackout in Ergstown*.

In this unit, you will **investigate why blackouts occur and come up with solutions to prevent them**.

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Ergstown

This picture shows a town we'll call Ergstown.

What do you **see** in the picture?

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Ergstown: a Few Moments Later

This is an image of the same town just a few moments later.

How is this picture different?

What do you think is going on in the picture?

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Ergstown: Later That Night

What do you notice in this picture?

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Have you ever been in a blackout? What was it like?

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Why might blackouts be a problem?

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To: Systems Engineers
From: Mayor Joules, Ergstown City Hall
Subject: Improvements to the Electrical System

Recently, Ergstown has been experiencing frequent blackouts. Blackouts can be dangerous and inconvenient, so I need a team to figure out how the electrical system can be improved.

Before the team can begin to solve this problem, it will first need to figure out why the blackouts have been happening. I would like to receive updates as the team discovers possible causes of the blackouts and as the team comes up with ideas about how to improve the electrical system.

The town of Ergstown will be very grateful to anyone who can help us solve our blackout problem!

Navigation

1. **Navigation:** Finding resources and moving between lessons
2. **Classroom Slides:** Visual aids for instruction
3. **Unit Level Resources:** Supports available for instruction

Unit structure

Unit

↓

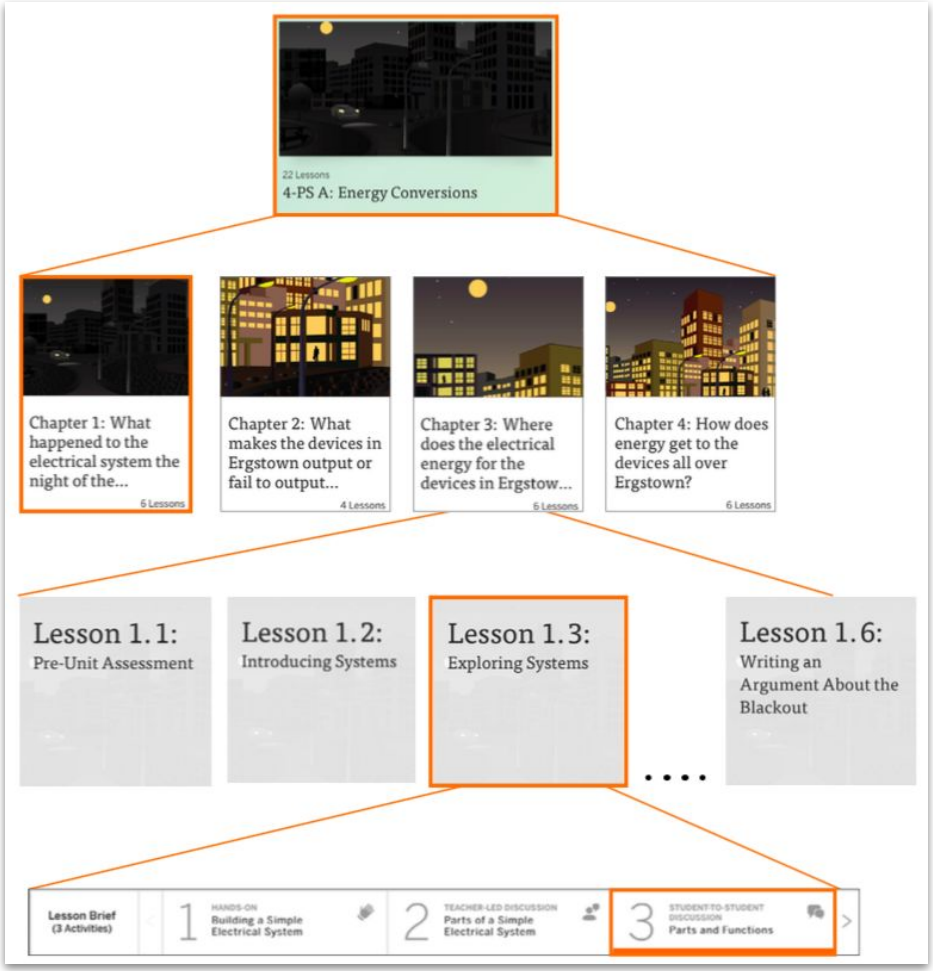
Chapter

↓

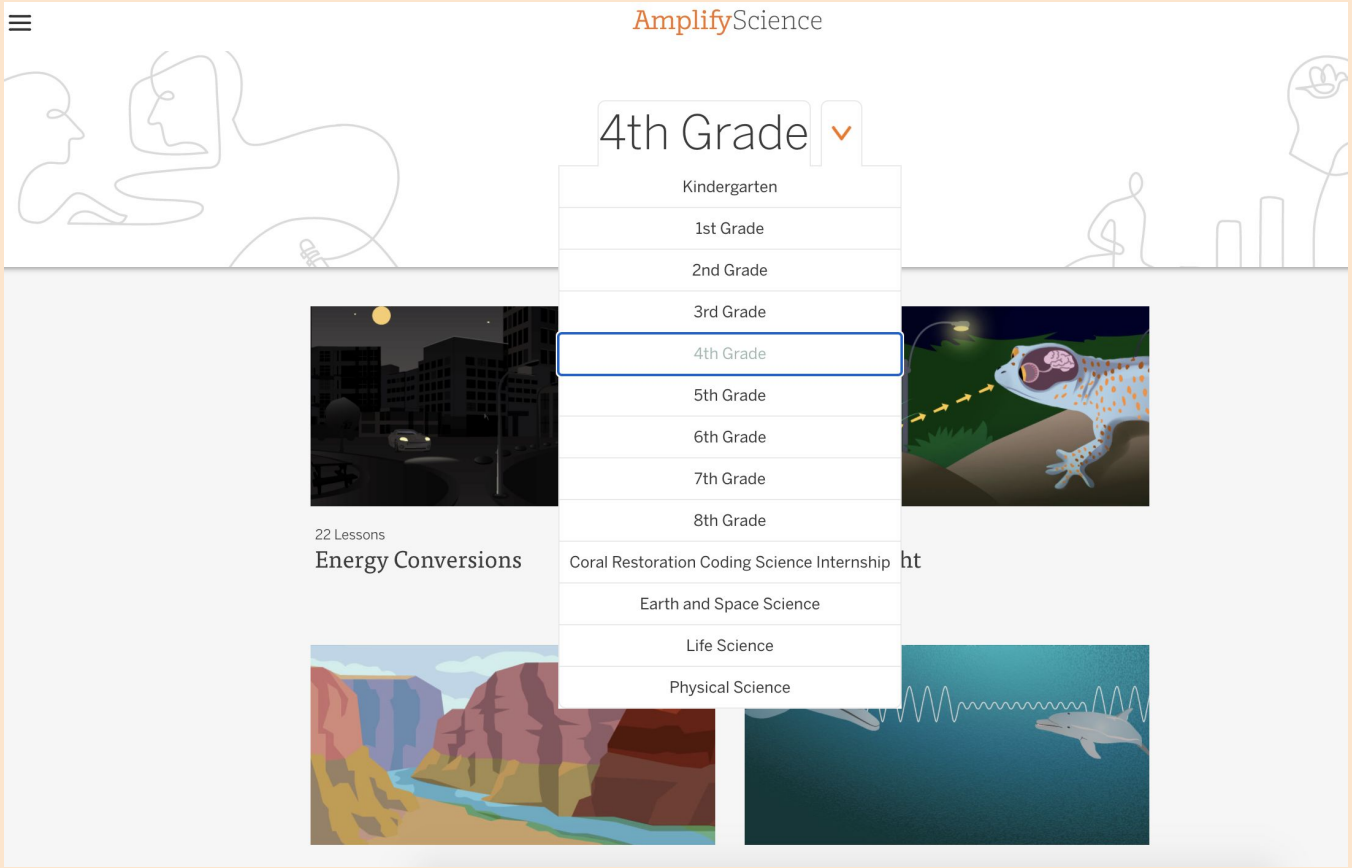
Lesson

↓

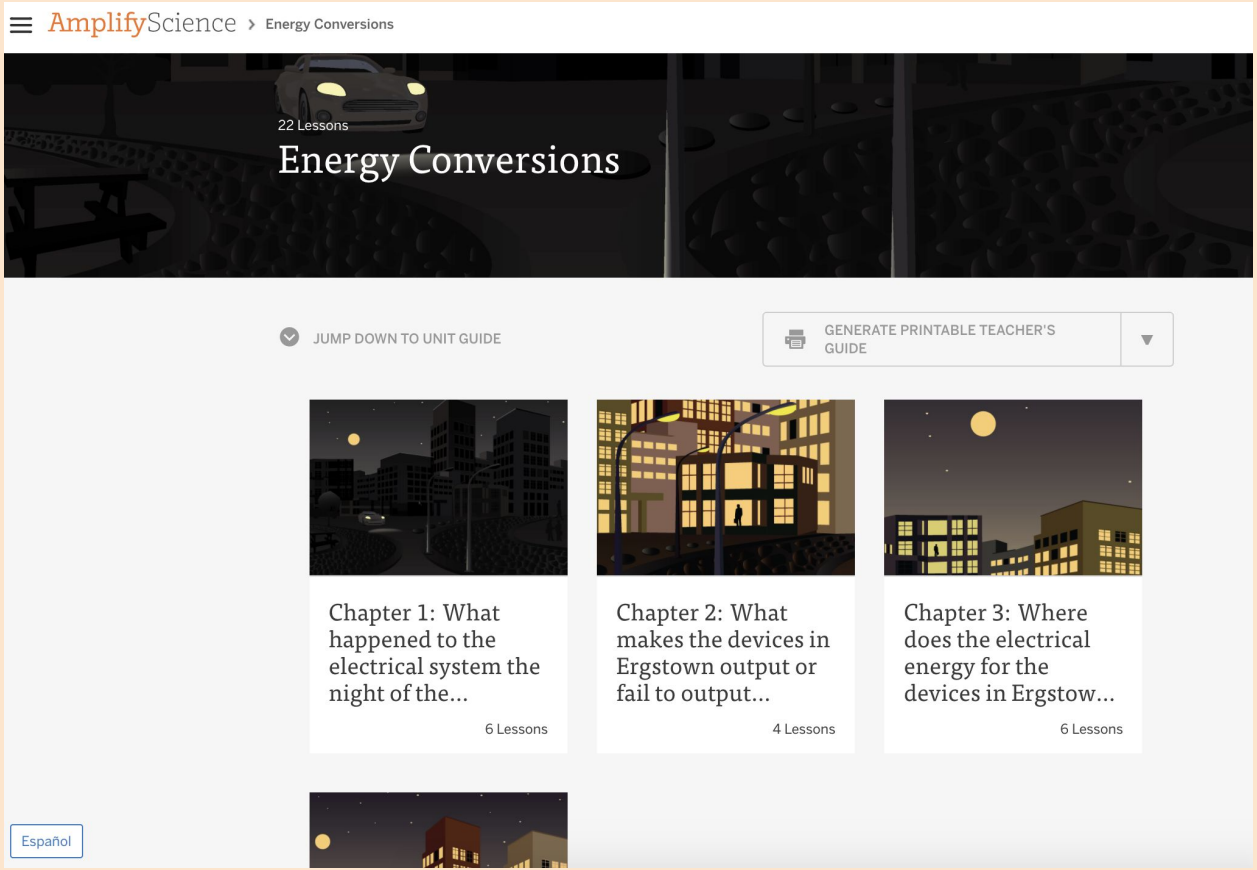
Activity



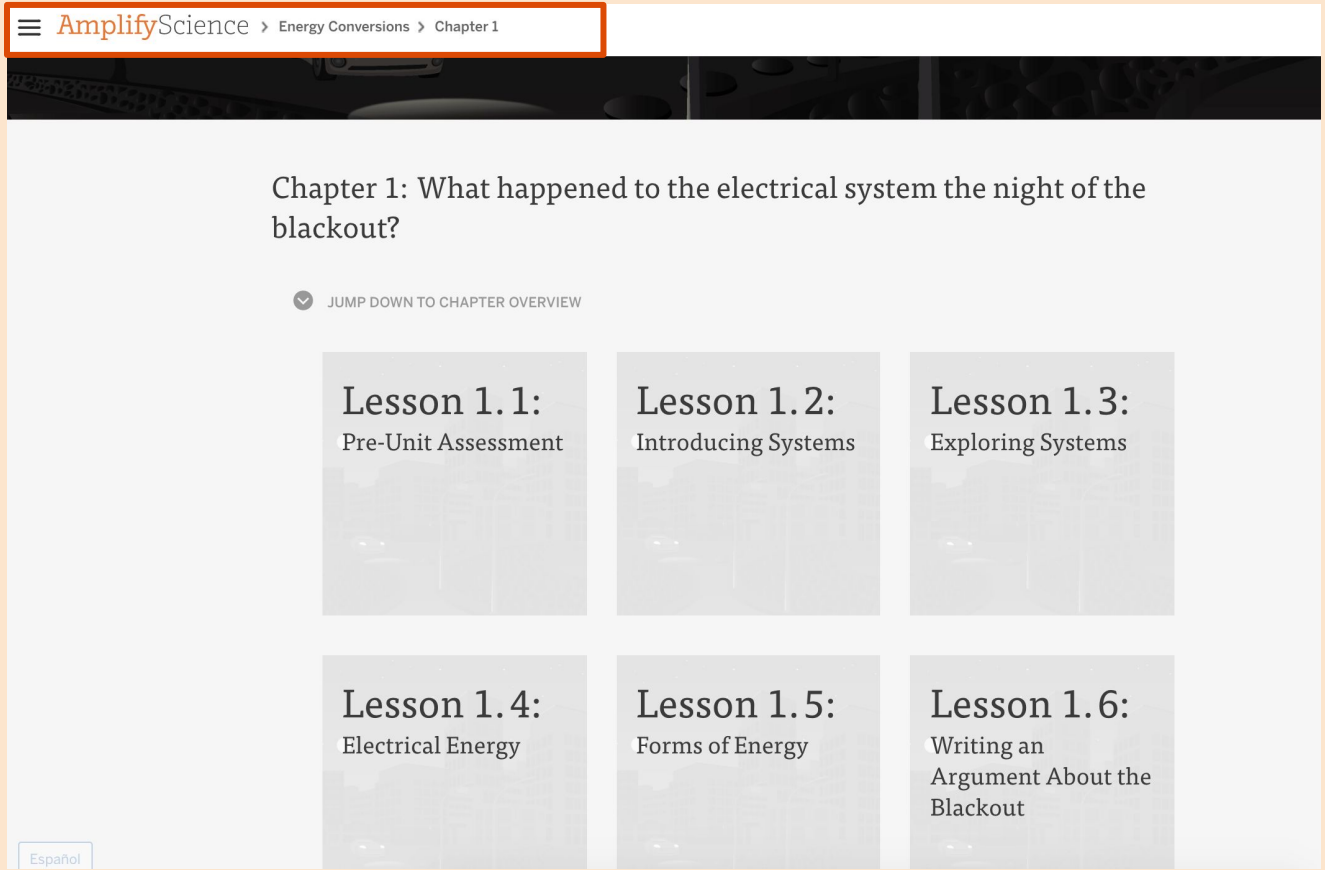
Hidden slide: Navigating to your grade level



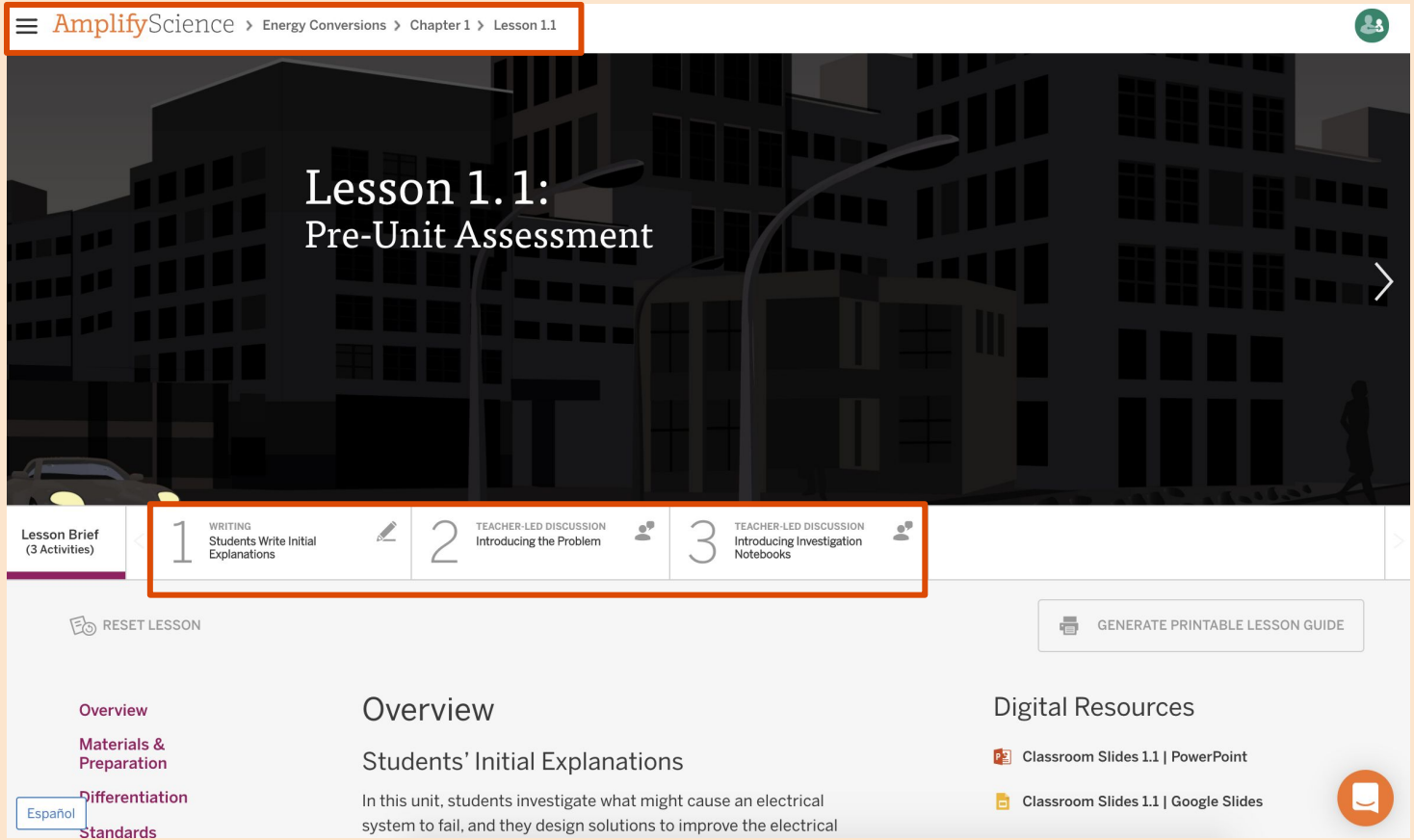
Hidden slide: Unit landing page



Hidden slide: Chapter 1 landing page



Hidden slide: Lesson 1.1 Lesson Brief

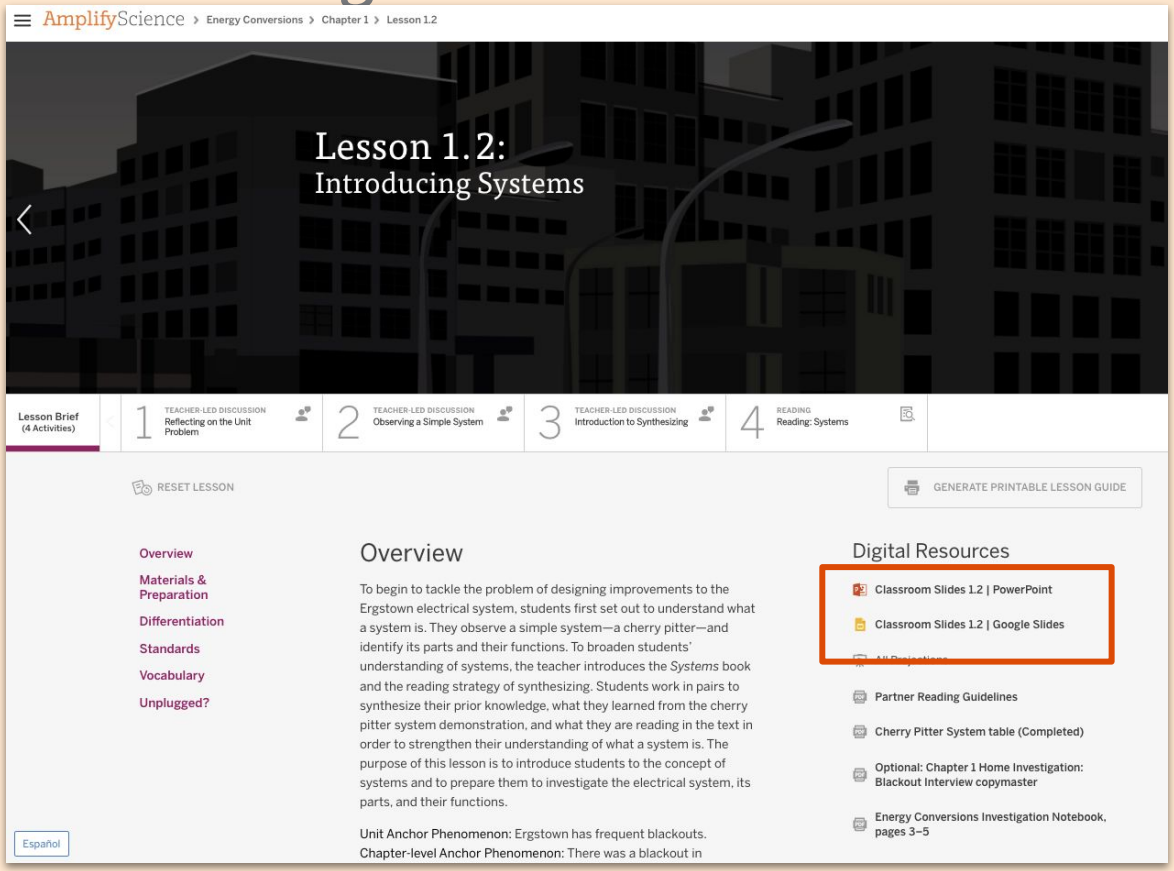


Classroom Slides

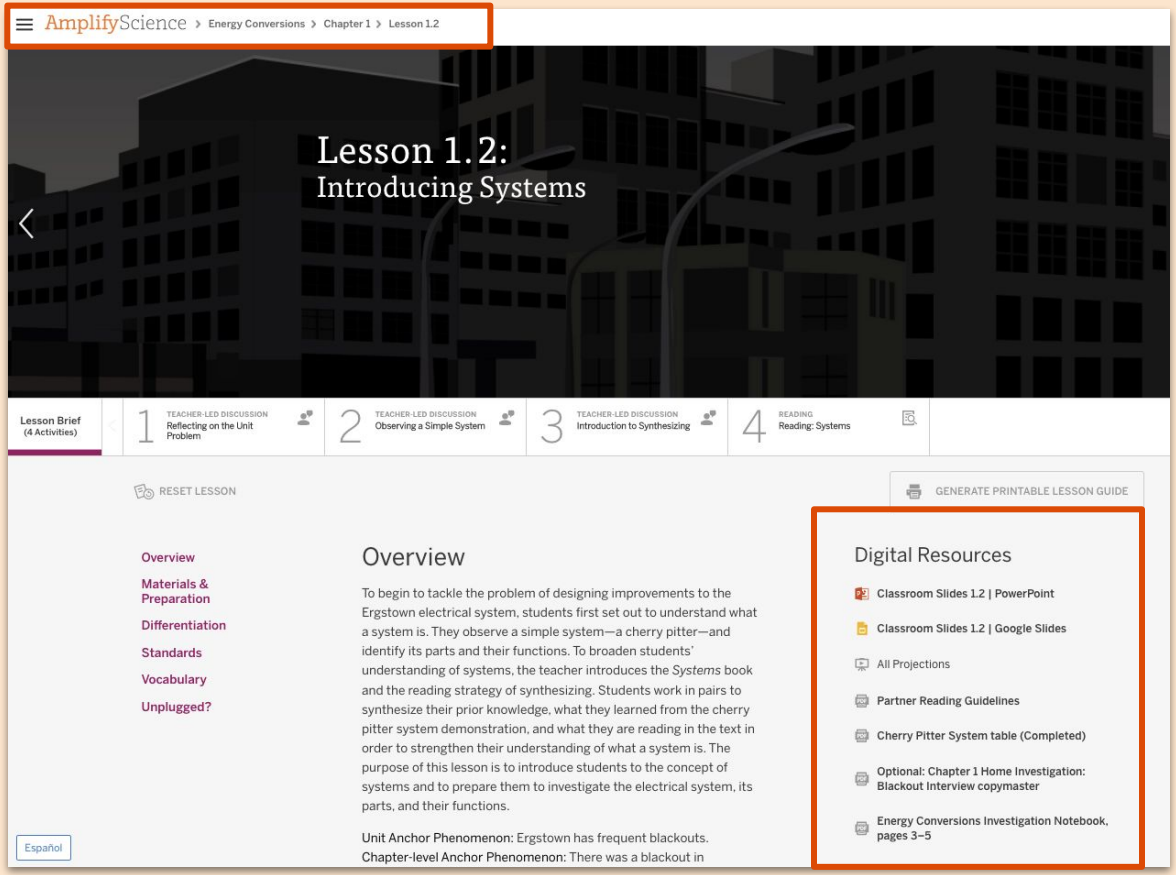
Classroom Slides are a tool for easily preparing and presenting lessons.

They are editable slide decks that include activity instructions, student prompts, and other text and visuals to guide teachers and students through a lesson.

Hidden slide: locating Classroom Slides



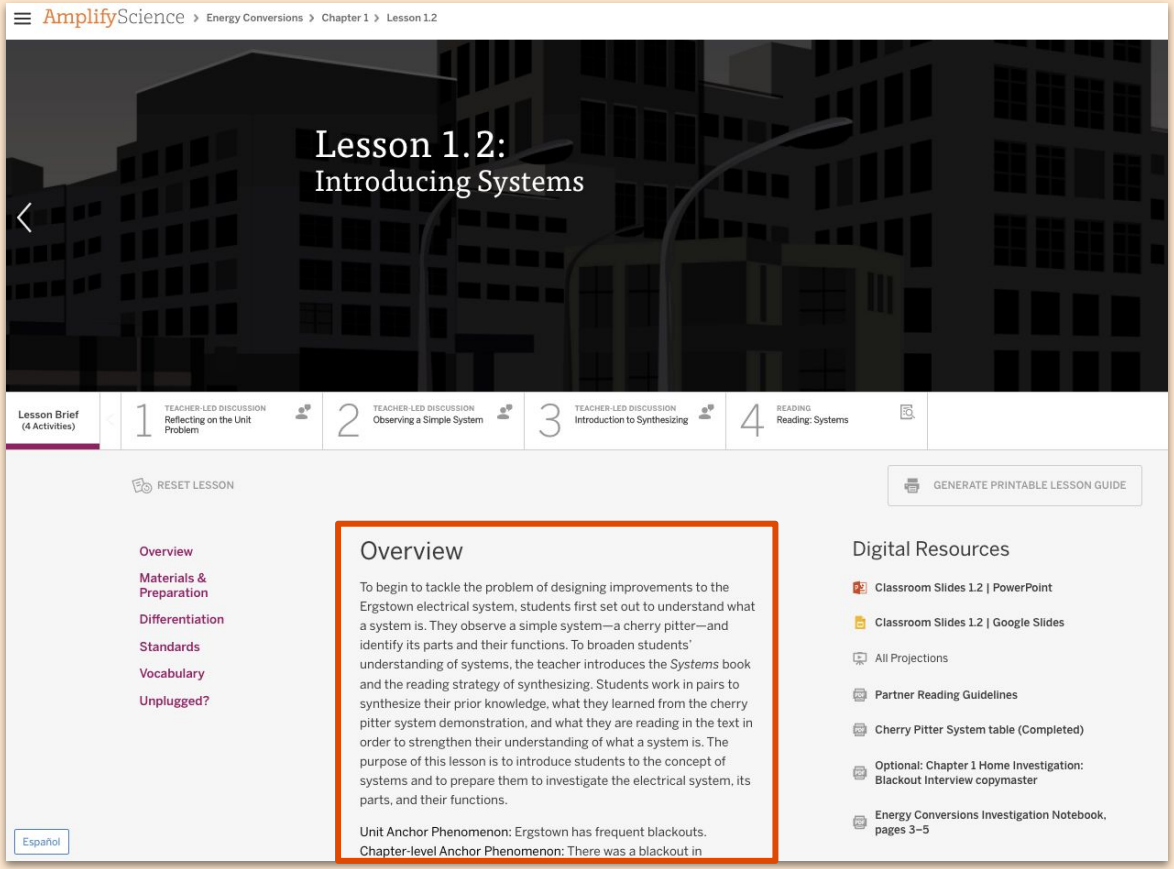
Hidden slide: Review breadcrumb trail and digital resources



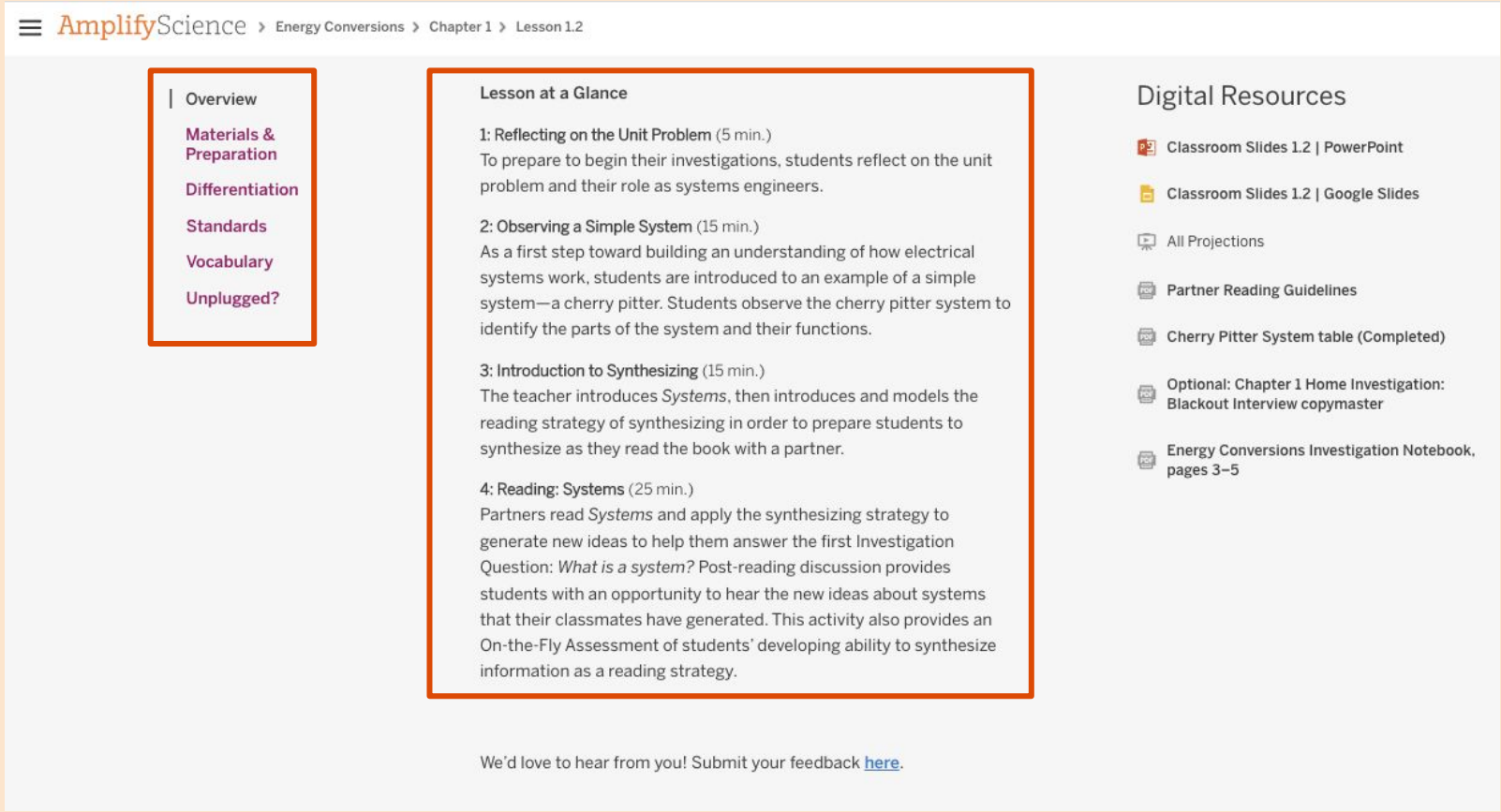
Lesson level resources

1. **Lesson Brief:** Overview of the lesson and timing
2. **Materials and Preparation:** Lists all materials for the lesson and prep steps
3. **Differentiation:** Suggestions to support student learning

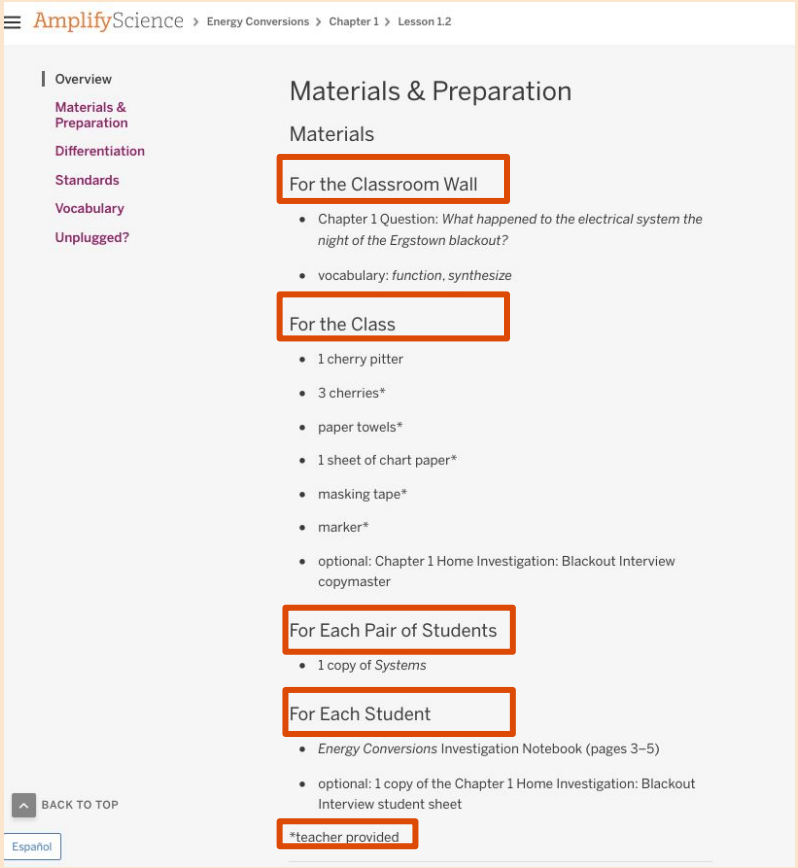
Hidden slide: Overview

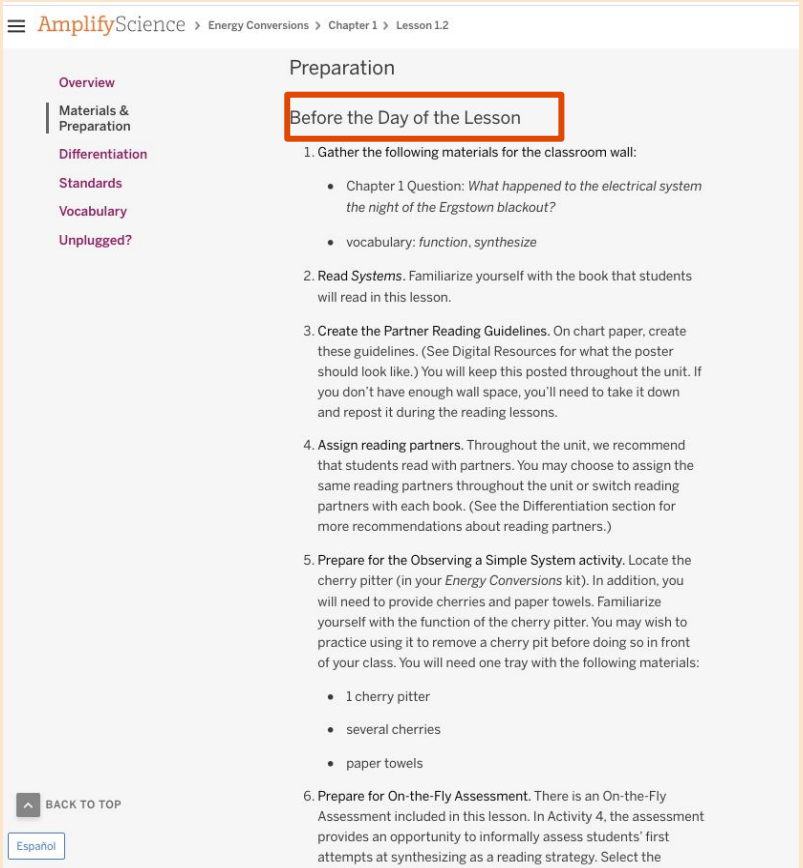


Hidden slide: Lesson at a Glance and floating menu

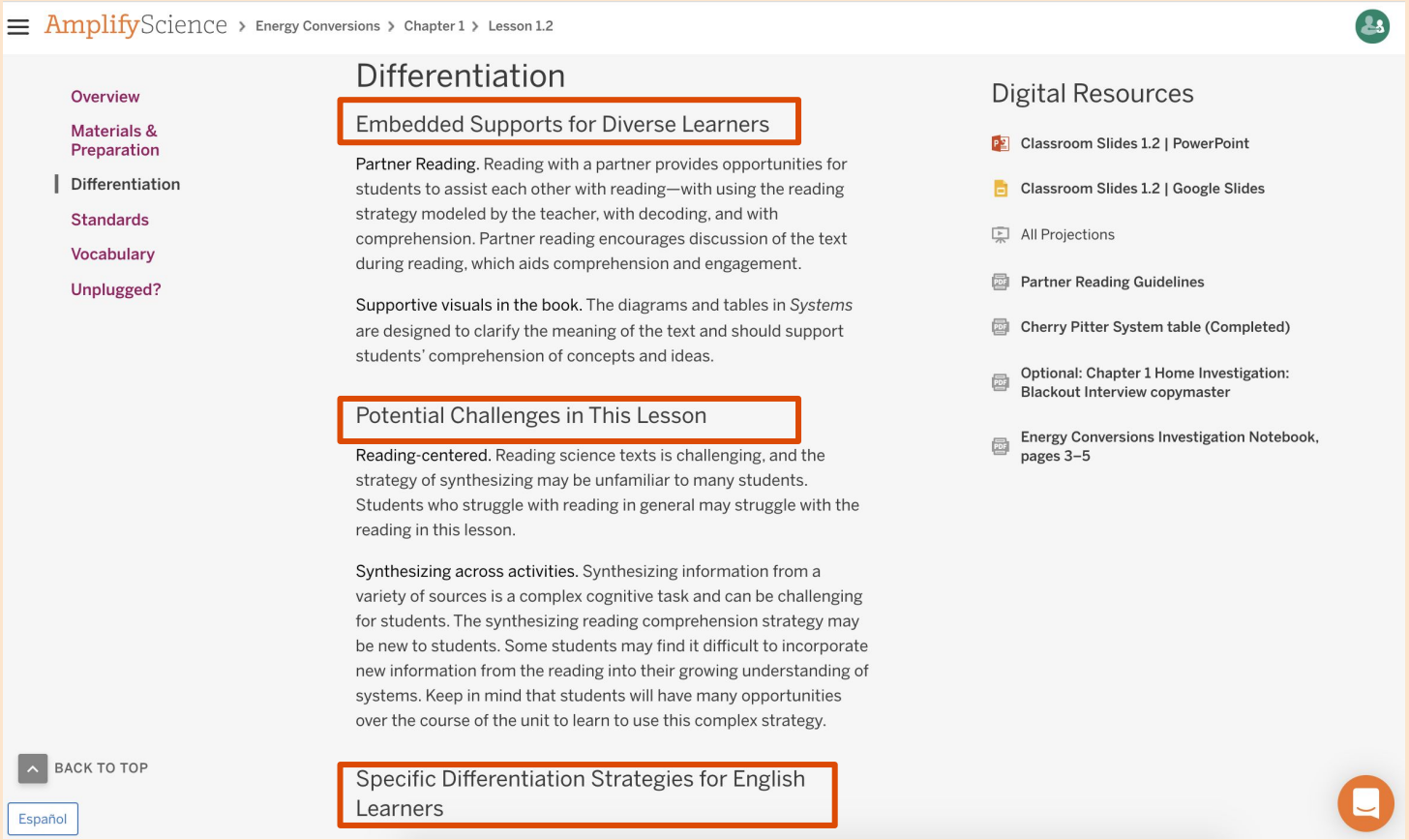


Hidden slide: Materials and preparation

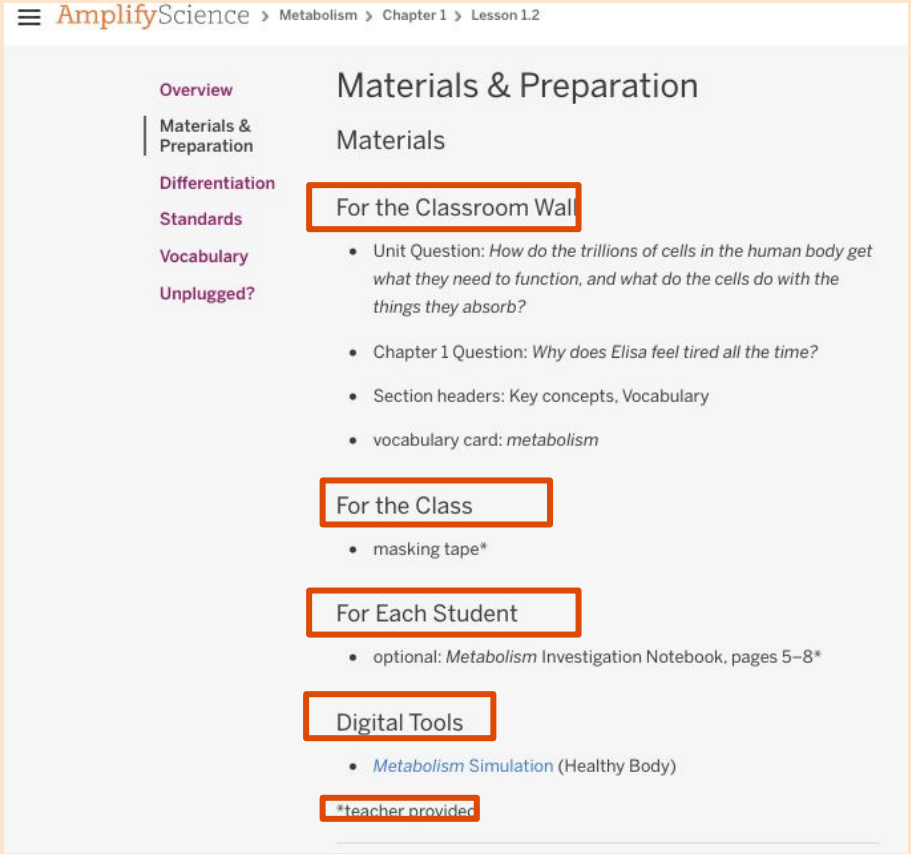


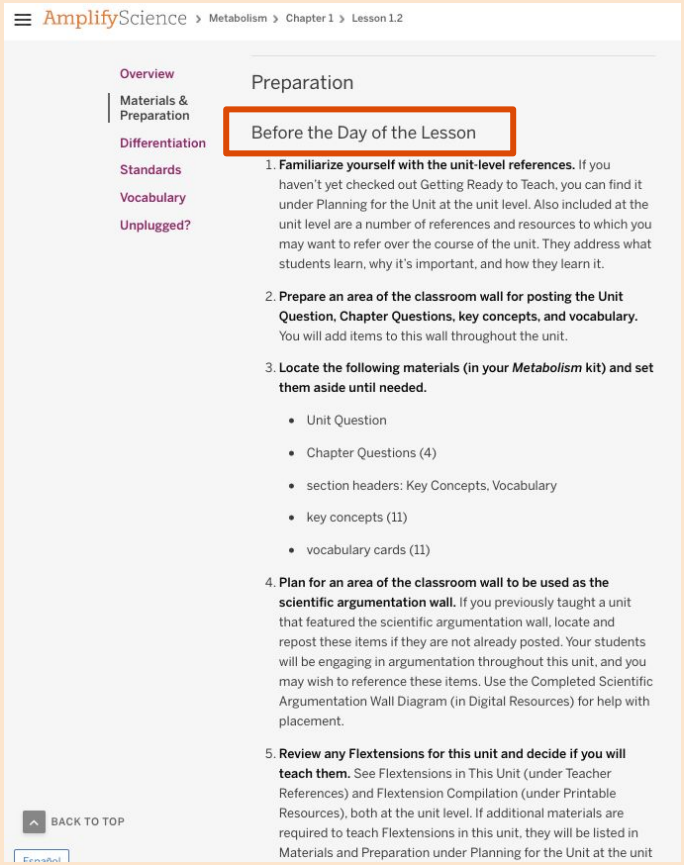


Hidden slide: Differentiation



Hidden slide: Materials and preparation

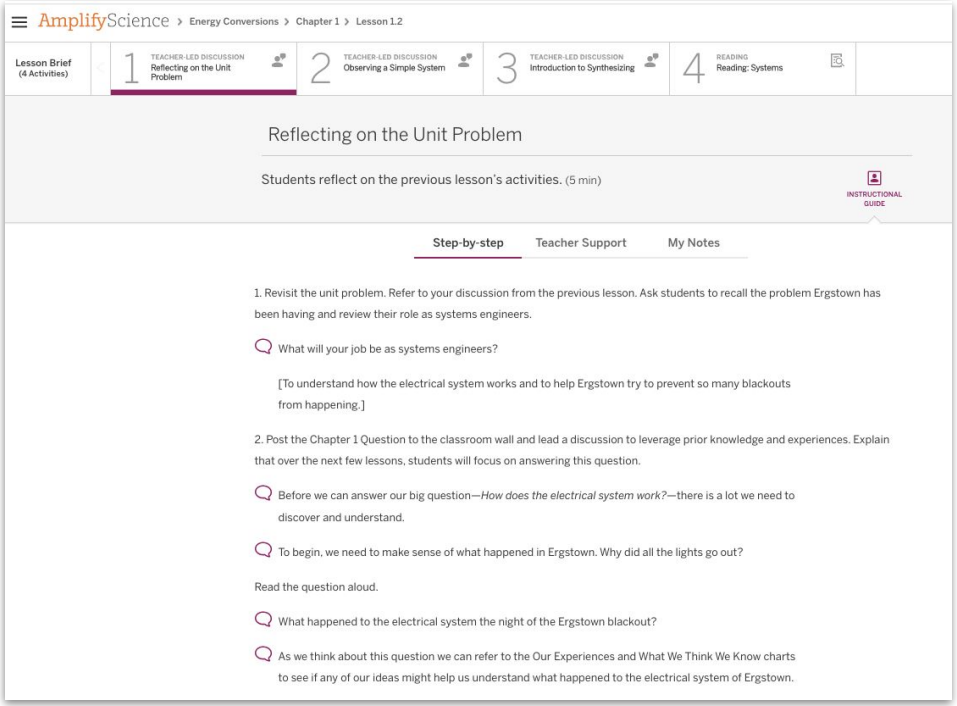




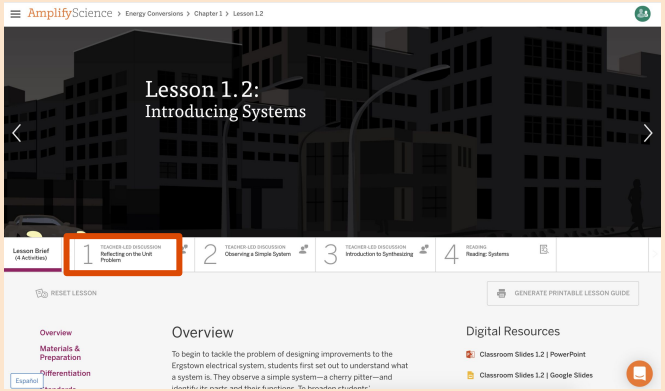
Teaching a lesson

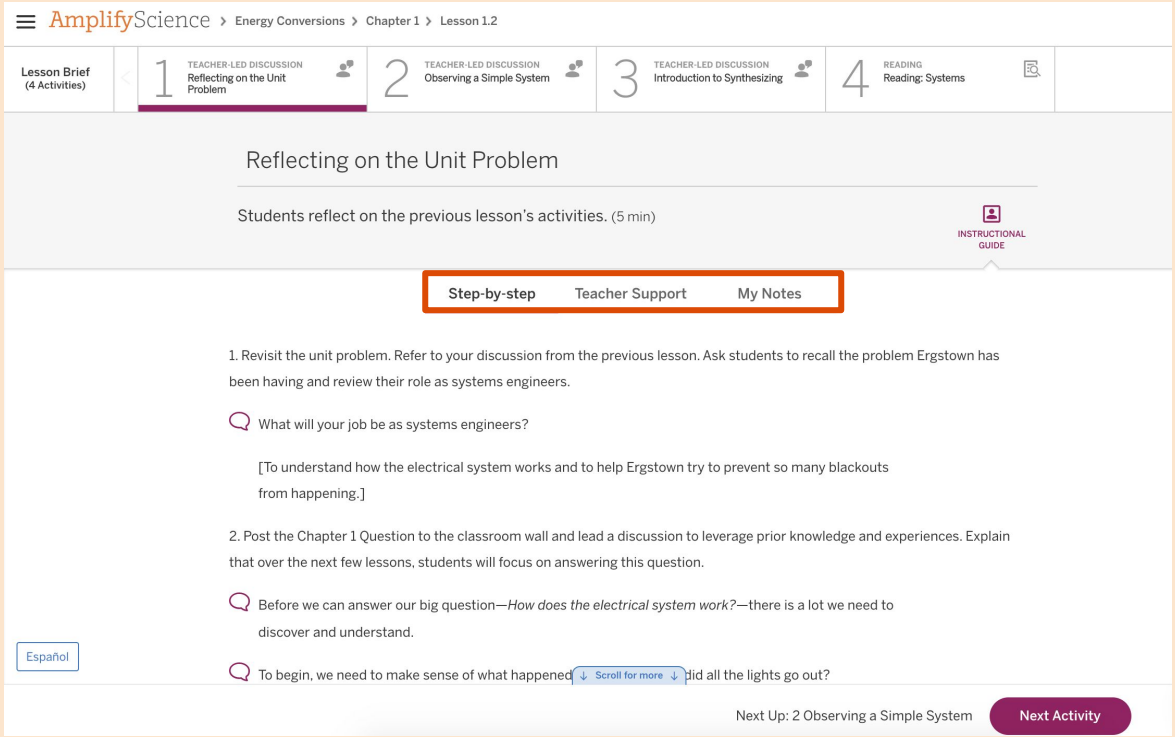
Instructional Guide

The Instructional Guide includes the steps for teaching each activity, as well as Teacher Support notes and, when applicable, Possible Responses.



Hidden Slide: Lesson Map to Instructional Guide





Navigation Temperature Check

Rate yourself on your comfort level accessing Amplify Science materials and navigating a digital curriculum.

1 = Extremely Uncomfortable

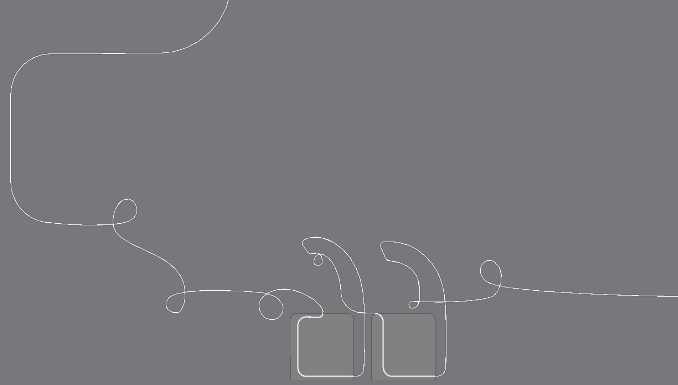
2 = Uncomfortable

3 = Mild

4 = Comfortable

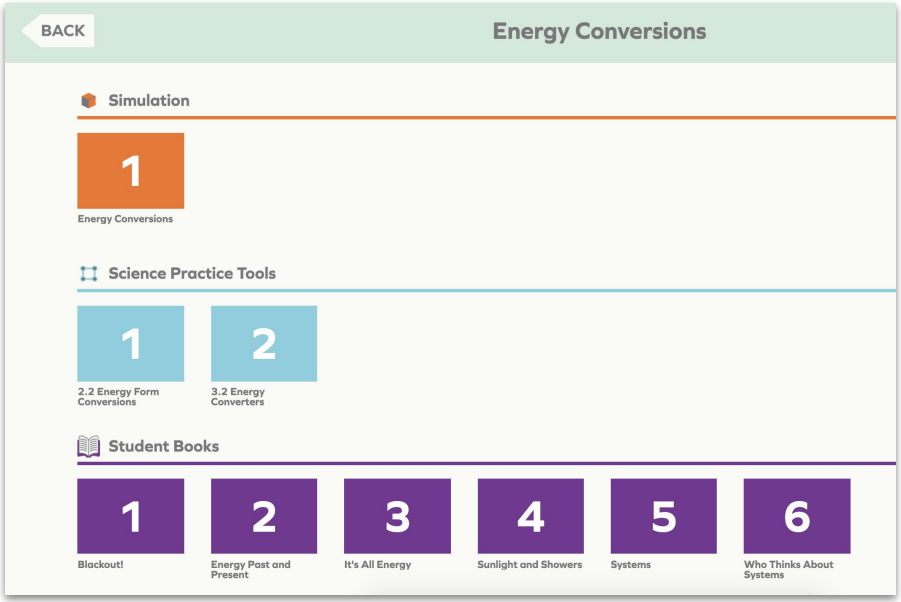
5 = Extremely Comfortable

Questions?

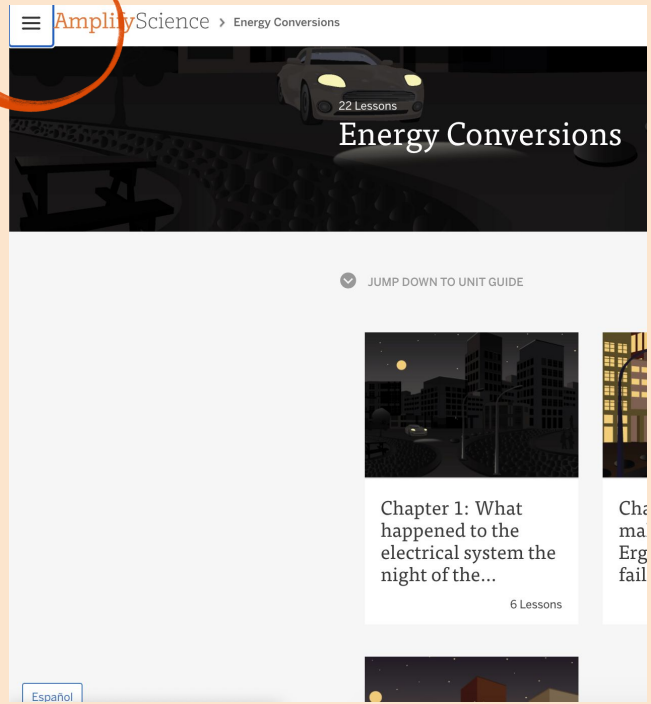


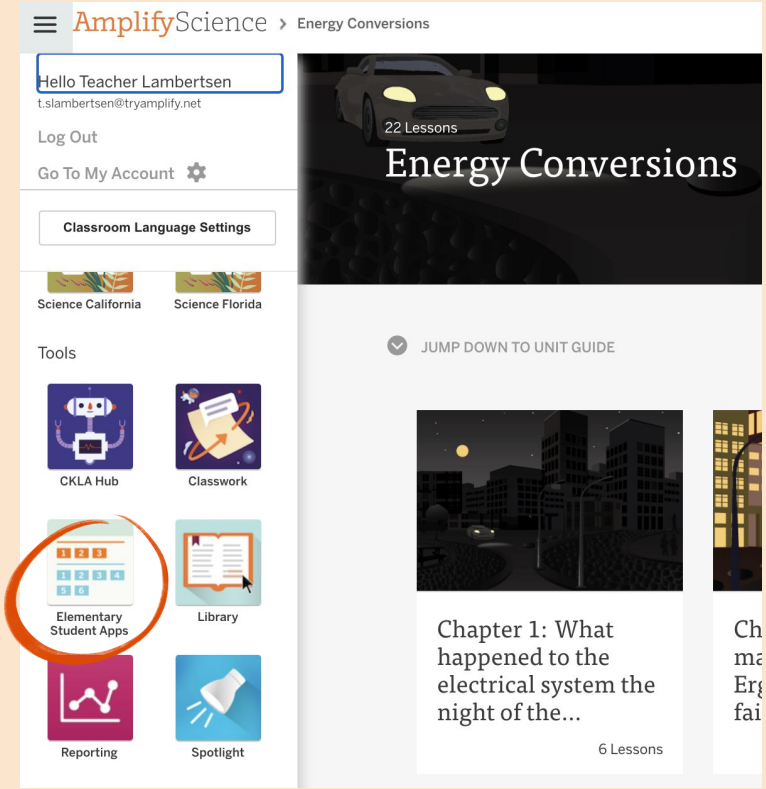
Student apps page

To prepare for our model lesson, you'll need to open a digital student book through the Student Apps page.

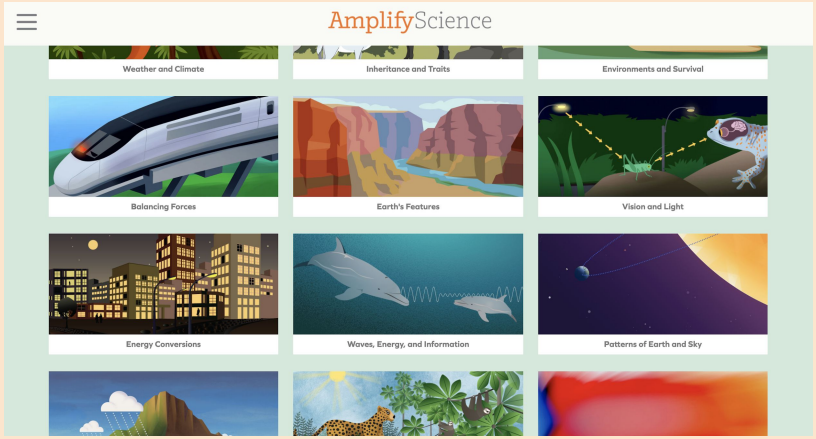


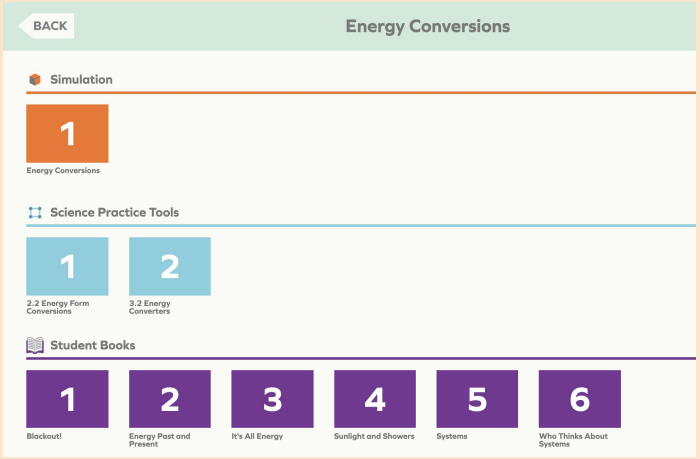
Hidden slide: Navigating to the Student Apps page

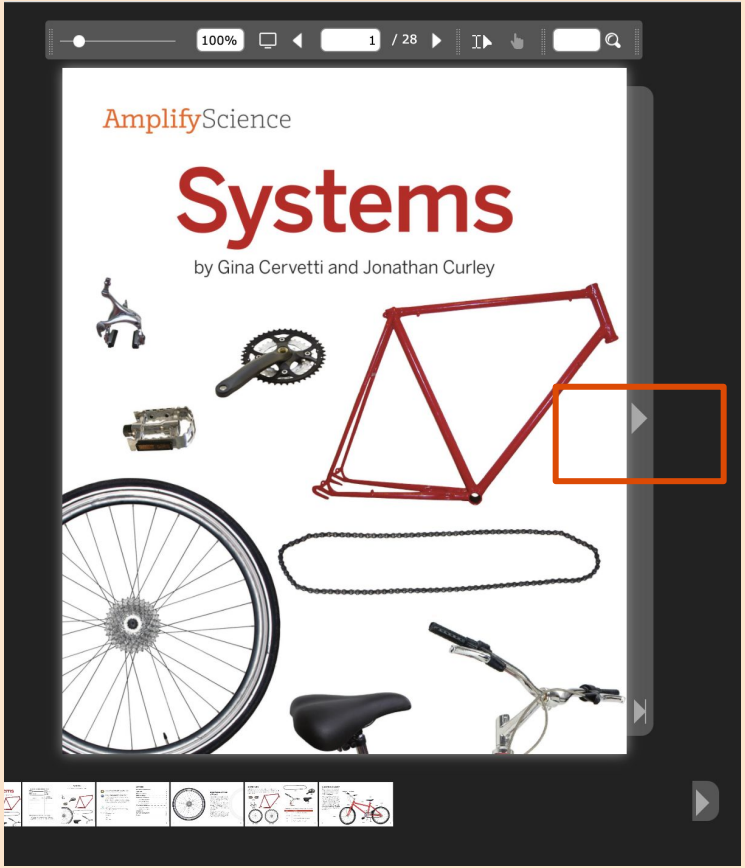




Hidden slide: Student Apps page and accessing the book





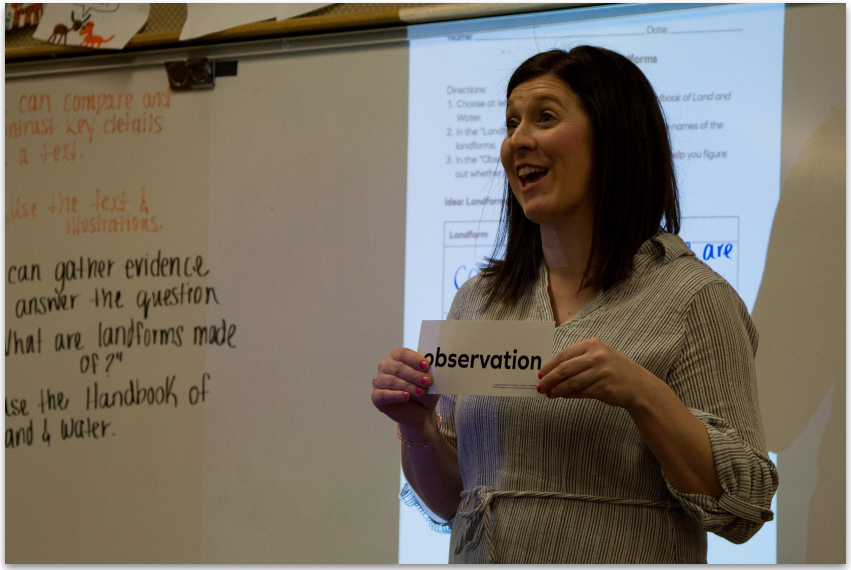


Example lesson

Experiencing instruction as a student

During the example lesson, you'll take on the role of a student.

However, we'll pause a few times to share insights about the teaching and learning in this lesson.



Energy Conversions Classroom Wall

Unit Question
How does the electrical system work?

Chapter 1 Question
What happened to the electrical system the night of the Ergstown blackout?

Investigation Question
What is a system?

Key Concepts

Vocabulary

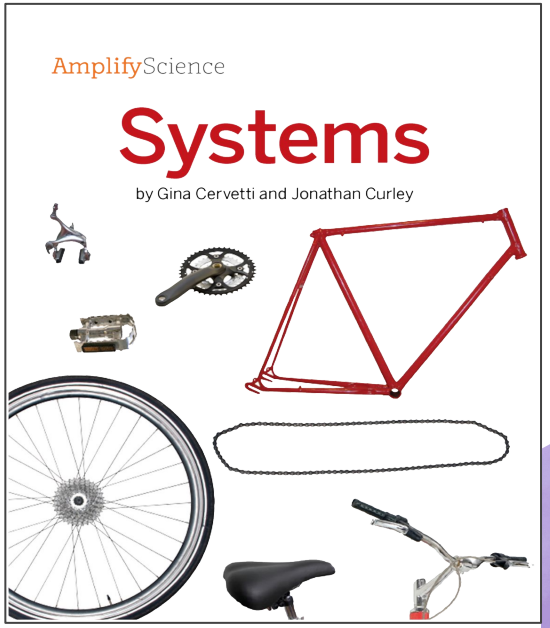
- engineer
- function
- synthesize

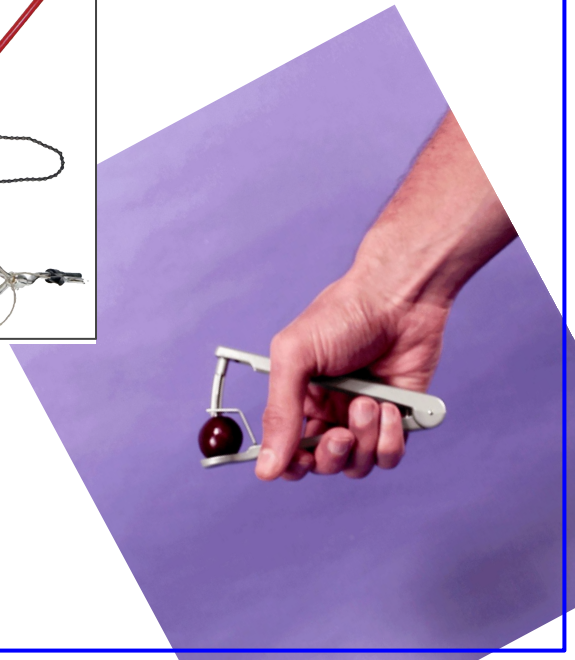
Amplify.

In the last lesson...

Lesson 1.2

Students gathered evidence to figure out the Investigation Question: What is a system?





25 MIN

Activity 1

Building a Simple Electrical System

It will be your job to figure out a way to put these materials together into a functioning system.

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Electrical Safety Guidelines

- Only attach the clips to the electrical devices that are part of the lesson.
- Keep the moving fan away from your face.
- Keep all electrical investigation materials away from electrical outlets.
- Keep all electrical investigation materials away from water.

Scientists and engineers are careful to do their investigations in a safe way.

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Name: _____ Date: _____

Building a Simple Electrical System

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

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

Build your simple electrical system and then **draw** what your system looks like.

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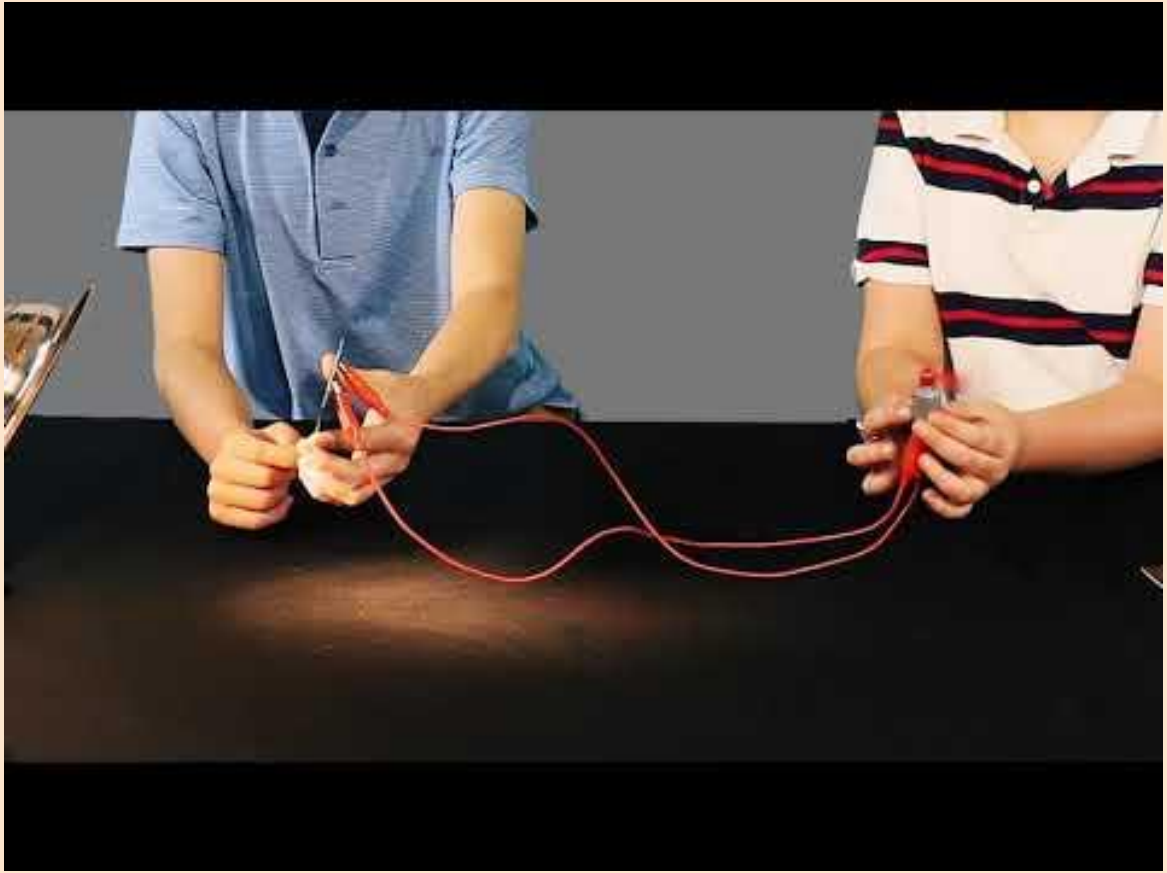
Hidden slide: Hands-on Video



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How did your group make a simple electrical system?

What are the parts of your system?

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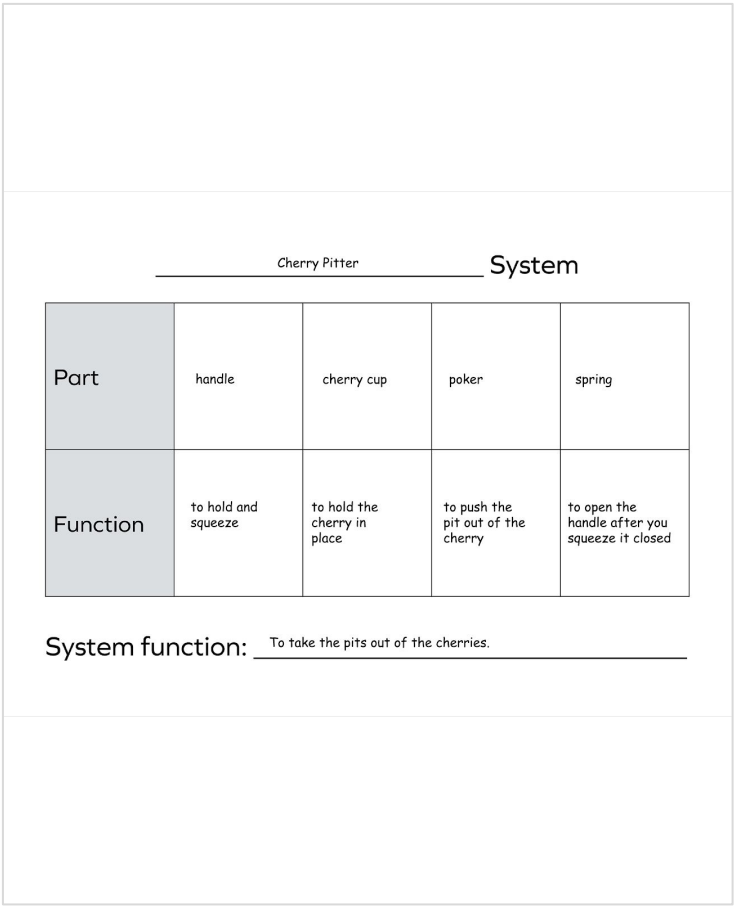
15 MIN

Activity 2

Parts of a Simple Electrical System



Cherry Pitter System

Part	handle	cherry cup	poker	spring
Function	to hold and squeeze	to hold the cherry in place	to push the pit out of the cherry	to open the handle after you squeeze it closed

System function: To take the pits out of the cherries.

The Cherry Pitter System table showed the parts of the system and the function of each part.

Now we will complete a table about a **simple electrical system**.

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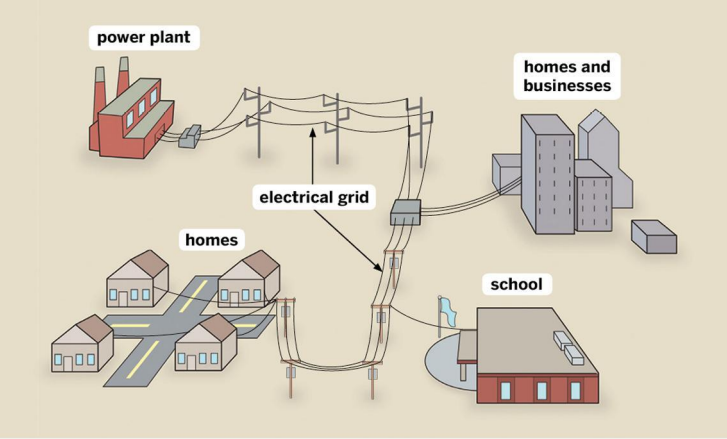
Simple Electrical System

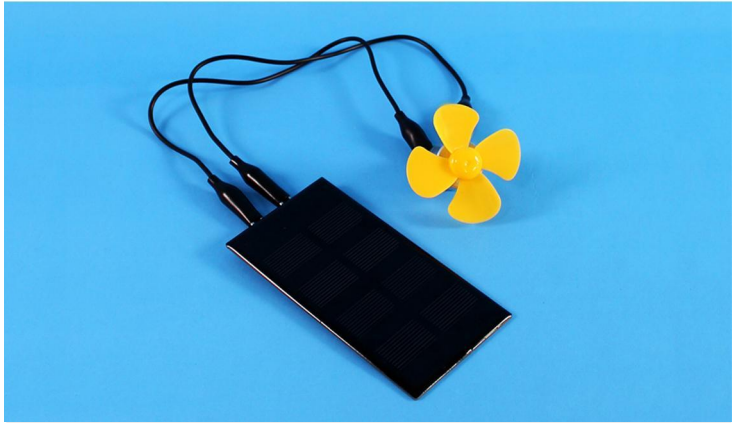
Part	sun	solar panel	wire	motor with fan
Function	to provide energy to the system	to send electrical energy throughout the system	to move electrical energy from one place to another	to use electrical energy to run

_____ System

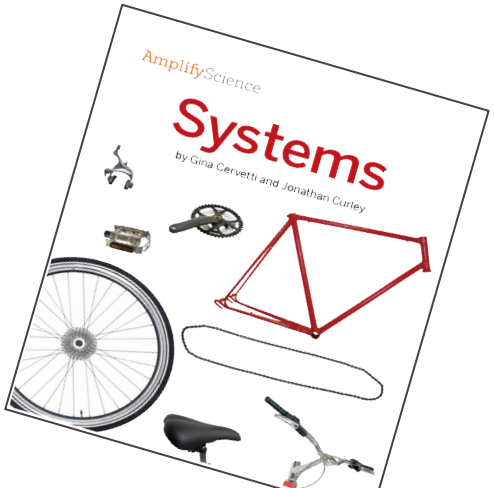
Part				
Function				

Function of both systems: _____





In many ways, the **simple electrical system** you built is a lot like the **larger electrical system**.



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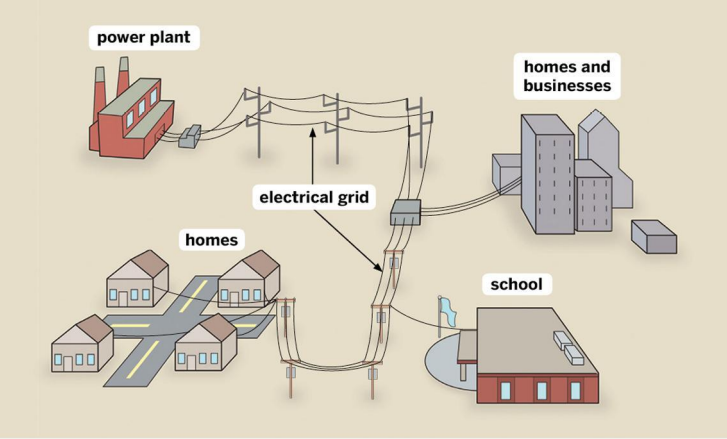

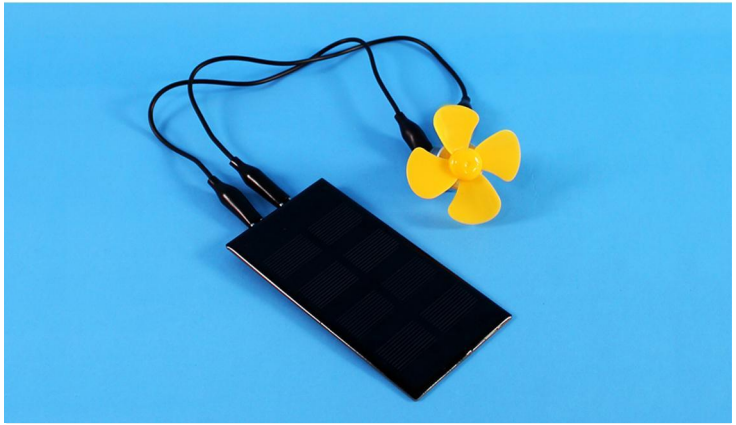

How are the diagram of the system and the simple system that we built **similar**?

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Simple Electrical System

Part	sun	solar panel	wire	motor with fan
Function	to provide energy to the system	to send electrical energy throughout the system	to move electrical energy from one place to another	to use electrical energy to run

_____ System

Part				
Function				

Function of both systems: _____

Simple Electrical System

Part	sun	solar panel	wire	motor with fan
Function	to provide energy to the system	to send electrical energy throughout the system	to move electrical energy from one place to another	to use electrical energy to run

Electrical Energy System

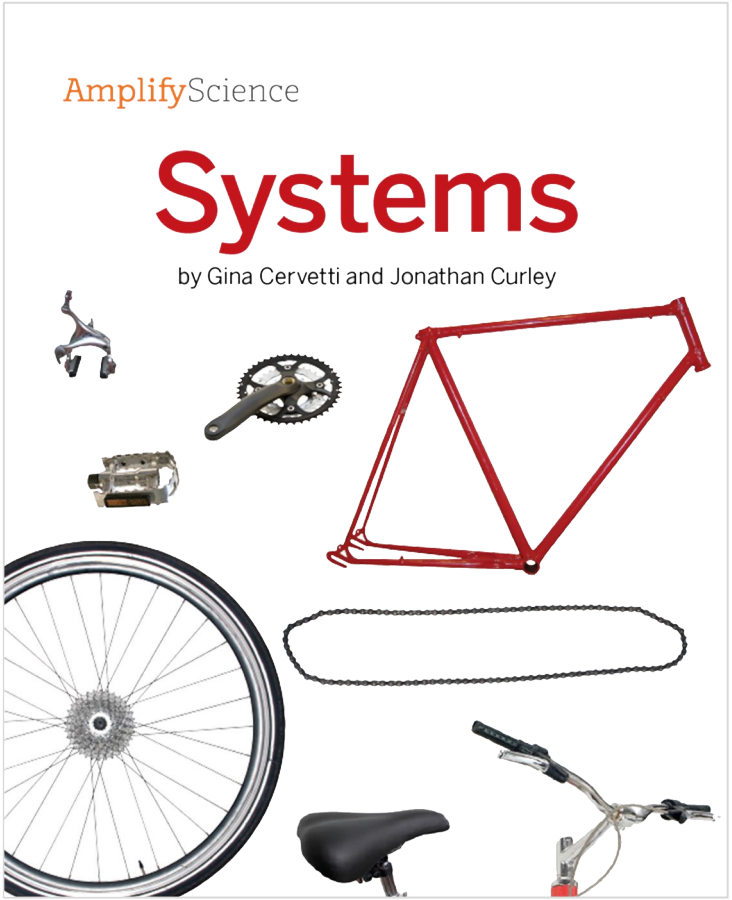
Part	?	power plant	wires (the grid)	devices in homes, etc.
Function		to send electrical energy throughout the system	to move electrical energy from one place to another	to use electrical energy to run

Function of both systems: to provide electricity to power devices

20 MIN

Activity 3

Parts and Functions



You'll use the *Systems* book again with your reading partners and fill out tables for different systems in the book.

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Contents

Turn to page 3.

The **table of contents** lists sections of the book. We can use it to find out what page a section starts on.

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Name: _____ Date: _____

Parts of a System

1. With your partner, look through *Systems* and choose one of the systems described in the book.
2. Write the name of the system and its function on the two lines below.
3. Record each part of the system in the left column of the table below.
4. Beside each part, record the part's function.
5. Use as many rows as you need.

_____ System

Function: _____

Part	Function

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Turn to page 10, Parts of a System, in your notebooks.

Choose a system from the book *Systems* and **record its parts and functions**.

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ON-THE-FLY

Name: _____ Date: _____

Parts of a System

1. With your partner, look through ***Systems*** and choose one of the systems described in the book.
2. Write the name of the system and its function on the two lines below.
3. Record each part of the system in the left column of the table below.
4. Beside each part, record the part's function.
5. Use as many rows as you need.

_____ System

Function: _____

Part	Function

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How are the systems we read about **similar**?

What do they have **in common**?

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We have been investigating the question: ***What is a system?***

What do you think a system is now?

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Key Concept

A system is a collection of interacting parts that work together. Each part in the system plays a role to perform an overall system function.

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Vocabulary

system

a group of parts that work together

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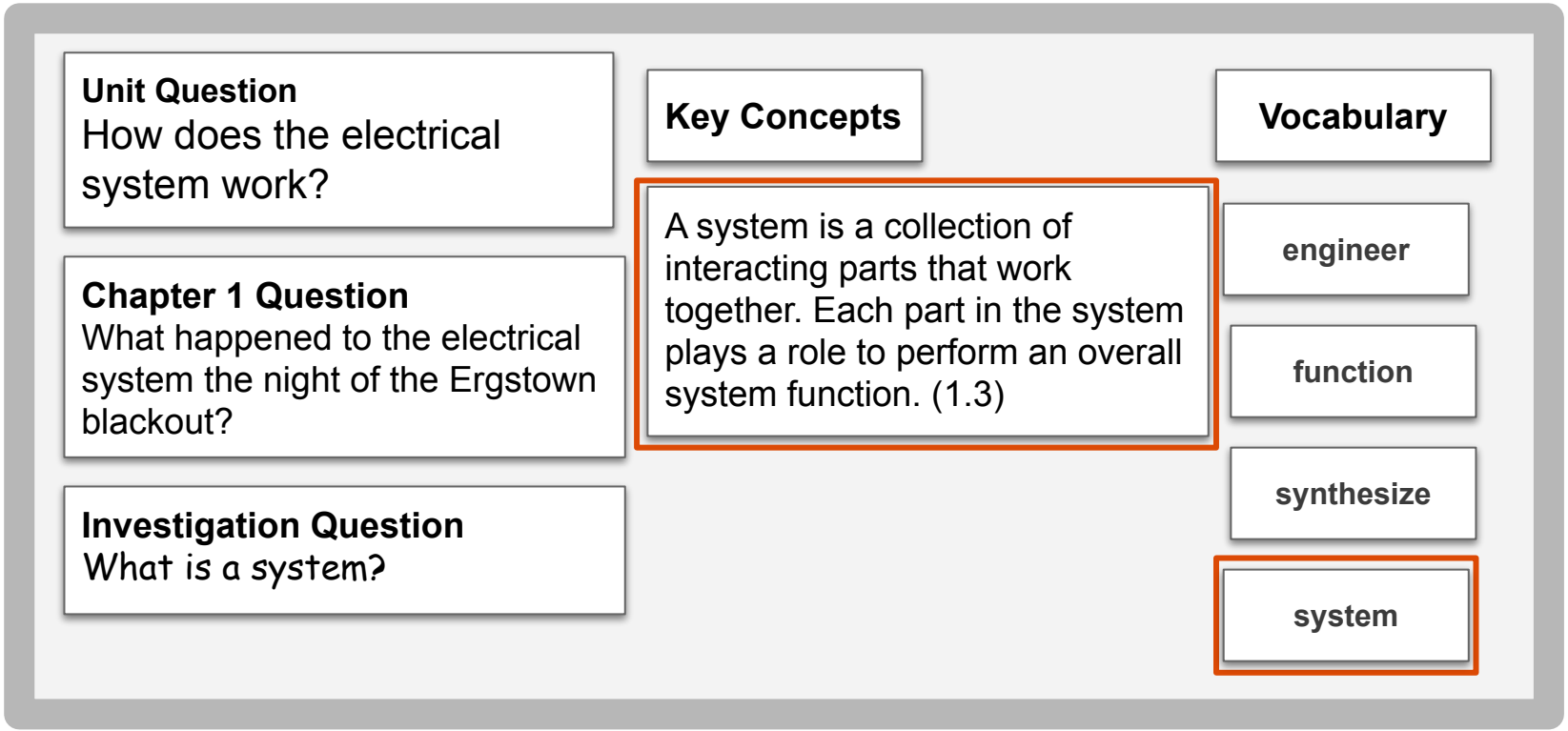
Energy Conversions Classroom Wall



Amplify.

End of Lesson

THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

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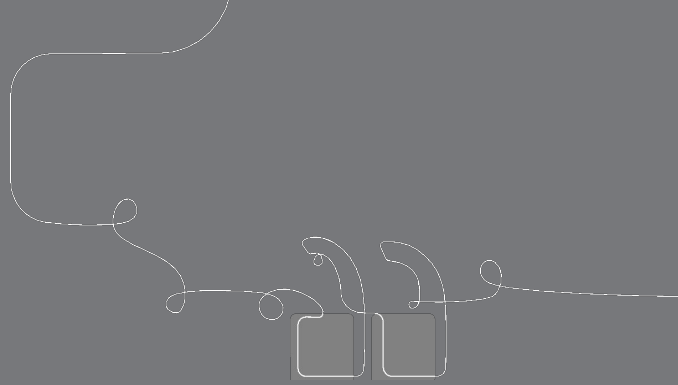
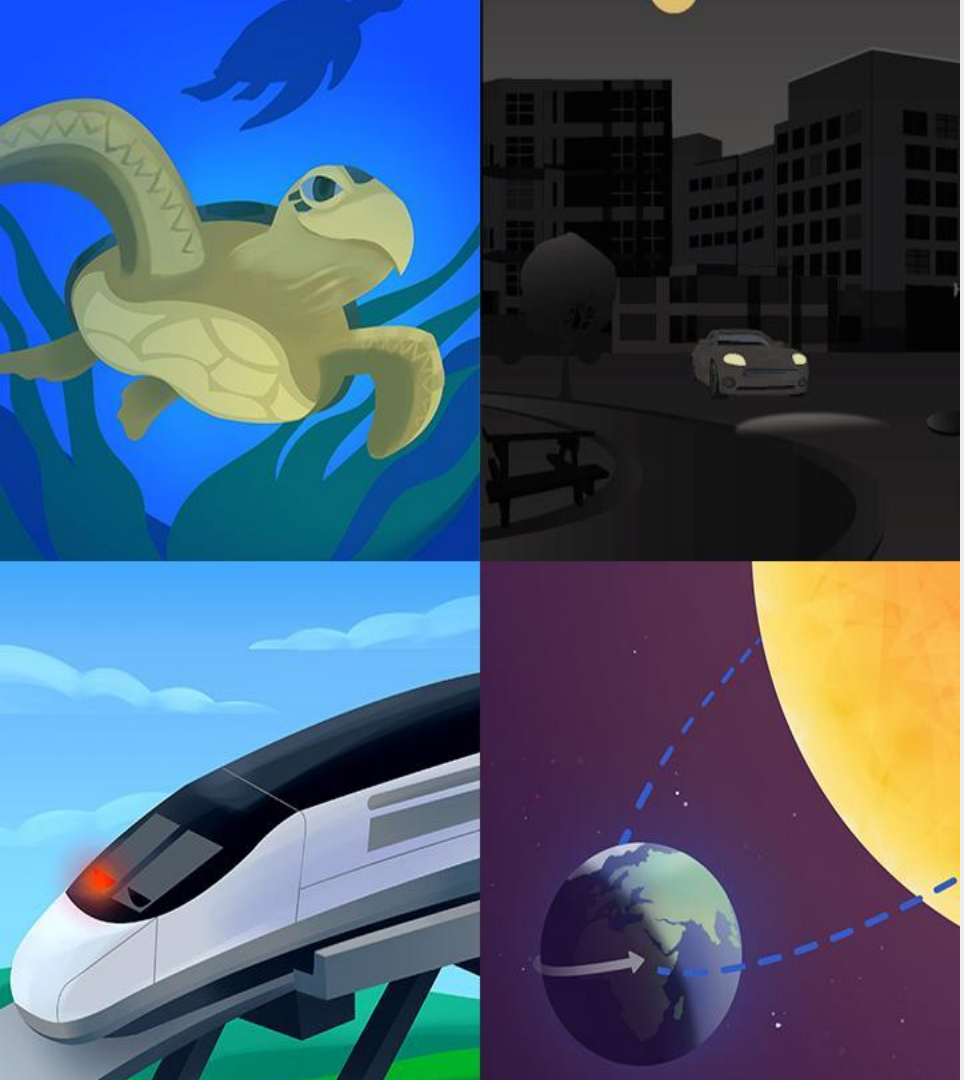
Questions?

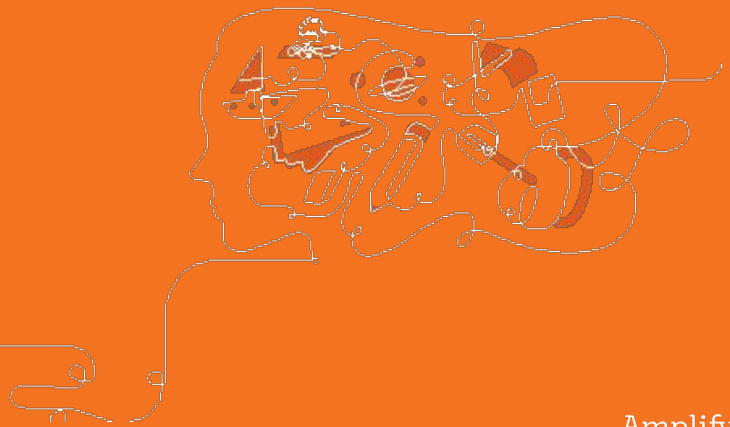




Plan for the day

- Introduction and Framing
- Teaching and learning in Amplify Science
- **Supporting instruction**
- Supporting implementation
- Closing

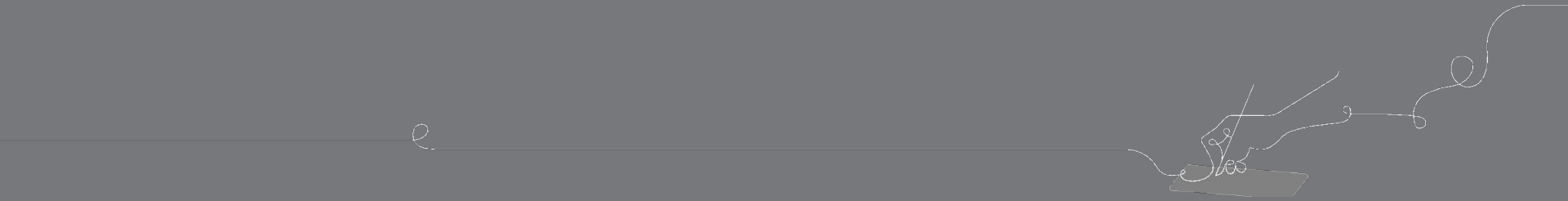
Supporting instruction



Supporting Instruction

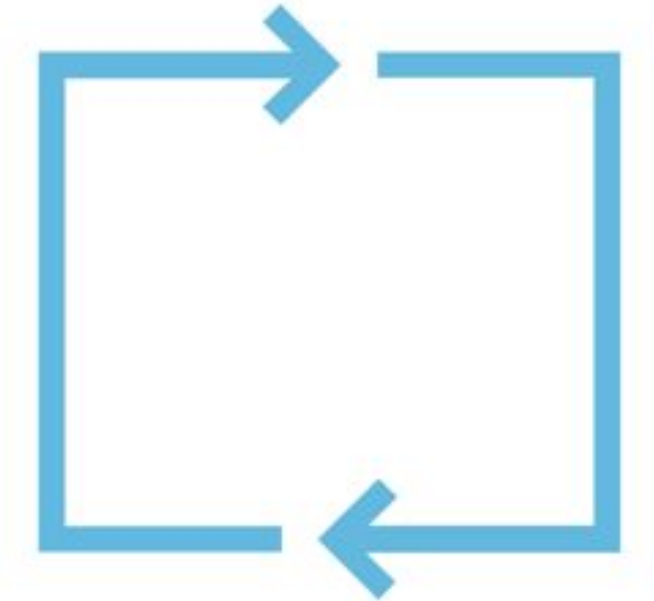
In this section you will learn:

- ❏ Amplify Science's multimodal approach
- ❏ Assessment System



Multimodal learning

Gathering evidence over multiple lessons

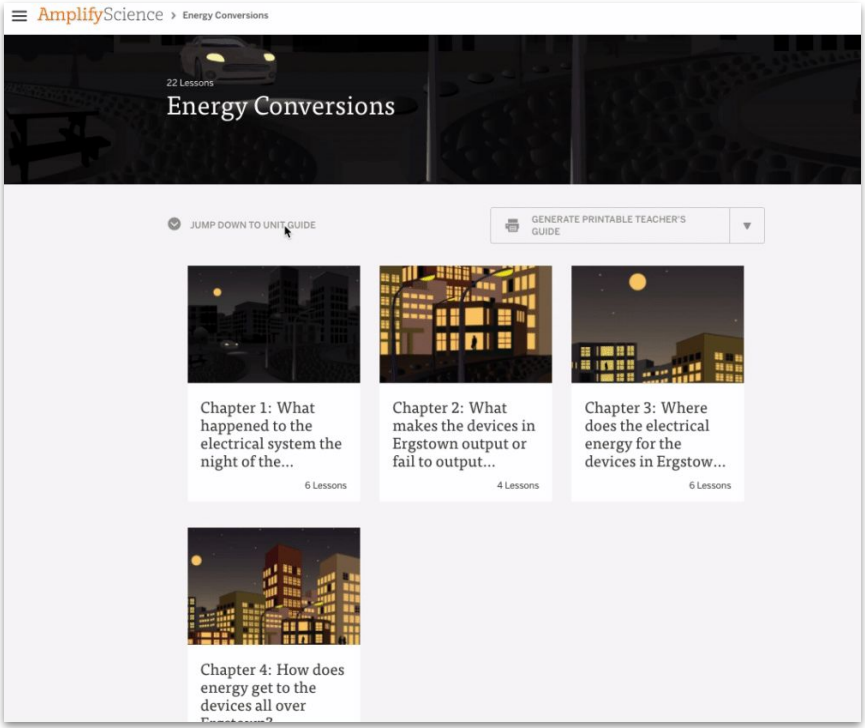


Do,
Talk,
Read,
Write,
Visualize

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.



Unit Guide

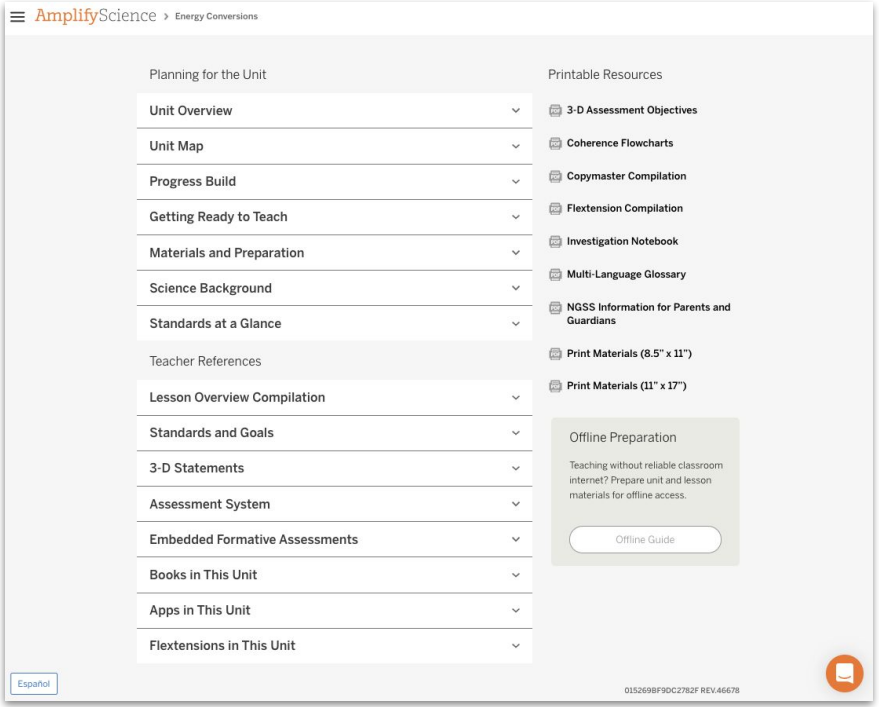
Key resources

Progress Build: Summary of how science concepts build through the unit

Science Background: Adult-level summary of unit science content

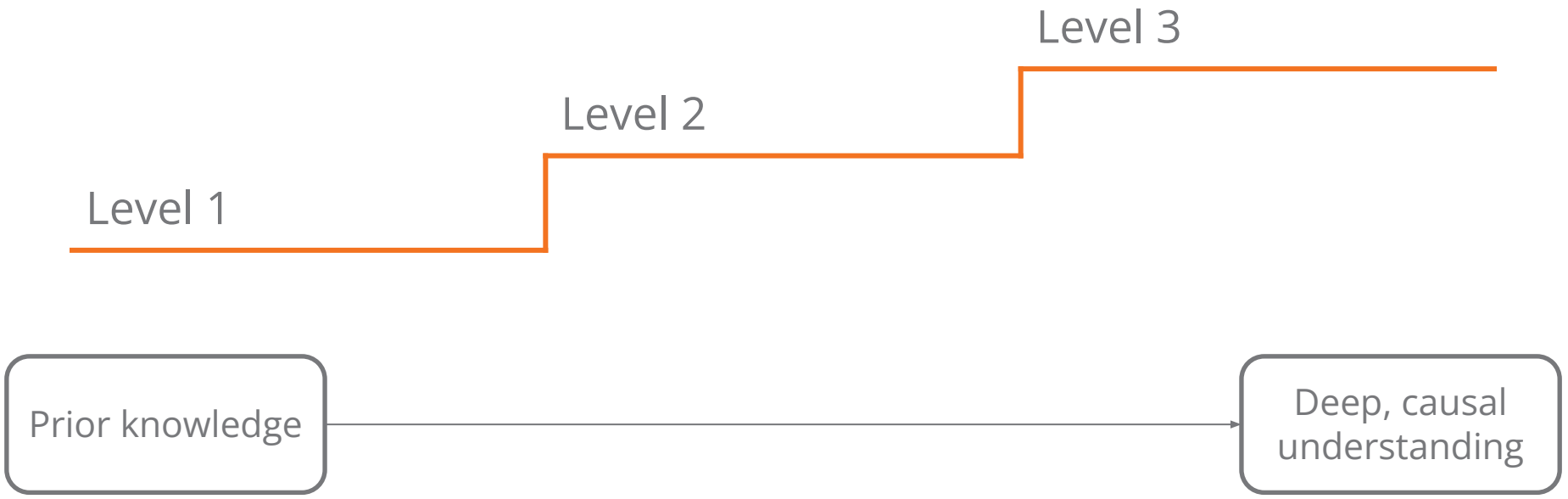
Assessment System: Summary of Assessment System components and list of all unit assessments

Apps in This Unit: Introduction to digital tools in the unit (grades 2-5)

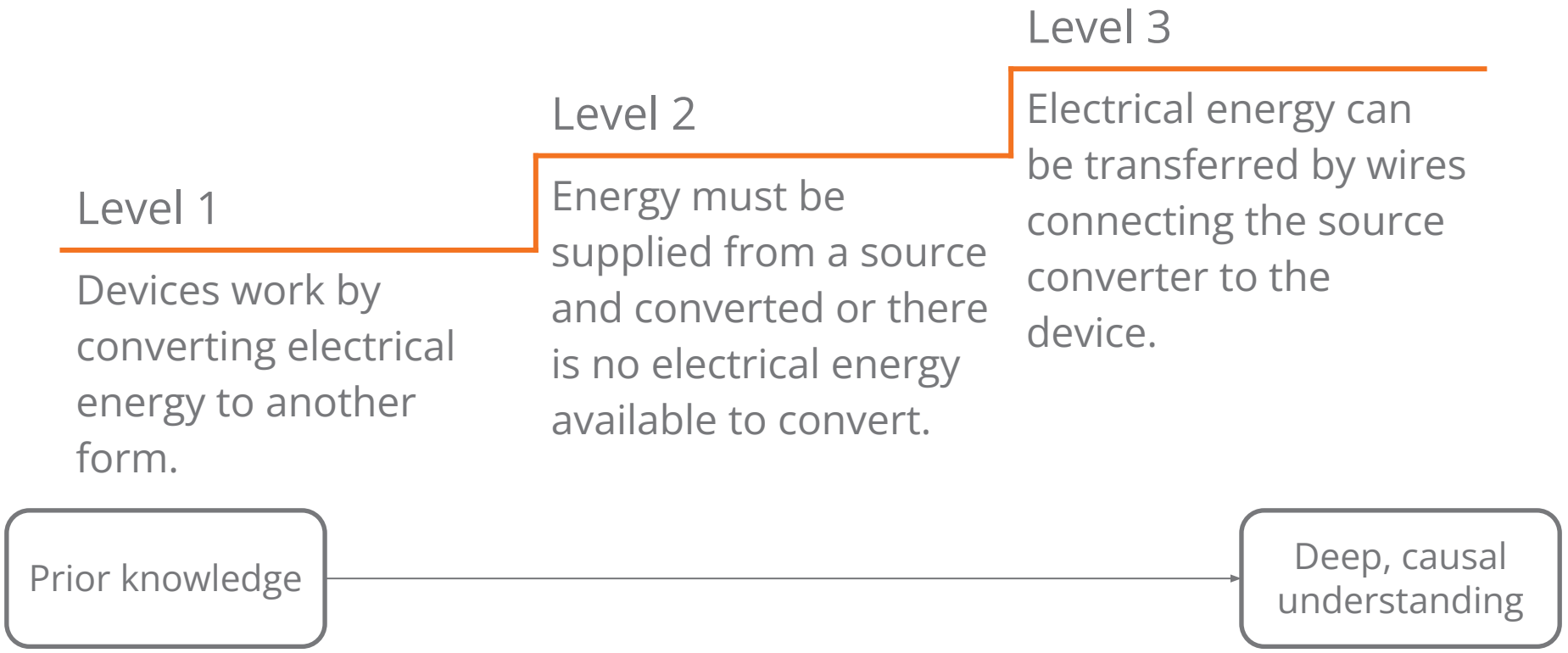


Progress Build

A unit-specific learning progression



Energy Conversions Progress Build



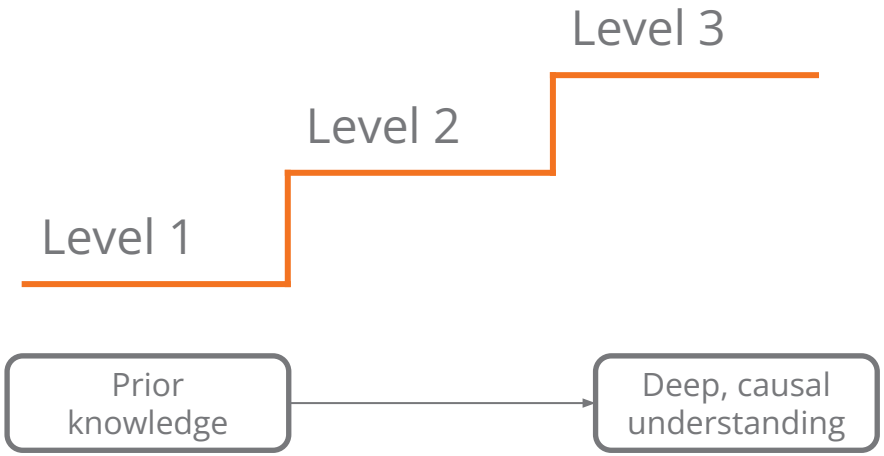
Assessment System

Pgs. 18-21

The Amplify Science Assessment System is built around the Progress Build.

Frequent formative assessments provide insight into students' progress along the Progress Build.

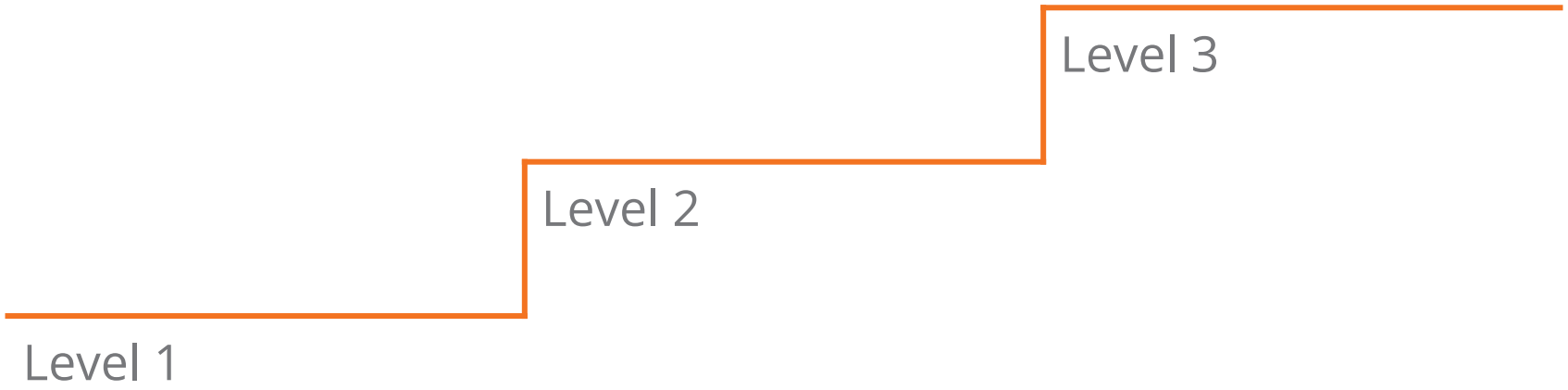
The summative End-of-Unit Assessment evaluates which level(s) of the Progress Build students understand at the end of the unit.



Pre- and End-of-Unit Assessment

Pre-Unit Assessment

End-of-Unit Assessment



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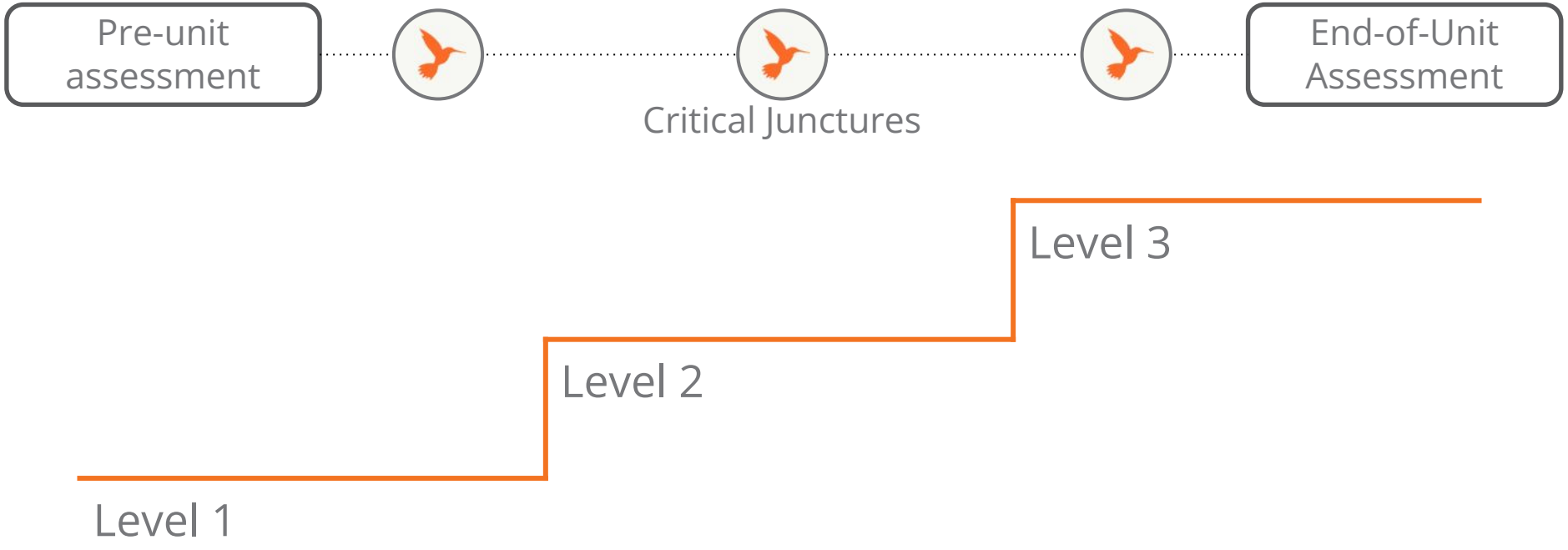
Critical Juncture Assessments



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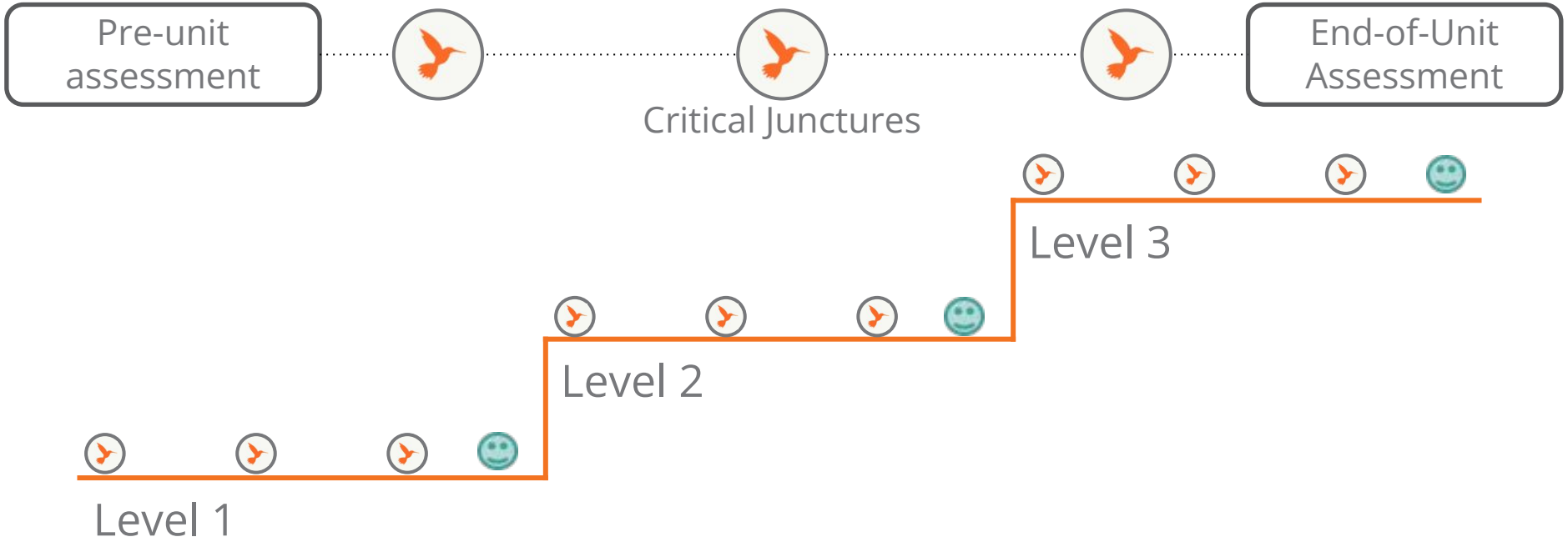
On-the-Fly Assessments and Student Self-Assessments



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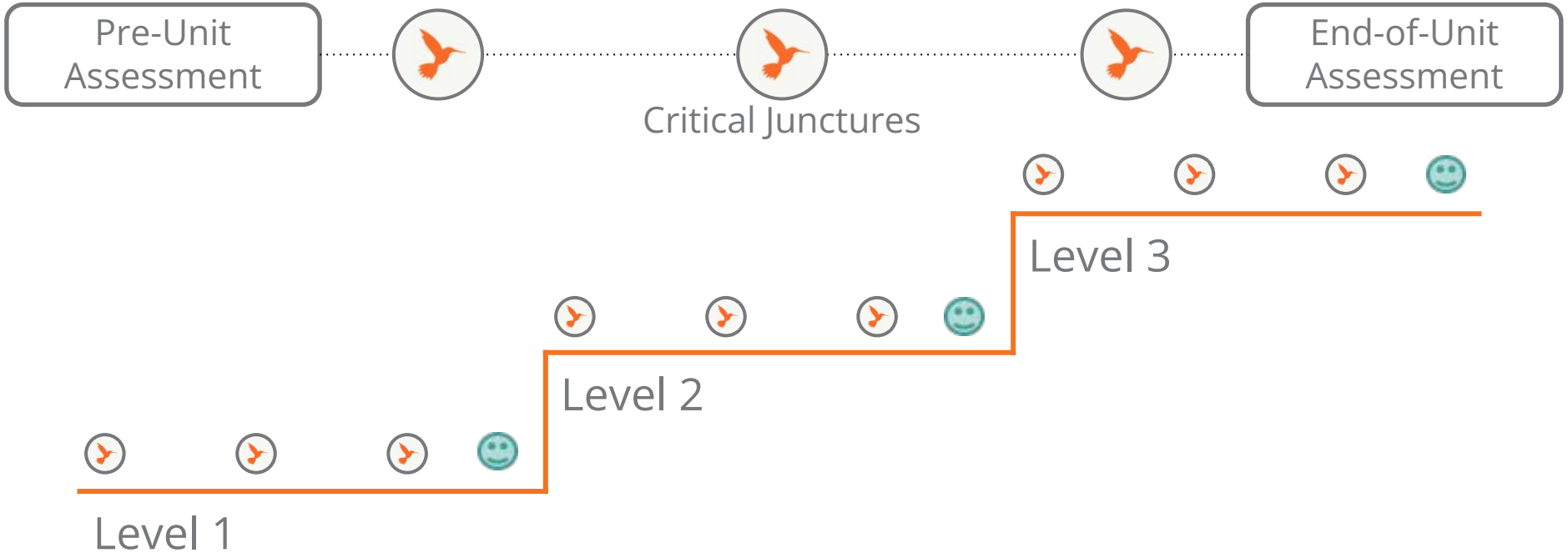
Assessment System



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Assessment System

In the first year with Amplify Science, Teachers don’t need to collect data for every assessment in the Assessment System.

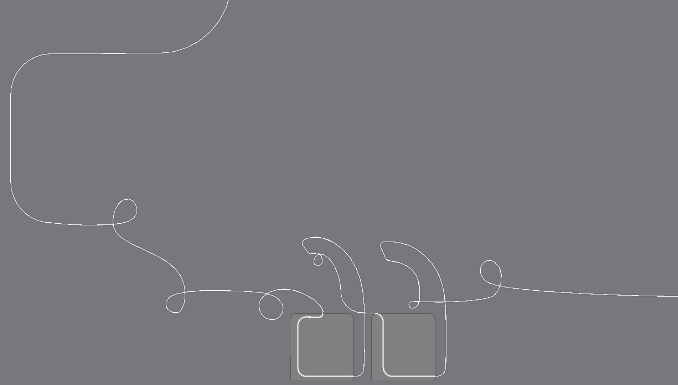
Choose which assessments you want to prioritize, and as they become more comfortable teaching the program, they can start collecting more data.

Assessment System Reflection

Consider which type of assessment and supports you would like to explore:

- Pre-Unit Assessment
- On-the-Fly Assessment
- Critical Juncture
- End-of-Unit Assessment

Questions?



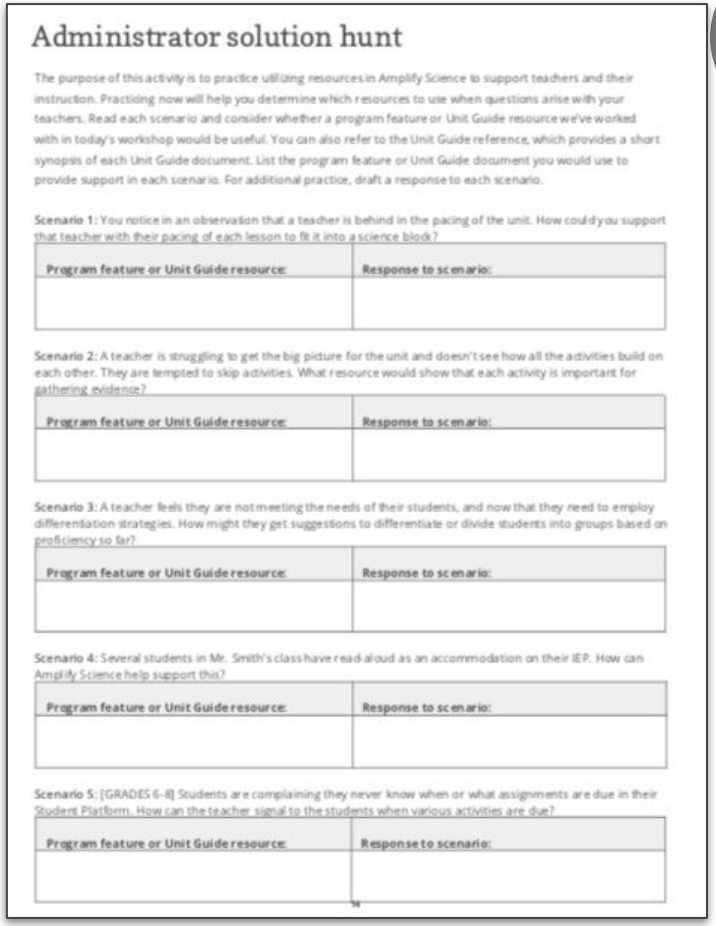
Observing Amplify Science

Amplify Science involves less...	Amplify Science involves more...
Teachers providing information to the whole class	Students discussing and synthesizing ideas in small and whole group
Teachers posing questions with only one right answer	Students solving problems through multimodal learning
Students reading textbooks and answering questions at the end of the chapter	Gathering evidence from scientific text
Rote memorization of facts and terminology	Purposeful construction of key concepts and uncovering vocabulary through exploration
Pre-planned labs to confirm already “found” science	Students engage in authentic hands-on learning to figure out the phenomenon
Technology use is led by the teacher to present information.	Students navigate digital tools to collect firsthand data and visualize models.

Administrator solution hunt

Consider 5 challenges that teachers may face, you may want to use the following resources to craft your response:

- Unit Guide
- Lesson level resources
- Instructional Guide
- Printable Resources



Administrator solution hunt

The purpose of this activity is to practice utilizing resources in Amplify Science to support teachers and their instruction. Practicing now will help you determine which resources to use when questions arise with your teachers. Read each scenario and consider whether a program feature or Unit Guide resource we've worked with in today's workshop would be useful. You can also refer to the Unit Guide reference, which provides a short synopsis of each Unit Guide document. List the program feature or Unit Guide document you would use to provide support in each scenario. For additional practice, draft a response to each scenario.

Scenario 1: You notice in an observation that a teacher is behind in the pacing of the unit. How could you support that teacher with their pacing of each lesson to fit it into a science block?

Program feature or Unit Guide resource:	Response to scenario:

Scenario 2: A teacher is struggling to get the big picture for the unit and doesn't see how all the activities build on each other. They are tempted to skip activities. What resource would show that each activity is important for gathering evidence?

Program feature or Unit Guide resource:	Response to scenario:

Scenario 3: A teacher feels they are not meeting the needs of their students, and now that they need to employ differentiation strategies. How might they get suggestions to differentiate or divide students into groups based on proficiency so far?

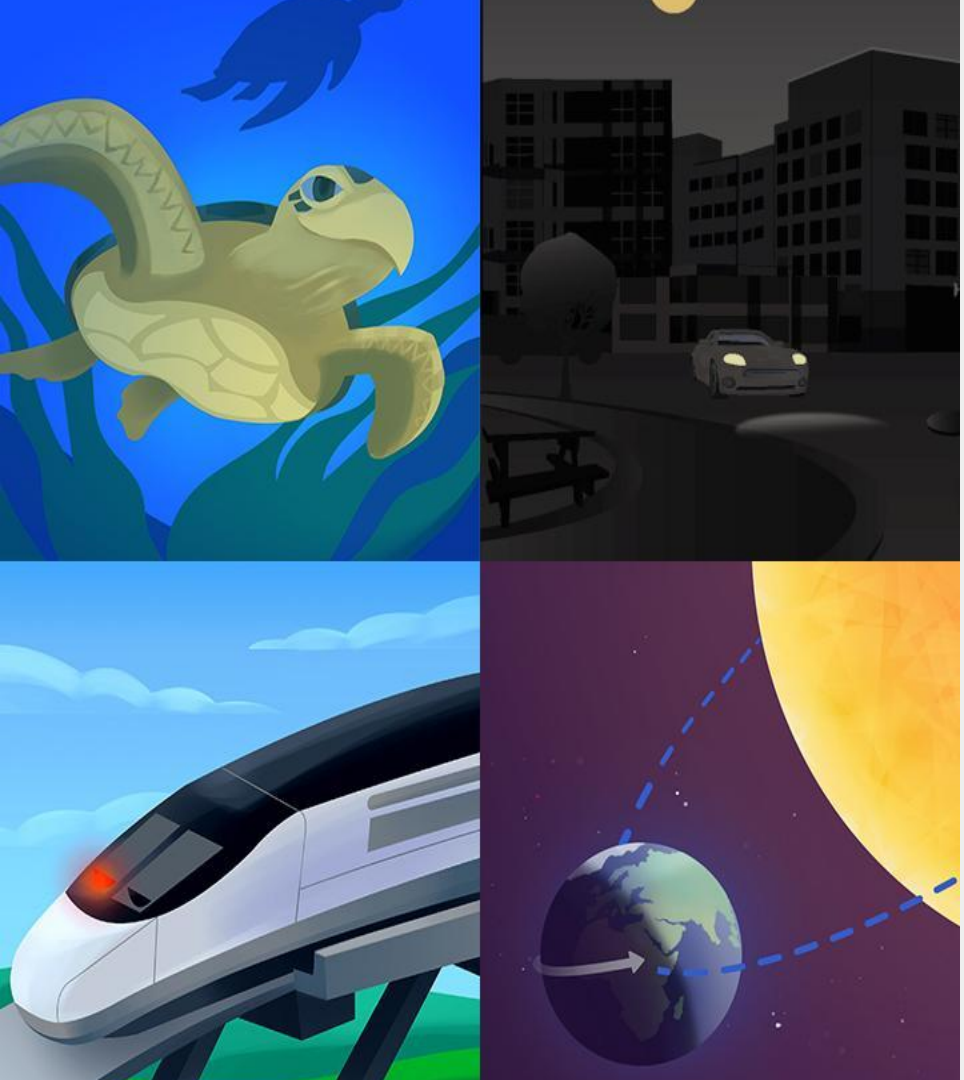
Program feature or Unit Guide resource:	Response to scenario:

Scenario 4: Several students in Mr. Smith's class have read-aloud as an accommodation on their IEP. How can Amplify Science help support this?

Program feature or Unit Guide resource:	Response to scenario:

Scenario 5: [GRADES 6-8] Students are complaining they never know when or what assignments are due in their Student Platform. How can the teacher signal to the students when various activities are due?

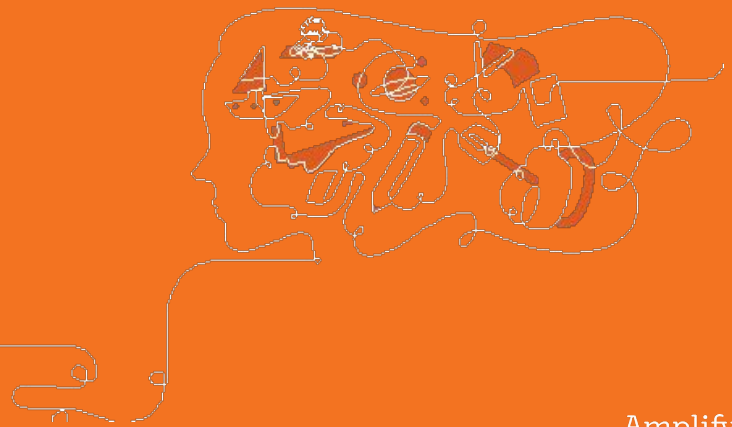
Program feature or Unit Guide resource:	Response to scenario:



Plan for the day

- Introduction and Framing
- Teaching and learning in Amplify Science
- Supporting instruction
- **Supporting implementation**
- Closing

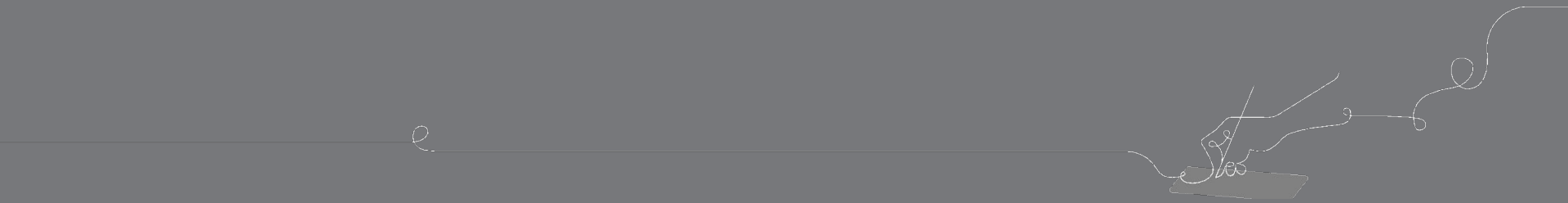
Supporting implementation



Supporting Implementation

In this section you will explore:

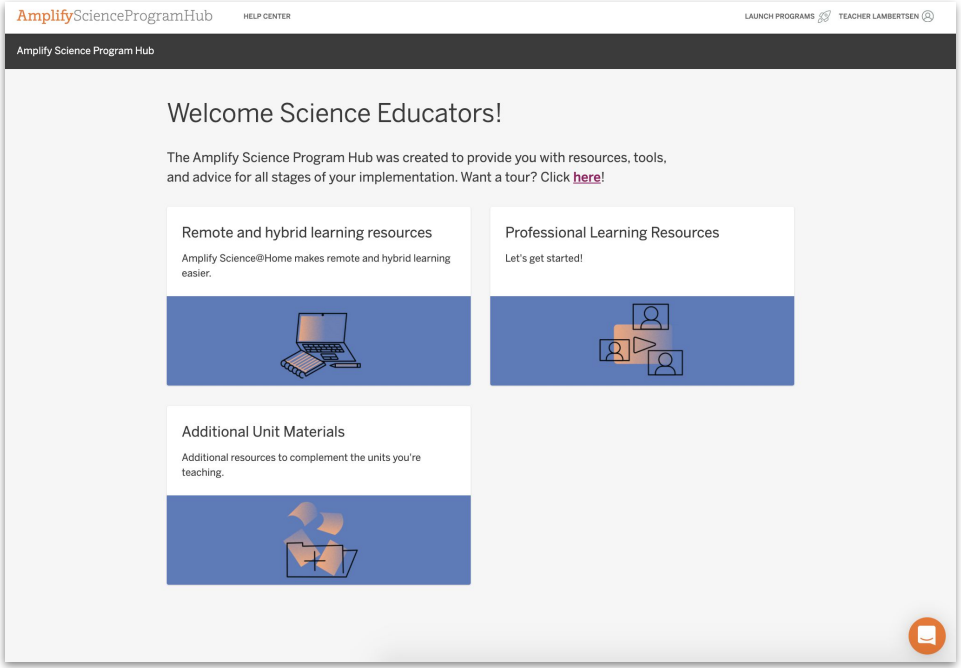
- ❑ Program Hub
- ❑ Setting priorities for implementation
- ❑ Specific scenario support

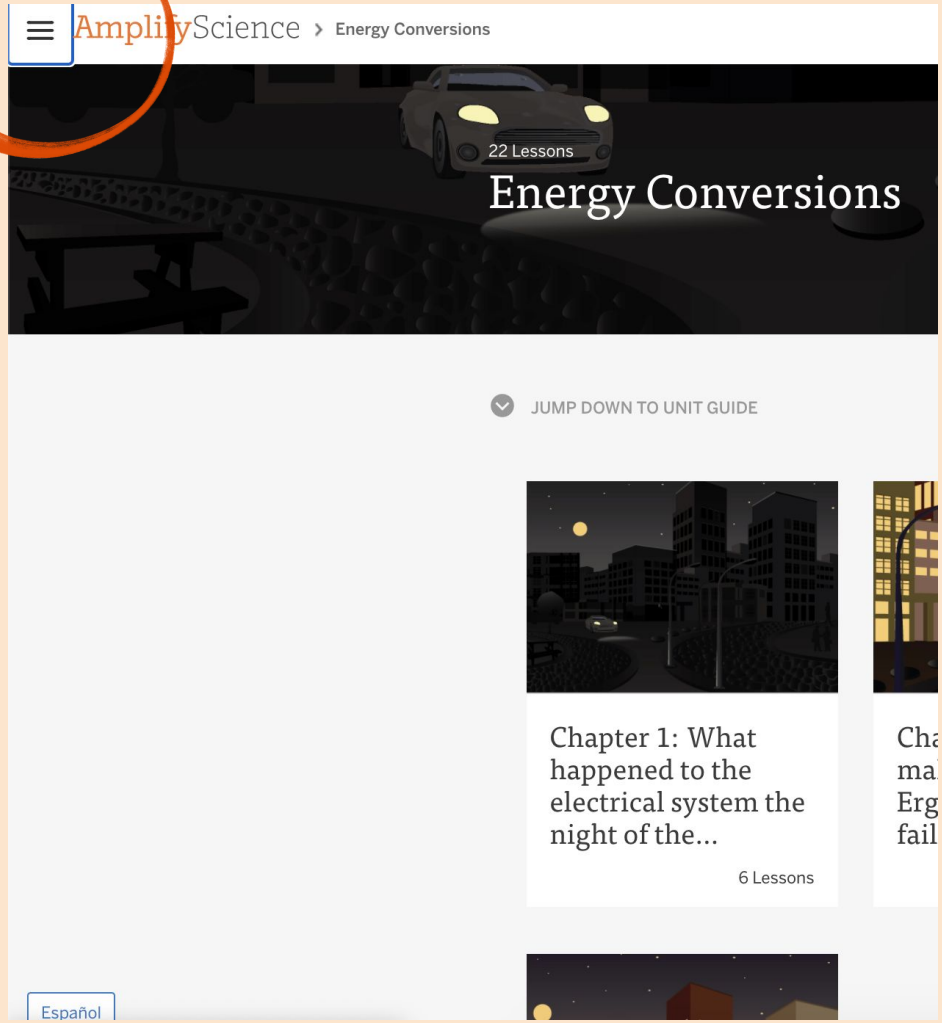


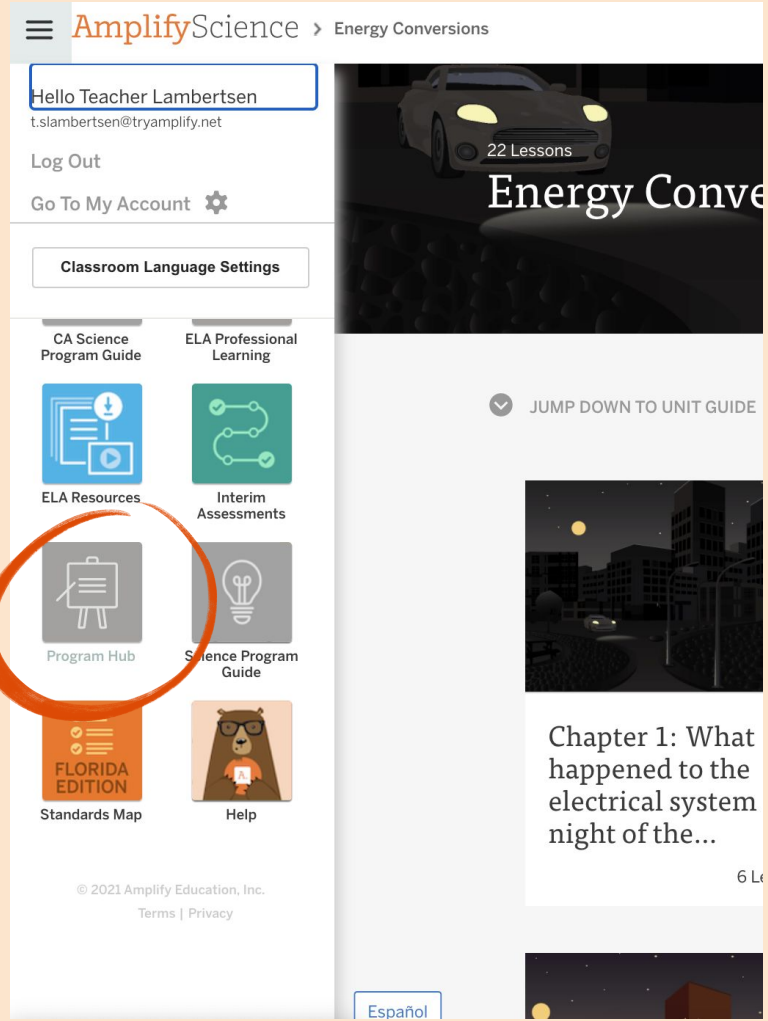
Program Hub

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.




AmplifyScience › Energy Conversions
22 Lessons
Energy Conversions
JUMP DOWN TO UNIT GUIDE
Chapter 1: What happened to the electrical system the night of the...
6 Lessons
Español


AmplifyScience › Energy Conversions
Hello Teacher Lambertsen
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Log Out
Go To My Account
Classroom Language Settings
CA Science Program Guide
ELA Professional Learning
ELA Resources
Interim Assessments
Program Hub
Science Program Guide
FLORIDA EDITION
Standards Map
Help
© 2021 Amplify Education, Inc.
Terms | Privacy
22 Lessons
Energy Conve
JUMP DOWN TO UNIT GUIDE
Chapter 1: What happened to the electrical system night of the...
Español

AmplifyScienceProgramHub HELP CENTER LAUNCH PROGRAMS TEACHER LAMBERTSEN

Amplify Science Program Hub

Welcome Science Educators!

The Amplify Science Program Hub was created to provide you with resources, tools, and advice for all stages of your implementation. Want a tour? Click here!

Remote and hybrid learning resources

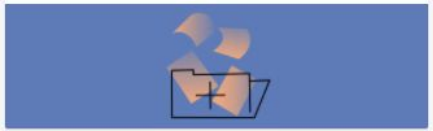
Amplify Science@Home makes remote and hybrid learning easier.

Professional Learning Resources

Let's get started!

Additional Unit Materials

Additional resources to complement the units you're teaching.



AmplifyScienceProgramHub HELP CENTER

Amplify Science Program Hub > Additional Unit Materials

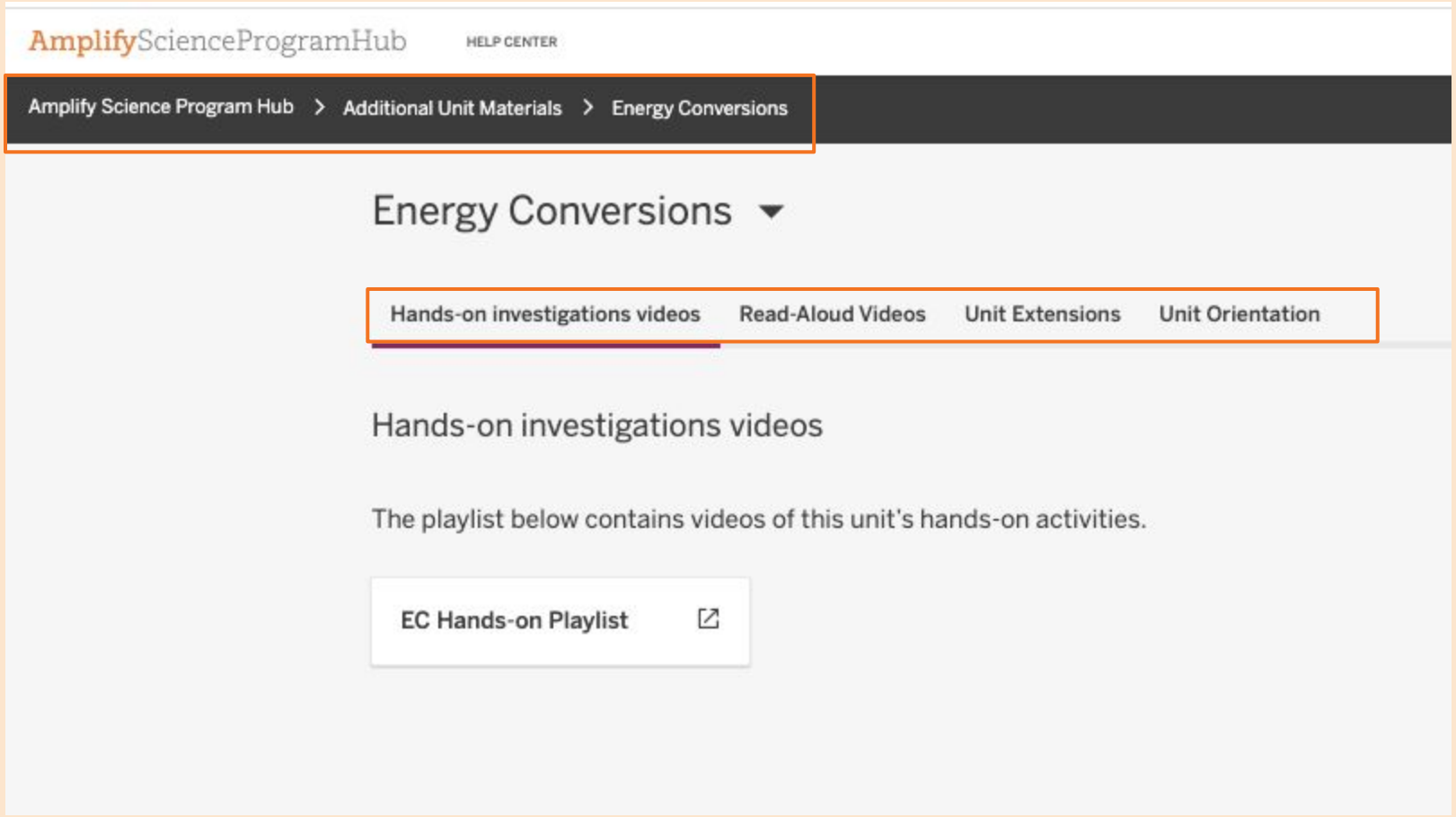
Additional Unit Materials

Grade Level Units

Grade TK

Grade K	Grade 6	NYC Grade 6
Grade 1	Grade 7	NYC Grade 7
Grade 2	Grade 8	NYC Grade 8
Grade 3	Earth	
Grade 4	Life	
Grade 5	Physical	

Transiti


AmplifyScienceProgramHub
HELP CENTER
Amplify Science Program Hub > Additional Unit Materials > Energy Conversions
Energy Conversions
Hands-on investigations videos
Read-Aloud Videos
Unit Extensions
Unit Orientation
Hands-on investigations videos
The playlist below contains videos of this unit's hands-on activities.
EC Hands-on Playlist

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Professional Learning Resources

This section will provide you with the knowledge and skills you need to start teaching with Amplify Science. You'll find **self-study** professional learning videos and resources.

Getting started

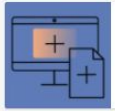
Planning

Videos and resources to help you plan

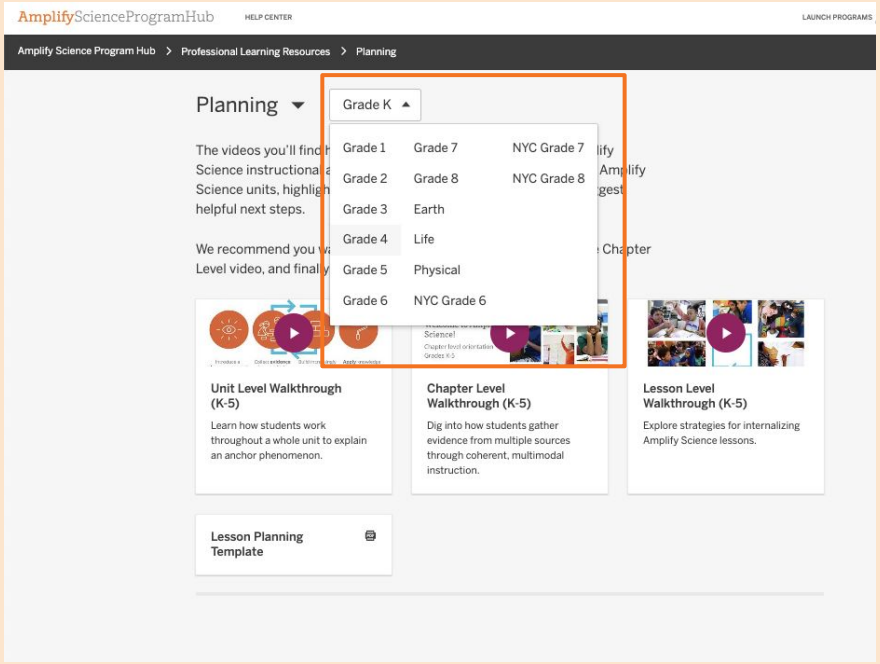
Assessment

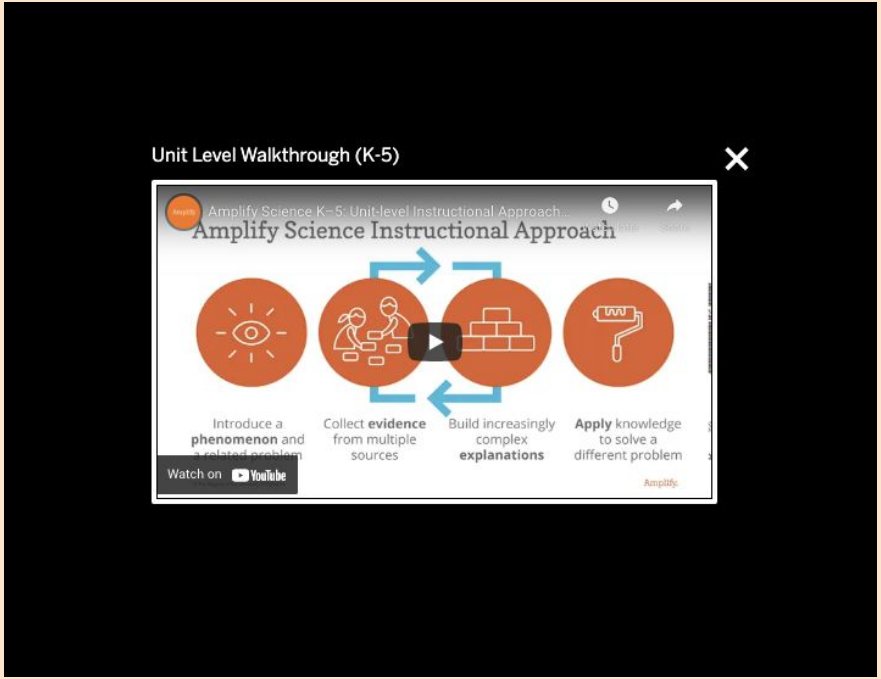
Student Assessments and Work

Unit Orientation



Additional Support

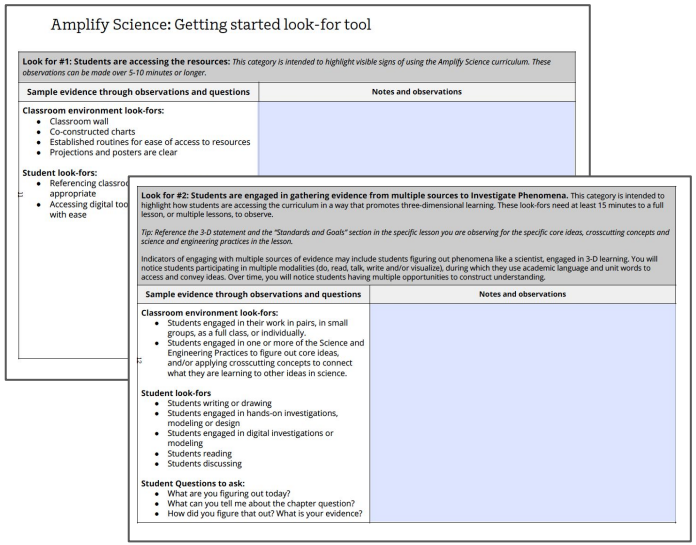

AmplifyScienceProgramHub
HELP CENTER
LAUNCH PROGRAMS
Amplify Science Program Hub > Professional Learning Resources > Planning
Planning
Grade K
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Grade 6
Grade 7
Grade 8
Earth
Life
Physical
NYC Grade 6
NYC Grade 7
NYC Grade 8
Unit Level Walkthrough (K-5)
Learn how students work throughout a whole unit to explain an anchor phenomenon.
Chapter Level Walkthrough (K-5)
Dig into how students gather evidence from multiple sources through coherent, multimodal instruction.
Lesson Level Walkthrough (K-5)
Explore strategies for internalizing Amplify Science lessons.
Lesson Planning Template


Unit Level Walkthrough (K-5)
Amplify Science K–5: Unit-level Instructional Approach...
Amplify Science Instructional Approach
Introduce a phenomenon and
Collect evidence from multiple sources
Build increasingly complex explanations
Apply knowledge to solve a different problem
Watch on YouTube

Additional resources to support implementation

Pgs. 23-28

Participant Notebook



Amplify Science: Getting started look-for tool

Look for #1: Students are accessing the resources: *This category is intended to highlight visible signs of using the Amplify Science curriculum. These observations can be made over 5-10 minutes or longer.*

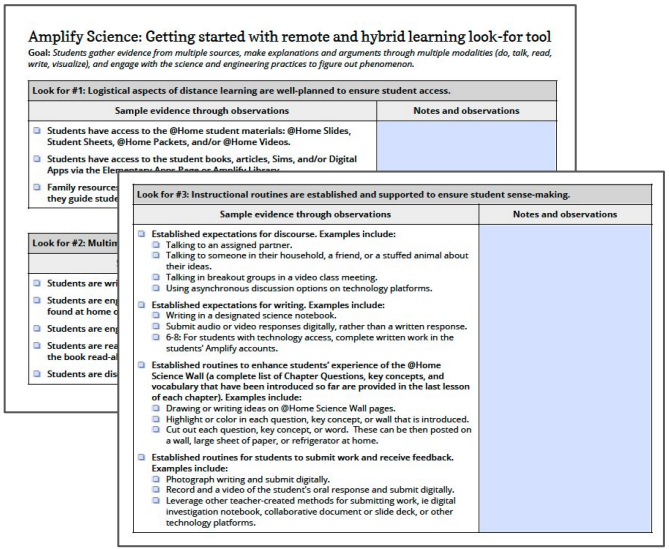
Sample evidence through observations and questions	Notes and observations
Classroom environment look-fors: • Classroom wall • Co-constructed charts • Established routines for ease of access to resources • Projections and posters are clear **Student look-fors:** • Referencing classroo… appropriate • Accessing digital too… with ease	

Look for #2: Students are engaged in gathering evidence from multiple sources to Investigate Phenomena. This category is intended to highlight how students are accessing the curriculum in a way that promotes three-dimensional learning. These look-fors need at least 15 minutes to a full lesson, or multiple lessons, to observe.

Tip: Reference the 3-D statement and the "Standards and Goals" section in the specific lesson you are observing for the specific core ideas, crosscutting concepts and science and engineering practices in the lesson.

Indicators of engaging with multiple sources of evidence may include students figuring out phenomena like a scientist, engaged in 3-D learning. You will notice students participating in multiple modalities (do, read, talk, write and/or visualize), during which they use academic language and unit words to access and convey ideas. Over time, you will notice students having multiple opportunities to construct understanding.

Sample evidence through observations and questions	Notes and observations
Classroom environment look-fors: • Students engaged in their work in pairs, in small groups, as a full class, or individually. • Students engaged in one or more of the Science and Engineering Practices to figure out core ideas, and/or applying crosscutting concepts to connect what they are learning to other ideas in science. **Student look-fors** • Students writing or drawing • Students engaged in hands-on investigations, modeling or design • Students engaged in digital investigations or modeling • Students reading • Students discussing **Student Questions to ask:** • What are you figuring out today? • What can you tell me about the chapter question? • How did you figure that out? What is your evidence?	



Amplify Science: Getting started with remote and hybrid learning look-for tool

Goal: *Students gather evidence from multiple sources, make explanations and arguments through multiple modalities (do, talk, read, write, visualize), and engage with the science and engineering practices to figure out phenomenon.*

Look for #1: Logistical aspects of distance learning are well-planned to ensure student access.

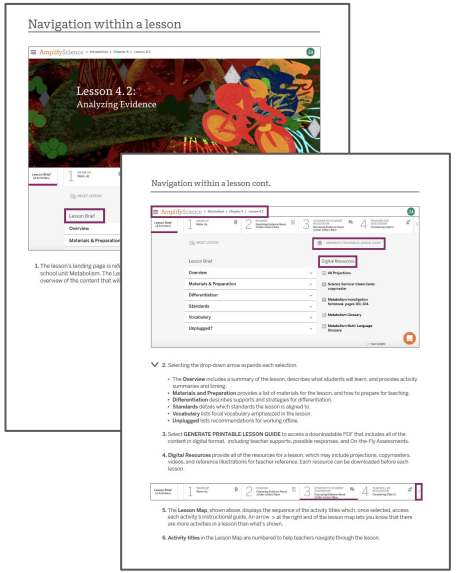
Sample evidence through observations	Notes and observations
☐ Students have access to the @Home student materials: @Home Slides, Student Sheets, @Home Packets, and/or @Home Videos. ☐ Students have access to the student books, articles, Sims, and/or Digital Apps via the Elementary Apps Page or Amplify Library. ☐ Family resources… they guide stude…	

Look for #2: Multim…

☐ Students are wr… ☐ Students are eng… found at home c… ☐ Students are eng… ☐ Students are rea… the book read-al… ☐ Students are dis…	

Look for #3: Instructional routines are established and supported to ensure student sense-making.

Sample evidence through observations	Notes and observations
☐ **Established expectations for discourse. Examples include:** ☐ Talking to an assigned partner. ☐ Talking to someone in their household, a friend, or a stuffed animal about their ideas. ☐ Talking in breakout groups in a video class meeting. ☐ Using asynchronous discussion options on technology platforms. ☐ **Established expectations for writing. Examples include:** ☐ Writing in a designated science notebook. ☐ Submit audio or video responses digitally, rather than a written response. ☐ 6-8: For students with technology access, complete written work in the students' Amplify accounts. ☐ **Established routines to enhance students' experience of the @Home Science Wall (a complete list of Chapter Questions, key concepts, and vocabulary that have been introduced so far are provided in the last lesson of each chapter). Examples include:** ☐ Drawing or writing ideas on @Home Science Wall pages. ☐ Highlight or color in each question, key concept, or wall that is introduced. ☐ Cut out each question, key concept, or word. These can be then posted on a wall, large sheet of paper, or refrigerator at home. ☐ **Established routines for students to submit work and receive feedback. Examples include:** ☐ Photograph writing and submit digitally. ☐ Record and a video of the student's oral response and submit digitally. ☐ Leverage other teacher-created methods for submitting work, ie digital investigation notebook, collaborative document or slide deck, or other technology platforms.	



Navigation within a lesson

1. The lesson's landing page is with… school unit Metabolism. The Le… overview of the content that wil…

Navigation within a lesson cont.

2. Selecting the drop-down arrow expands each selection.

- The **Overview** includes a summary of the lesson, describes what students will learn, and provides activity summaries and timing.
- **Materials and Preparation** provides a list of materials for the lesson, and how to prepare for teaching.
- **Differentiation** describes supports and strategies for differentiation.
- **Standards** details which standards this lesson is aligned to.
- **Vocabulary** lists focal vocabulary emphasized in the lesson.
- **Unplugged** lists recommendations for working offline.

3. Select **GENERATE PRINTABLE LESSON GUIDE** to access a downloadable PDF that includes all of the content in digital format, including teacher supports, possible responses, and On-the-Fly Assessments.

4. **Digital Resources** provide all of the resources for a lesson, which may include projections, copymasters, videos, and reference illustrations for teacher reference. Each resource can be downloaded before each lesson.

5. The **Lesson Map**, shown above, displays the sequence of the activity titles which, once selected, access each activity's instructional guide. An arrow > at the right and of the lesson map lets you know that there are more activities in a lesson than what's shown.

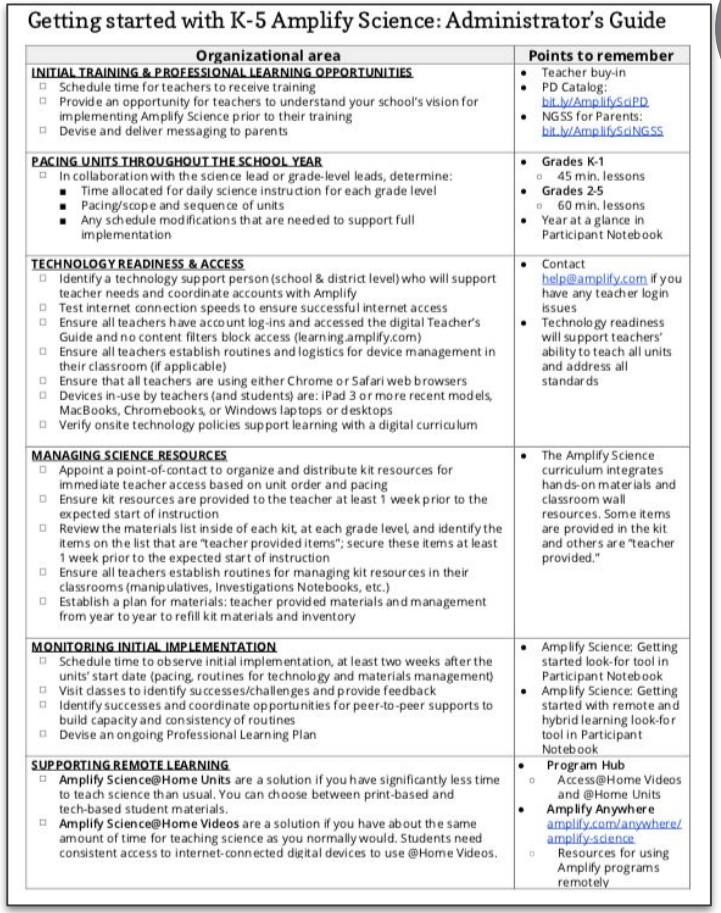
6. **Activity titles** in the Lesson Map are numbered to help teachers navigate through the lesson.

Getting started with K-5 Amplify Science: Administrator's Guide

Organizational area	Points to remember
INITIAL TRAINING & PROFESSIONAL LEARNING OPPORTUNITIES ☐ Schedule time for teachers to receive training ☐ Provide an opportunity for teachers to understand your school's vision for implementing Amplify Science prior to their training ☐ Devise and deliver messaging to parents	• Teacher buy-in • PD Catalog: bit.ly/AmplifySciPD • NGSS for Parents: bit.ly/AmplifySciNGSS
PACING UNITS THROUGHOUT THE SCHOOL YEAR ☐ In collaboration with the science lead or grade-level leads, determine: ▪ Time allocated for daily science instruction for each grade level ▪ Pacing/scope and sequence of units ▪ Any schedule modifications that are needed to support full implementation	• **Grades K-1** ○ 45 min. lessons • **Grades 2-5** ○ 60 min. lessons • Year at a glance in Participant Notebook
TECHNOLOGY READINESS & ACCESS ☐ Identify a technology support person (school & district level) who will support teacher needs and coordinate accounts with Amplify ☐ Test internet connection speeds to ensure successful internet access ☐ Ensure all teachers have account log-ins and accessed the digital Teacher's Guide and no content filters block access (learning.amplify.com) ☐ Ensure all teachers establish routines and logistics for device management in their classroom (if applicable) ☐ Ensure that all teachers are using either Chrome or Safari web browsers ☐ Devices in-use by teachers (and students) are: iPad 3 or more recent models, MacBooks, Chromebooks, or Windows laptops or desktops ☐ Verify onsite technology policies support learning with a digital curriculum	• Contact help@amplify.com if you have any teacher login issues • Technology readiness will support teachers' ability to teach all units and address all standards
MANAGING SCIENCE RESOURCES ☐ Appoint a point-of-contact to organize and distribute kit resources for immediate teacher access based on unit order and pacing ☐ Ensure kit resources are provided to the teacher at least 1 week prior to the expected start of instruction ☐ Review the materials list inside of each kit, at each grade level, and identify the items on the list that are "teacher provided items"; secure these items at least 1 week prior to the expected start of instruction ☐ Ensure all teachers establish routines for managing kit resources in their classrooms (manipulatives, Investigations Notebooks, etc.) ☐ Establish a plan for materials: teacher provided materials and management from year to year to refill kit materials and inventory	• The Amplify Science curriculum integrates hands-on materials and classroom wall resources. Some items are provided in the kit and others are "teacher provided."
MONITORING INITIAL IMPLEMENTATION ☐ Schedule time to observe initial implementation, at least two weeks after the units' start date (pacing, routines for technology and materials management) ☐ Visit classes to identify successes/challenges and provide feedback ☐ Identify successes and coordinate opportunities for peer-to-peer supports to build capacity and consistency of routines ☐ Devise an ongoing Professional Learning Plan	• Amplify Science: Getting started look-for tool in Participant Notebook • Amplify Science: Getting started with remote and hybrid learning look-for tool in Participant Notebook
SUPPORTING REMOTE LEARNING ☐ **Amplify Science@Home Units** are a solution if you have significantly less time to teach science than usual. You can choose between print-based and tech-based student materials. ☐ **Amplify Science@Home Videos** are a solution if you have about the same amount of time for teaching science as you normally would. Students need consistent access to internet-connected digital devices to use @Home Videos.	• **Program Hub** ○ Access@Home Videos and @Home Units • **Amplify Anywhere** amplify.com/anywhere/amplify-science ○ Resources for using Amplify programs remotely

What is your highest priority?

- Read through and rank each organizational area from 1 to 6:
  - 1 = Highest priority for my school/district
  - 6 = Lowest priority for my school/district



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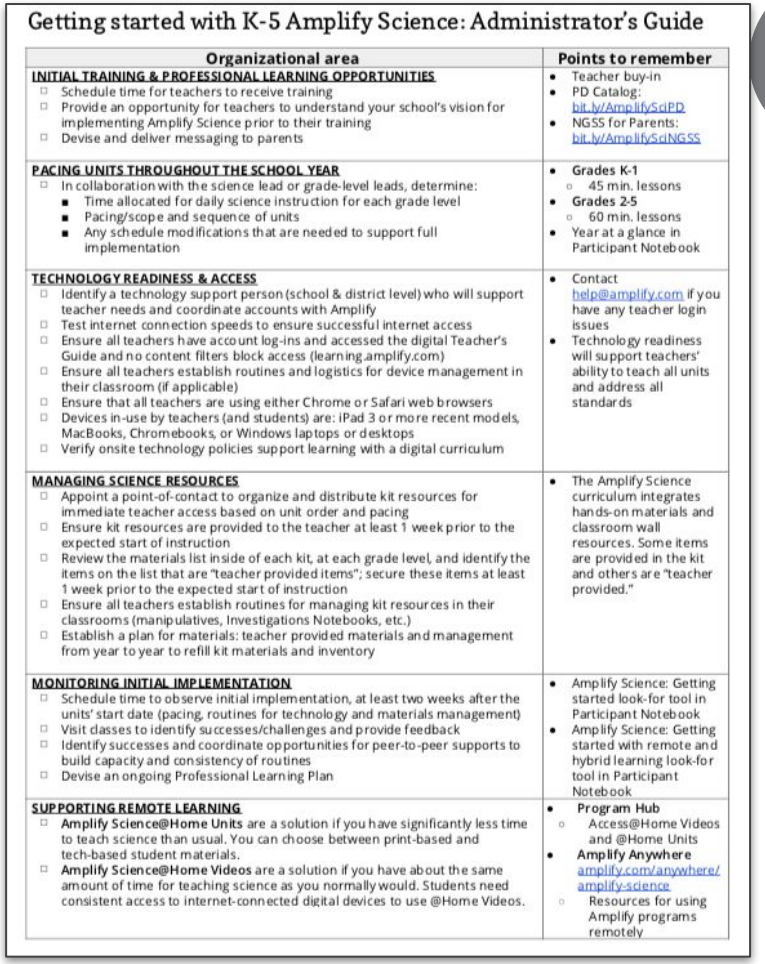
Capture your thinking!

After exploring your highest priority organizational area, what is your biggest takeaway or next step for a successful implementation of Amplify Science?



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Common implementation scenarios

Scenario 1

A teacher asks how Amplify Science aligns to our school/district goals.

Scenario 2

Since I don't have time in the school day to teach 60-minute lessons (45 for K-1). I will probably skip some parts. Some of the lessons seem to repeat ideas anyway.

Scenario 3

I have never taught this science content before. I am concerned that students will ask me questions I don't know the answers to.

Common implementation scenarios (cont.)

Scenario 4

I need a grade every week. There aren't enough gradable assignments.

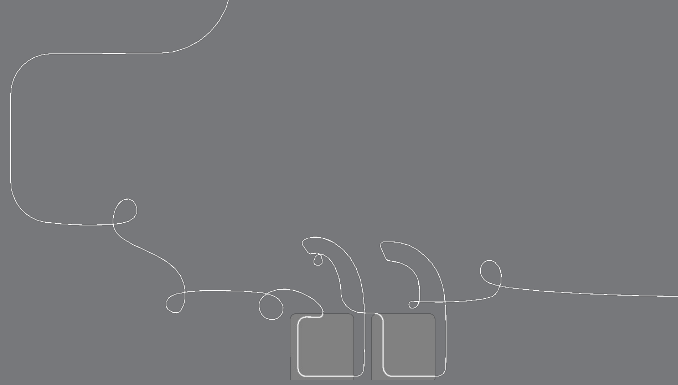
Scenario 5

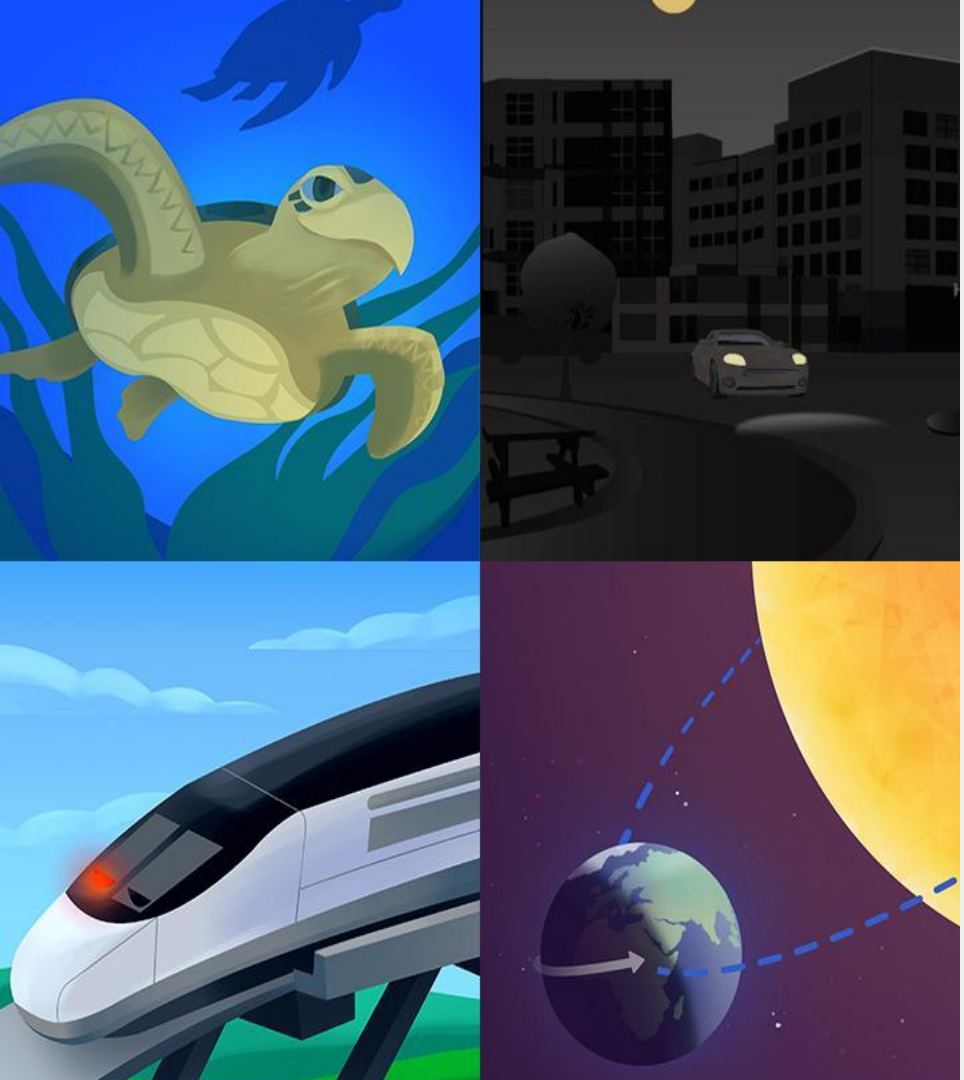
My students can't do this work, this is too hard for them. How am I supposed to get them to do the work?

Scenario 6

Our students need to focus on reading, how will this support our reading goals and literacy?

Questions?

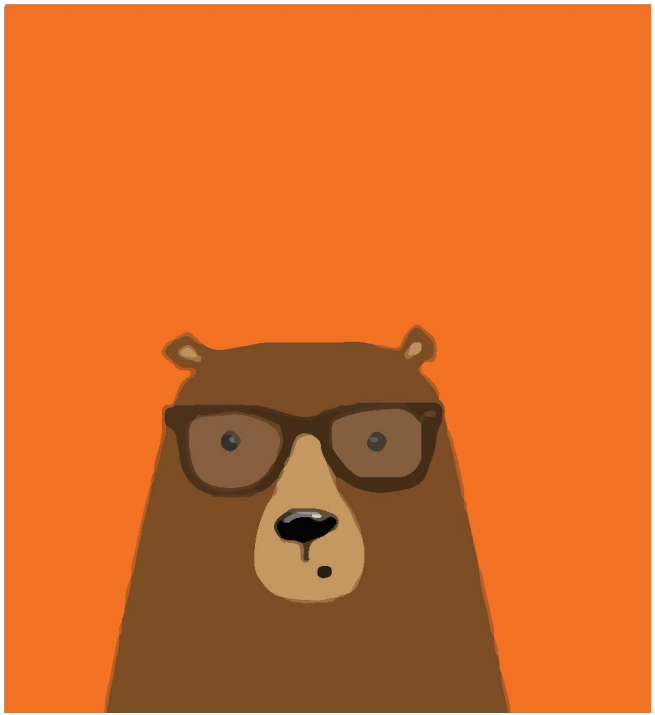




Plan for the day

- Introduction and Framing
- Teaching and learning in Amplify Science
- Supporting instruction
- Supporting implementation
- Closing

Additional Amplify resources



Program Guide

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

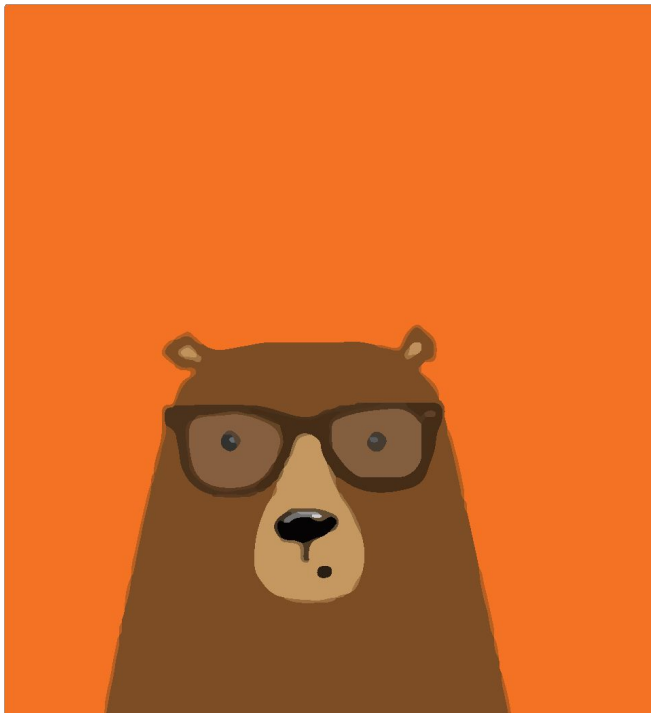
my.amplify.com/programguide

Amplify Help

Find lots of advice and answers from the Amplify team.

my.amplify.com/help

Additional Amplify resources



Professional learning

Offer additional professional development for your staff to support their instruction.

amplify.com/professional-development/

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.

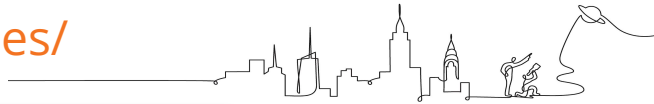
help@amplify.com

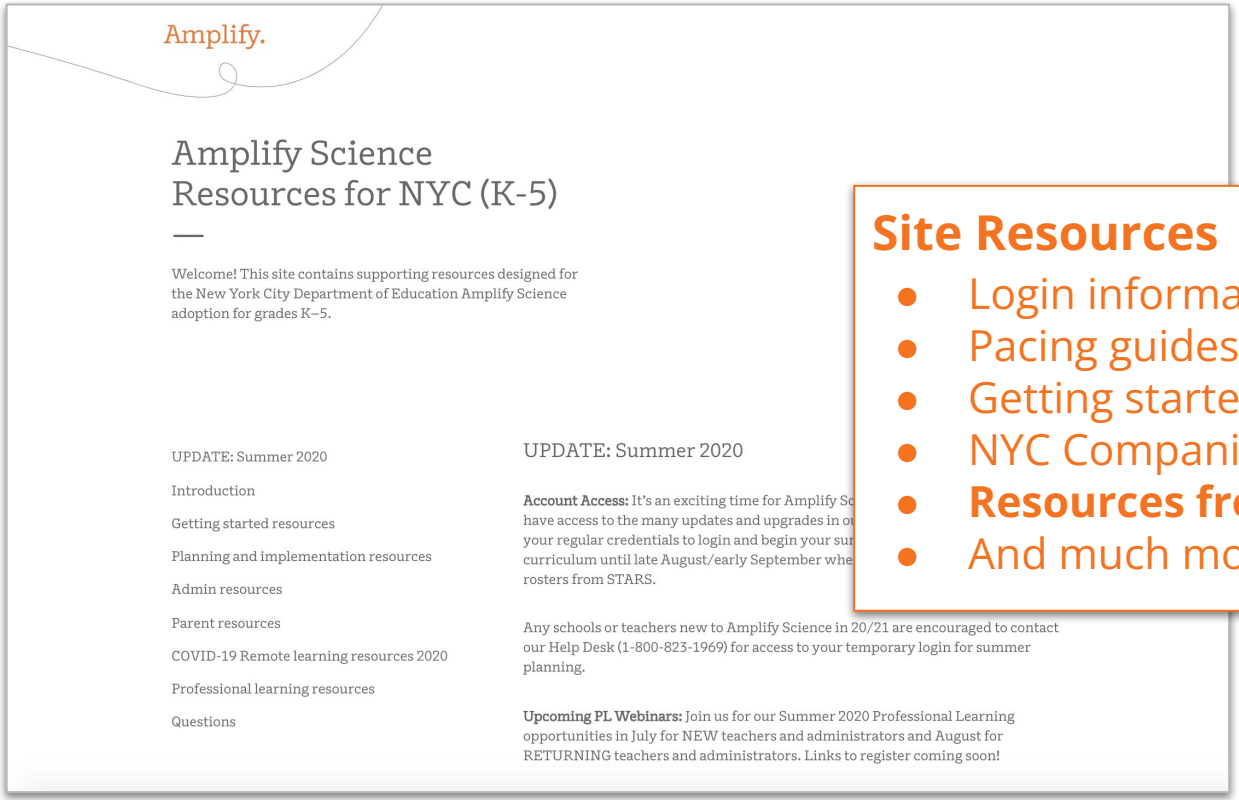
800-823-1969

Amplify Chat

New York City Resources Site

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

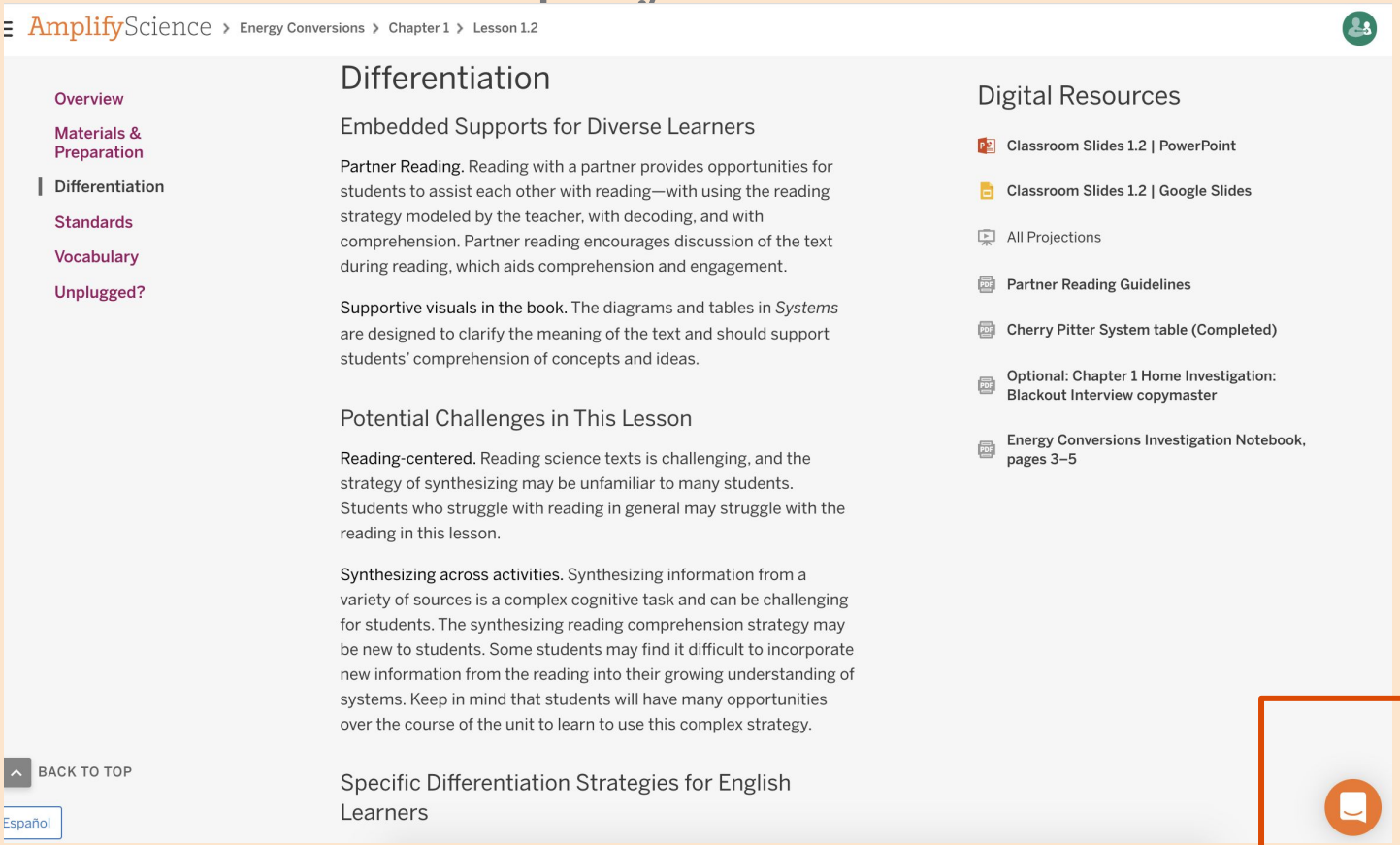




Site Resources

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

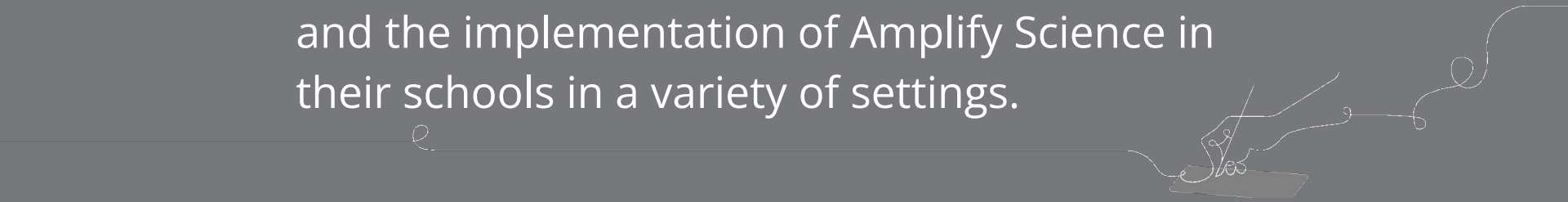
Hidden slide: Amplify Chat



Overarching goals

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

- ☑ Recognize how lessons engage students in the three dimensions of the NYSSLS through phenomenon-based instruction.
- ☑ Understand the ways in which administrators can support phenomenon-based instruction and the implementation of Amplify Science in their schools in a variety of settings.



Please provide feedback!

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

Presenter name:

xx

Please select K-5 grade band

Modality:

Remote

Amplify.

Thank you & be well!