

Amplify Science

Navigation Program Essentials / Guided Planning

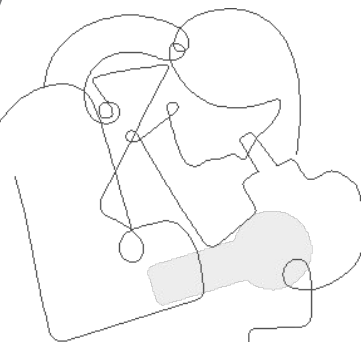
Grade 3, Unit 1: Balancing Forces

Part 1

School/District Name: LAUSD

Date: December, 2021

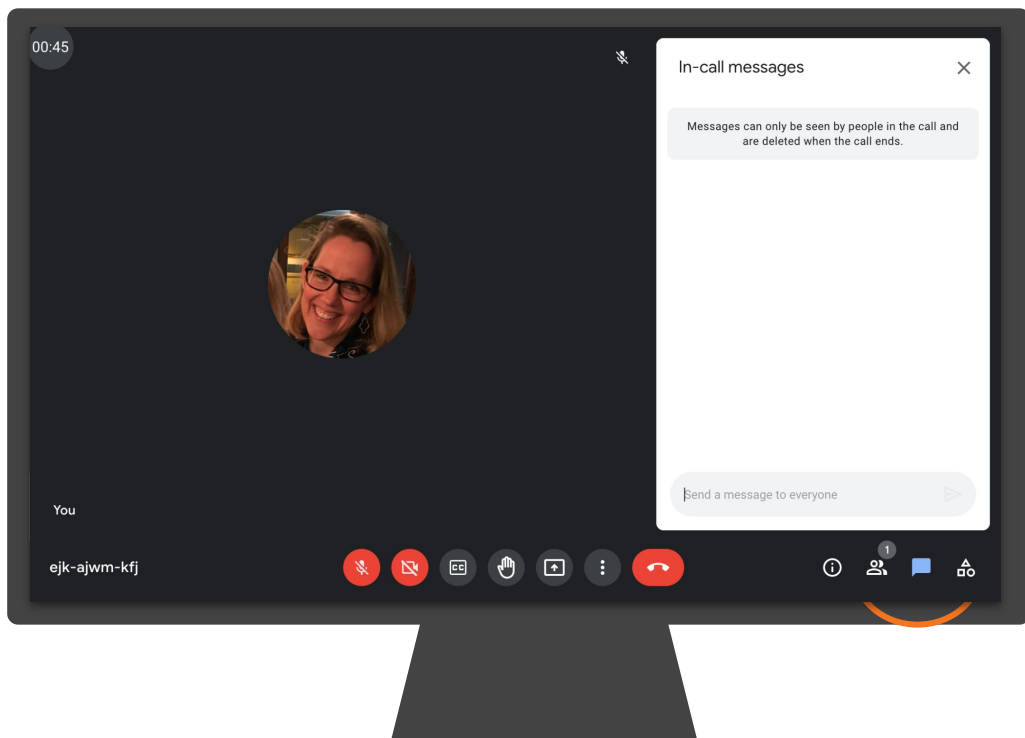
Presented by:



Ice Breaker!

Who do we have in the room today?

- **Question 1:** Which aspects of implementing the Amplify Science standard curriculum are you most excited or hopeful about?
- **Question 2:** What do you feel most hesitant about?



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

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.


Last year's Amplify apps.



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LOS ANGELES UNIFIED SCHOOL DISTRICT


[mCLASS Student](#)



Content Area: ELA
Grade Level: ES
Content Type: Assessment
Integration Type: App (Left Navigation)
Purchase Type: District
[Getting Started Guide](#)
Other Info: App to be installed for all course members.

Vendor Support Desk:
P: 800.823.1969
E: help@amplify.com
S: amplify.com/support/
Textbook Title(s):
NA


[mCLASS Assessment](#)



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[mCLASS Portal](#)




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LOS ANGELES UNIFIED COURSES





Course Options


 **Materials**


 Updates


 Gradebook


 Grade Setup


 Mastery

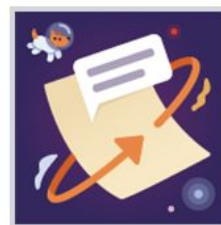
 Amplify Reading: Teacup

 Amplify Science: Elementary


 Amplify Science: Middle School

 mCLASS Portal

 mCLASS Student




This year's app(s).



LOS ANGELES UNIFIED SCHOOL DISTRICT

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LOS ANGELES UNIFIED SCHOOL DISTRICT

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LMS App Center

The LMS App Center provides a catalog of District-approved digital content and learning tools (including digital components of adopted textbooks) that are available for classroom teachers and students to access within the learning management system, Schoology.


For information on District-approval policies and procedures, please visit: udpp.lausd.net.

- To search the full list of digital learning tools, click "Submit".
- To search by Publisher Name or Textbook Title, type in a word associated to your adopted publisher, then click "Submit".
- To narrow your search with filters such as Content Area, Grade Level, or Content Type, select from the dropdown menu, then click "Submit".

To learn more about using the LMS App Center, please refer to the following [video overview](#).


[Search Again](#)

Amplify



Content Area: ELA
Grade Level: ES
Content Type: Supplemental
Integration Type: App (Left Navigation)
Purchase Type: District and School
[Getting Started Guide](#)
Other Info: School licenses required
 mCLASS
 CKLA
 Amplify Reading
 Amplify Science
 Fractions

Vendor Support Desk:
 P: 800.823.1969
 E: help@amplify.com
 S: amplify.com/support/
Textbook Title(s):
 NA



Content Area: ELA
Grade Level: ES
Content Type: Supplemental
Integration Type: App (Left Navigation)
Purchase Type: District and School
[Getting Started Guide](#)
Other Info: School licenses required. This app is for teacher use only (install for Course Admins only)

Vendor Support Desk:
 P: 800.823.1969
 E: help@amplify.com
 S: amplify.com/support/
Textbook Title(s):
 NA

All Amplify Products

Grade Sync for MS Science

Publisher Name: Starts With

Content Area: All

Grade Level: All

Content Type: All

Textbook Title: Starts With

Submit

 mCLASS Educators: To view or make changes to your account go to mclass.amplify.com.

Hi, Terin

Classes

Programs & Licenses

Account Settings

Help Center 



[CKLA Hub](#)



[CKLA Resource Site](#)



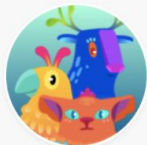
[mCLASS Assessment](#)



[mCLASS Reporting](#)



[Reading 6-8](#)



[Reading K-5](#)



[Science](#)



[Vocabulary](#)



Amplify. on Schoology

2021-2022



Join Amplify Science Schoology Group

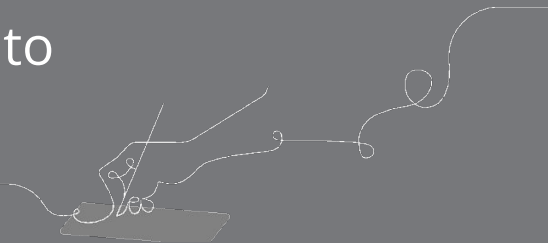
To join Amplify Science Schoology
ES Group: W4PK-W466-63F5B

Part 1

Overarching goals

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

- ❑ Navigate the full Amplify Science standard curriculum.
- ❑ Understand the program's phenomenon-based approach.
- ❑ Apply the program essentials to prepare to teach.





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing



Plan for the day: Part 1

- **Introduction and Framing**
- Phenomenon-based Instruction
- Program Essentials
- Closing



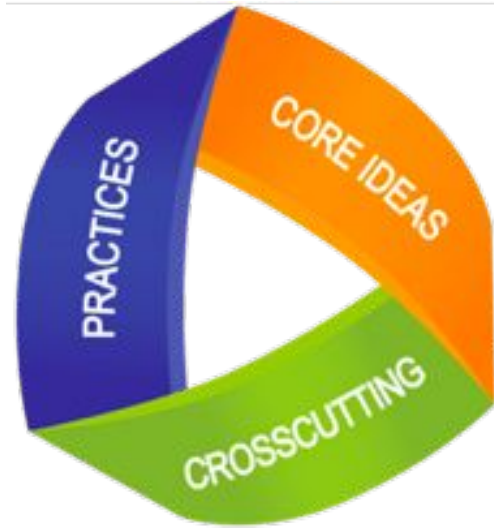
THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

+

Amplify.

Amplify Science

Next Generation Science Standards



Disciplinary Core Ideas

What students figure out

Science and Engineering Practices

How students figure out the science

Crosscutting Concepts

The habits of thinking that help students organize information

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

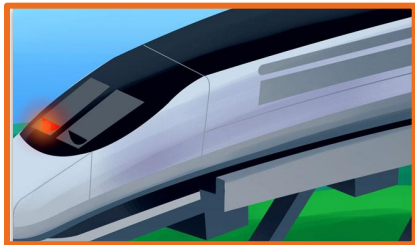
Grade 5

- 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

Year at a Glance: Grade 3



Balancing Forces

Domain: Physical Science

Unit type: Modeling

Student role:
Engineers

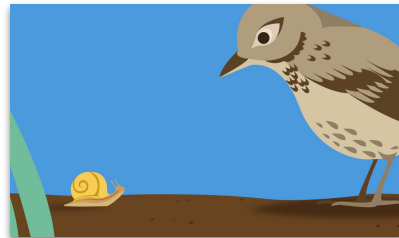


Inheritance and Traits

Domain: Life Science

Unit type: Investigation

Student role: Wildlife biologists

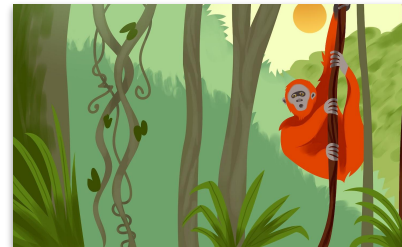


Environments and Survival

Domain: Life Science

Unit type: Engineering Design

Student role:
Biomimicry engineers



Weather and Climate

Domain: Earth and Space Science

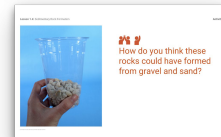
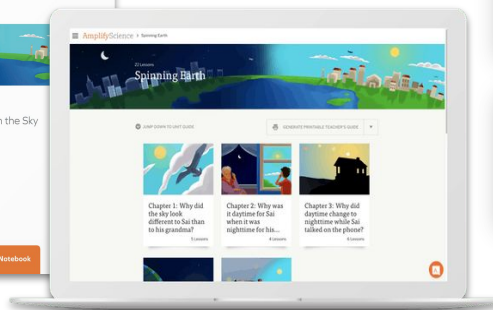
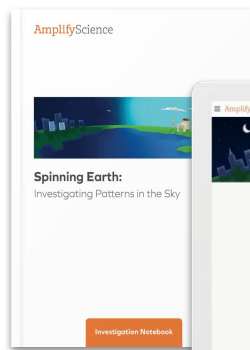
Unit type:
Argumentation

Student role:
Meteorologists

K-5 Program components

Teacher materials

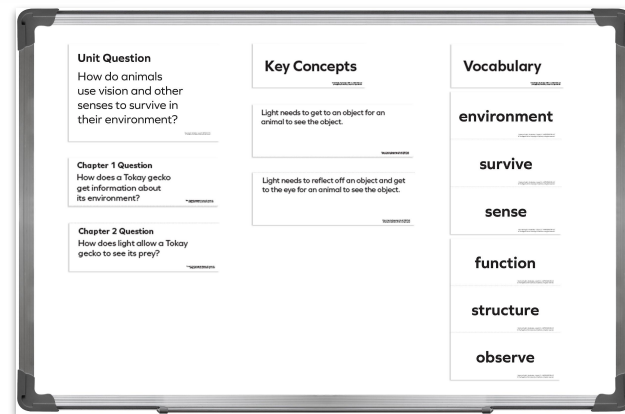
- Teacher's Guide (print and digital)
- Classroom Slides
- Classroom wall materials
- Embedded assessments
- Program Guide
- Program Hub
- Amplify Help Site



Program Hub



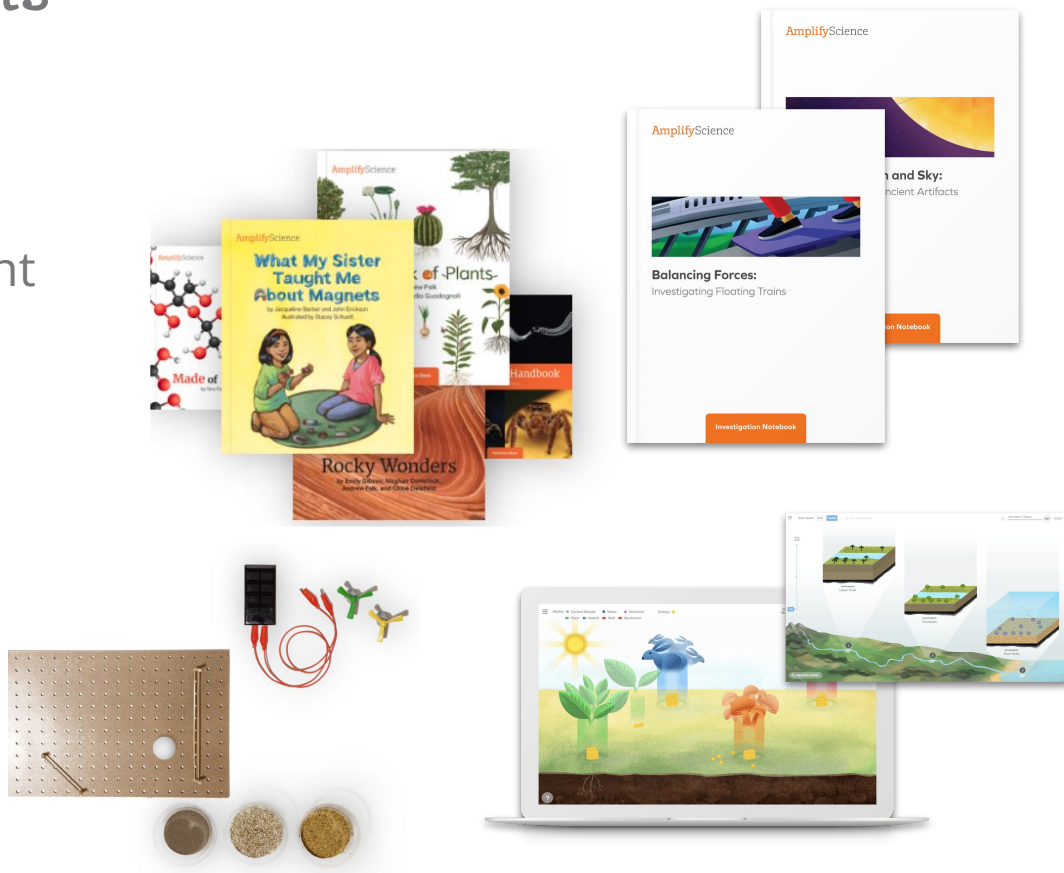
Science Program Guide



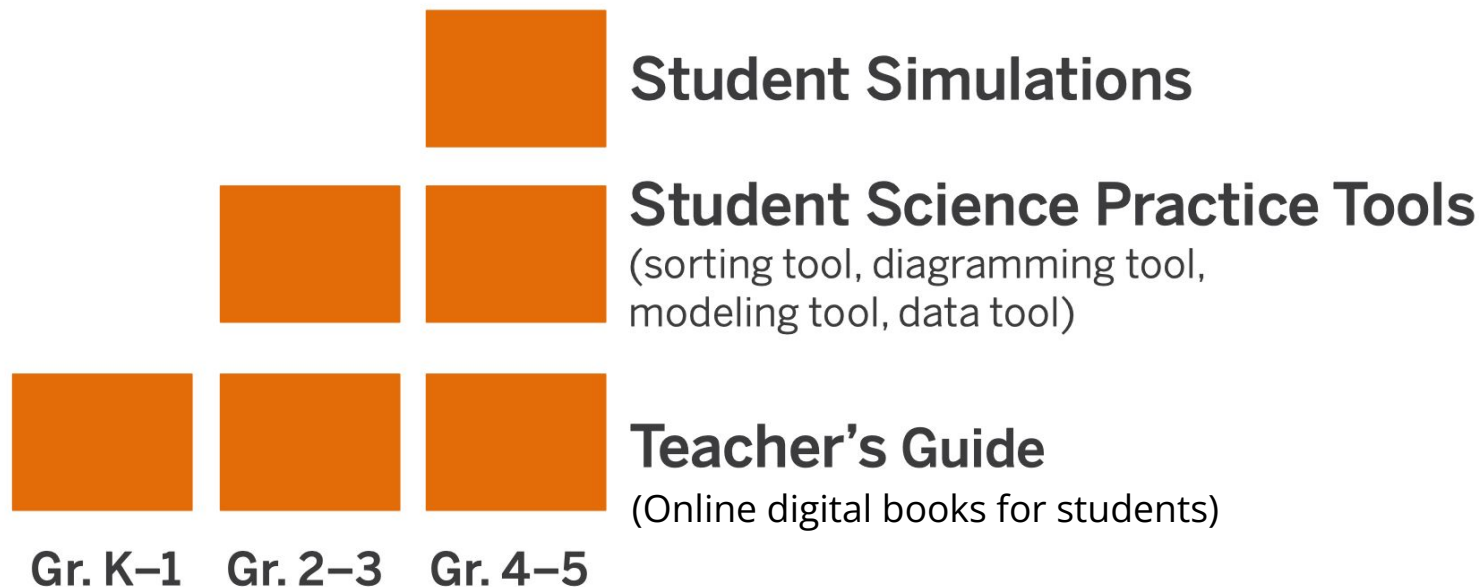
K-5 Program components

Student materials

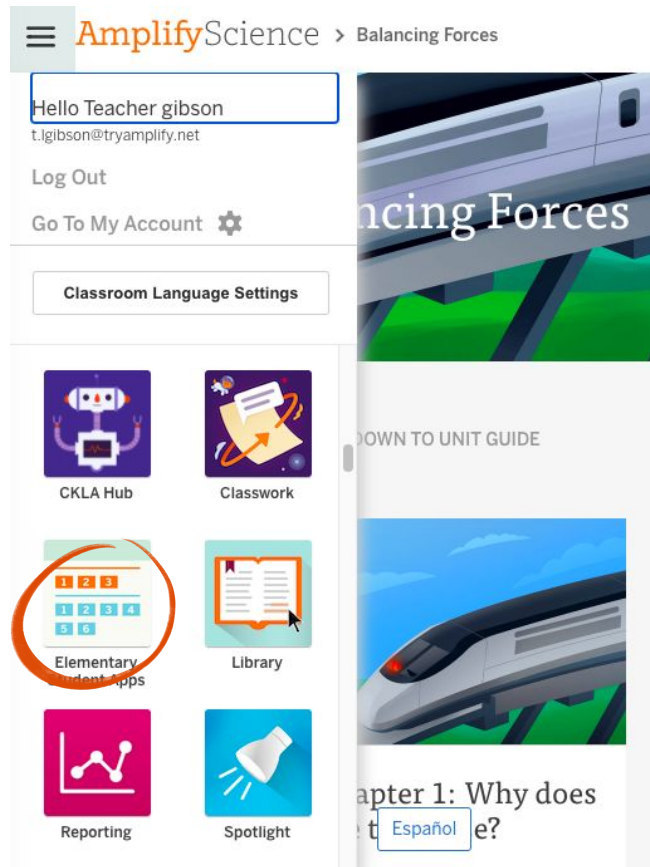
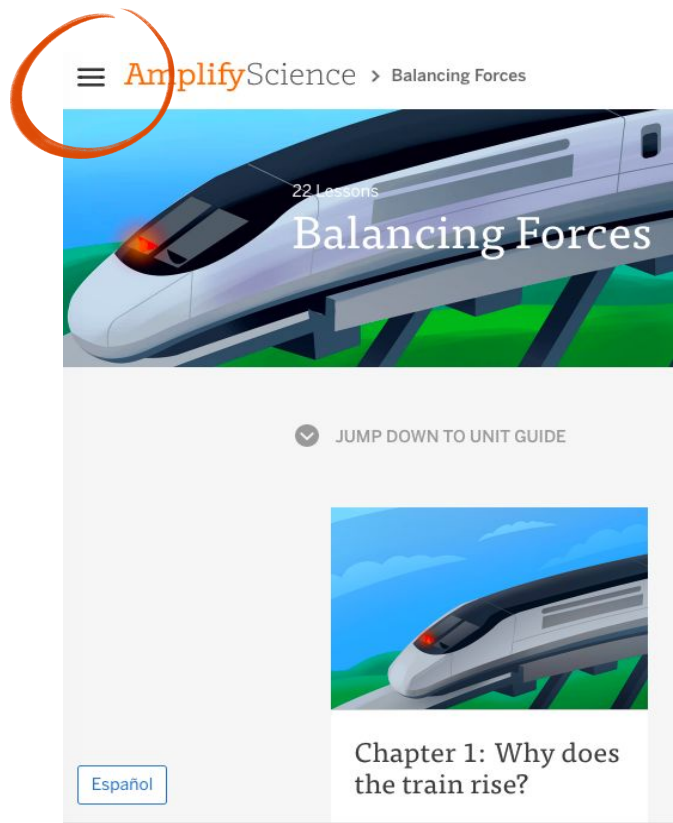
- Hands-on materials
- Investigation Notebooks (print and digital)
- Student books
- Digital Applications



What are the digital components of Amplify Science Elementary?

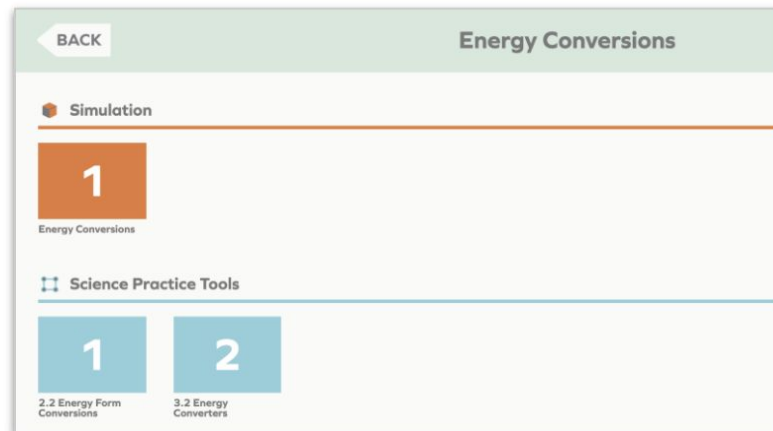
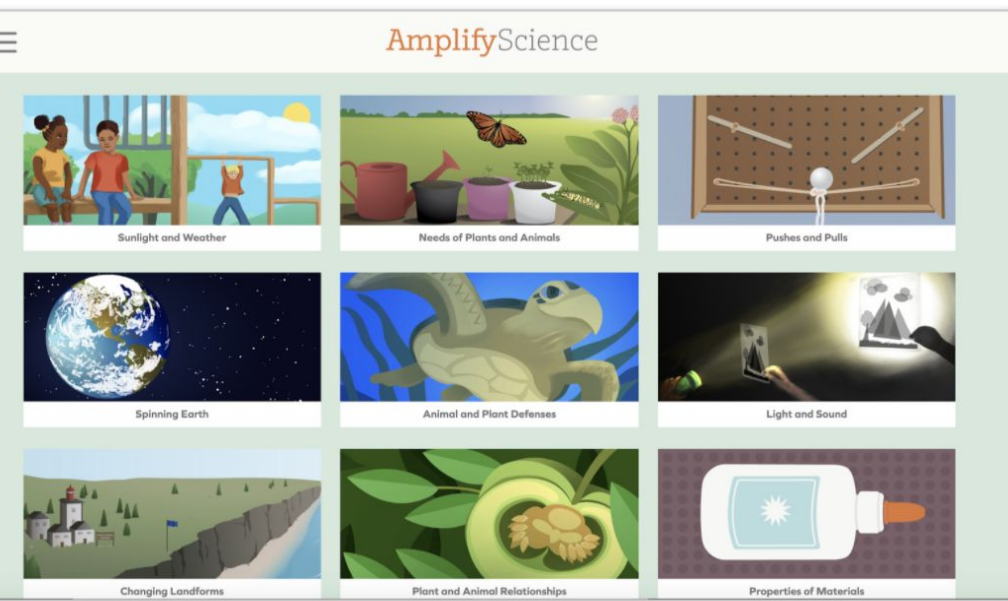


Navigating to the Student Apps page



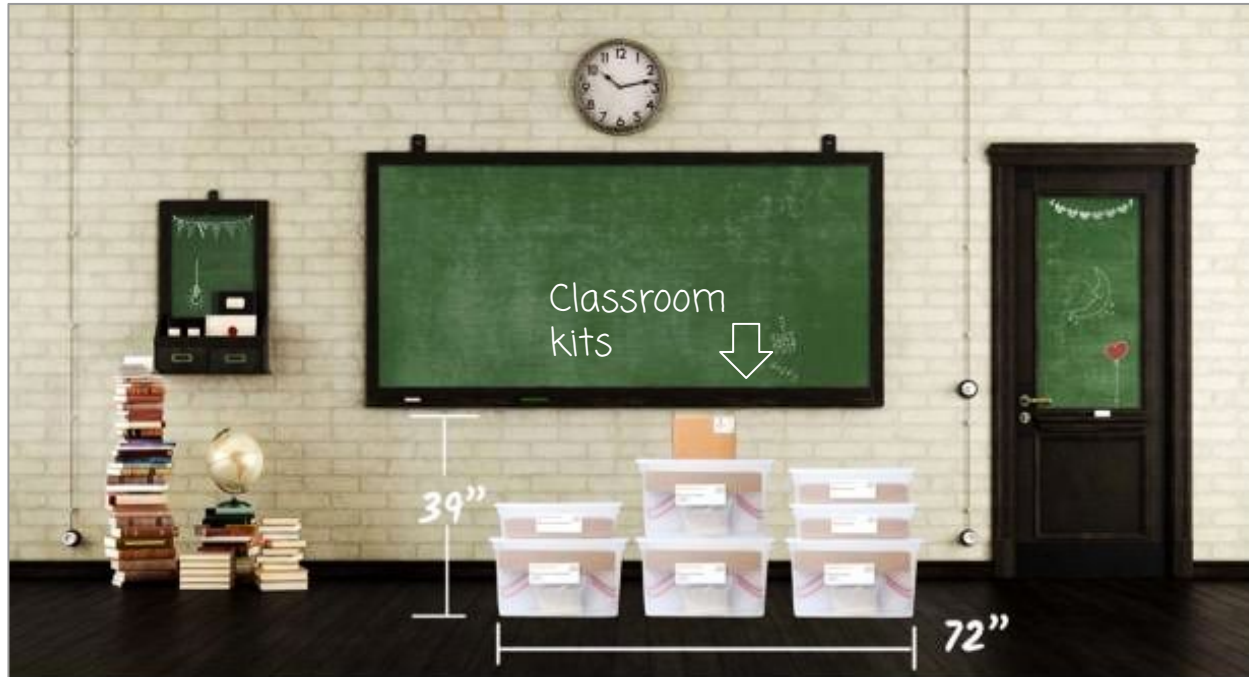
Student apps page

The elementary digital experience for students grades 2-5 is through the student apps page: apps.learning.amplify.com/elementary



K-5 Program components

Classroom kits



Classroom Kits

Built for a class of 36 students, with consumables for two years

LAUSD Microsite-

<https://amplify.com/laUSD-science>

Welcome to Amplify Science!

This site contains supporting resources designed for the LAUSD Amplify Science adoption for grades TK–8.


- Access the [Amplify Science Program Hub](#) (To help orient you to the new design, watch this [video](#) and view this [reference guide](#).)
- Find out more about [Amplify Science@Home](#)
- Share the [Caregiver Hub](#) (Eng/Span) with your families
- For LAUSD ES Teachers- [Amplify Science & Benchmark Advance Crosswalk](#)
- Instructional guidance for a [Responsive Relaunch of Amplify Science in 21-22](#)

Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



Unit 1, K-5 Lesson Prep Videos

Classroom kits

	New! Lesson Prep Videos
Program Introduction	Unit 1
Learn more about Amplify Science	
LAUSD Training Sessions- Reference Materials	Grade K- Needs of Plants and Animals >
 New! Lesson Prep Videos	Grade 1- Animals and Plant Defenses >
Remote Learning Resources	Grade 2- Plant and Animal Relationships >
Onboarding: What to expect	Grade 3- Balancing Forces >
Onboarding videos	Grade 4- Energy Conversions >
Unpacking your first hands-on materials kit	Grade 5- Patterns of Earth and Sky >
Looking for help?	

Classroom Kits

Built for a class of 36 students, with consumables for two years

Questions?





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing

Next Generation Science 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
Chemical reactions	There's a reddish-brown substance in a town's tap water.

Next Generation Science Standards

How might learning be different?

Topic-based	Phenomenon-based
Chemical reactions	There's a reddish-brown substance in a town's tap water.
Electric circuits	A flashlight won't turn on, even though it used to work.
Natural selection	A population of newts has become more poisonous over time.

Comparing topics and phenomena

A shift in science instruction

from learning about
(like a student)



to figuring out
(like a scientist)

Amplify Science Approach

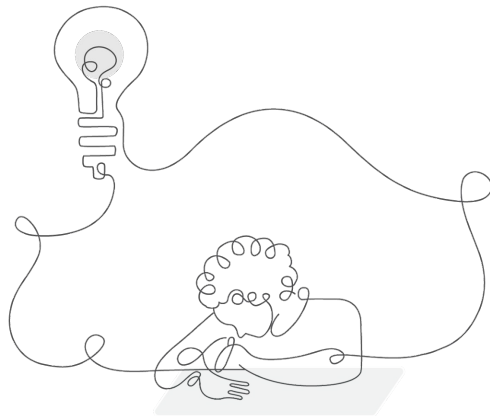


Previewing the unit

Introducing the phenomenon

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

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



The unit we're beginning is called *Balancing Forces: Investigating Floating Trains*.

In this unit, you will **investigate how something can start moving or stop moving without anything touching it.**



The train floated up without anything touching it. Later, it fell back down to the track.



We are going to figure out how floating trains work.

Amplify Science

Anchoring phenomenon

- Complex and rich
- Drives learning through a whole unit
- Specific and observable
- Relatable at students' developmental level





Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
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- Closing

Unit



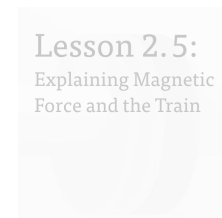
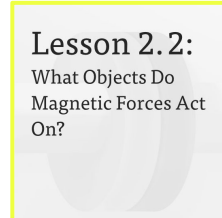
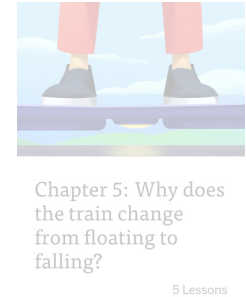
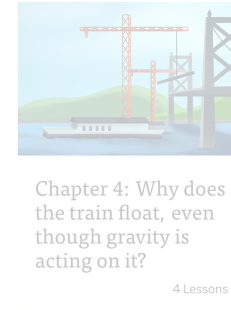
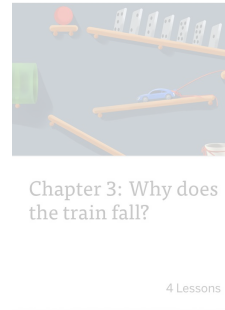
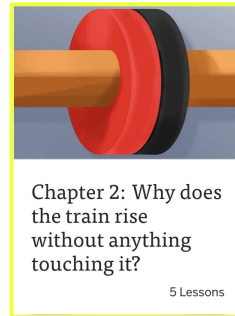
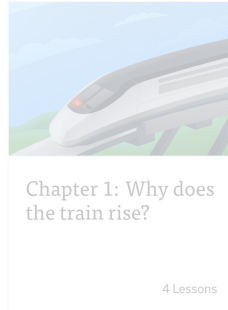
Chapters



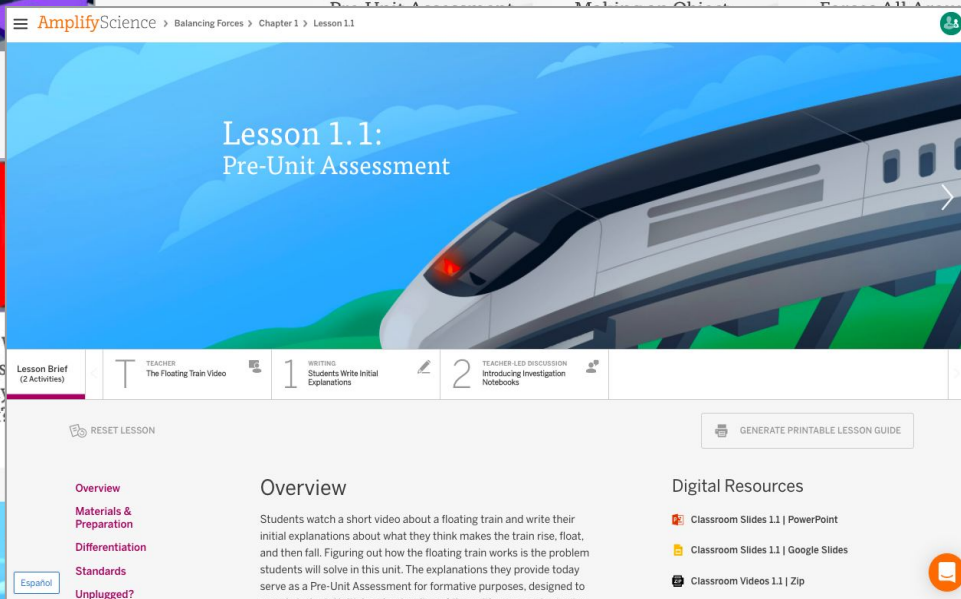
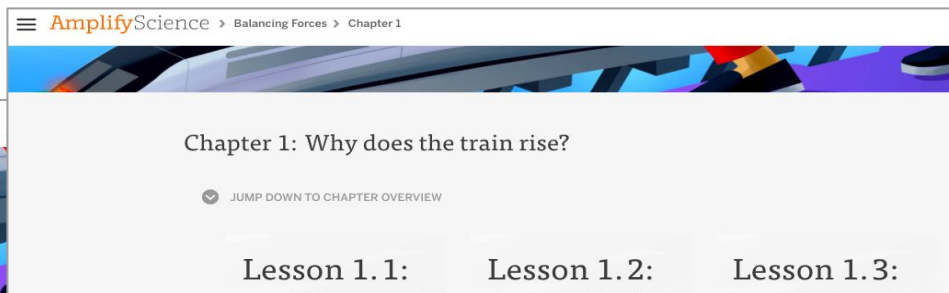
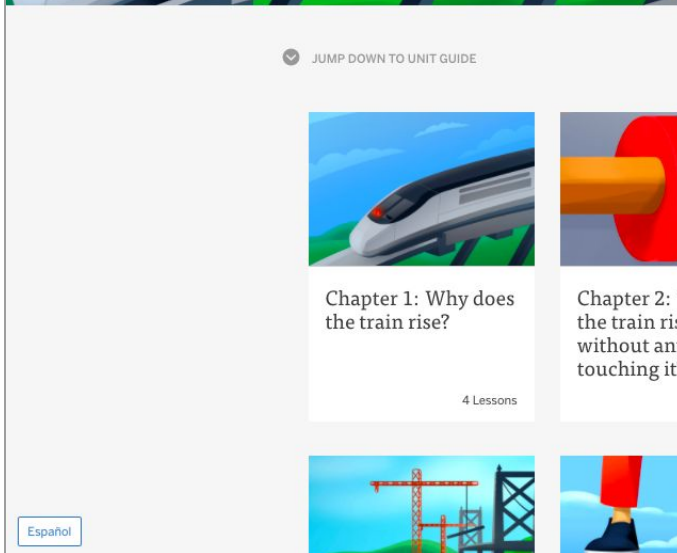
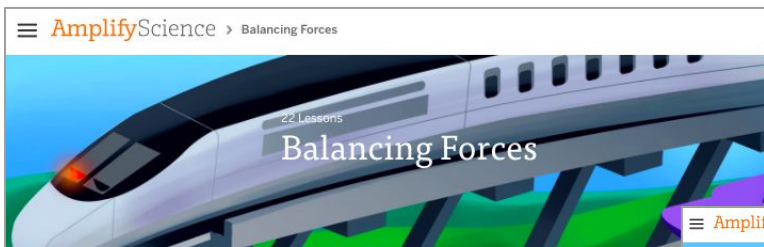
Lessons



Activities



Let's Go Live!



Explore the Essentials!

The image displays a multi-layered screenshot of the AmplifyScience website. The top layer shows the 'Balancing Forces' unit page, which features a large illustration of a high-speed train on a bridge. The page includes a 'JUMP DOWN TO UNIT GUIDE' button and a list of chapters: Chapter 1: Why does the train rise? (4 Lessons), Chapter 2: Why does the train rise without any touching it?, and Chapter 3: Why does the train rise without any touching it? (4 Lessons). The bottom layer shows the 'Lesson 1.1: Pre-Unit Assessment' page, which includes a 'RESET LESSON' button, a 'GENERATE PRINTABLE LESSON GUIDE' button, and a 'Digital Resources' section with links to Classroom Slides 1.1 | PowerPoint, Classroom Slides 1.1 | Google Slides, and Classroom Videos 1.1 | Zip. The page also features an 'Overview' section with a short video about a floating train and a 'Pre-Unit Assessment' section with a writing prompt.

AmplifyScience > Balancing Forces

22 Lessons

Balancing Forces

JUMP DOWN TO UNIT GUIDE

Chapter 1: Why does the train rise?

Chapter 2: Why does the train rise without any touching it?

Chapter 3: Why does the train rise without any touching it?

4 Lessons

AmplifyScience > Balancing Forces > Chapter 1

Chapter 1: Why does the train rise?

JUMP DOWN TO CHAPTER OVERVIEW

Lesson 1.1: Lesson 1.2: Lesson 1.3:

AmplifyScience > Balancing Forces > Chapter 1 > Lesson 1.1

Lesson 1.1: Pre-Unit Assessment

Lesson Brief (2 Activities) TEACHER The Floating Train Video WRITING Students Write Initial Explanations 1 2 TEACHER LED DISCUSSION Introducing Investigation Notebooks

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

Digital Resources

Classroom Slides 1.1 | PowerPoint

Classroom Slides 1.1 | Google Slides

Classroom Videos 1.1 | Zip

Overview

Students watch a short video about a floating train and write their initial explanations about what they think makes the train rise, float, and then fall. Figuring out how the floating train works is the problem students will solve in this unit. The explanations they provide today serve as a Pre-Unit Assessment for formative purposes, designed to

Materials & Preparation

Differentiation

Standards

Unplugged?

Español

Navigation summary

1. Select your first unit
 - a. You are now on the Unit Landing Page.
2. Select **JUMP DOWN TO UNIT GUIDE**.
 - a. Or scroll down the page to *Planning for the Unit* and *Teacher References*



Unit Landing Page

AmplifyScience > Balancing Forces



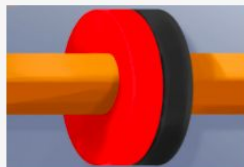
▼ JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE ▼



Chapter 1: Why does the train rise?

4 Lessons



Chapter 2: Why does the train rise without anything touching it?

5 Lessons



Chapter 3: Why does the train fall?

4 Lessons

Español



Key Unit Guide Documents for Unit Planning

Planning for the Unit	Printable Resources
Unit Overview ▾	Coherence Flowcharts
Unit Map ▾	Copymaster Compilation
Progress Build ▾	Flexextension Compilation
Getting Ready to Teach ▾	Investigation Notebook
Materials and Preparation ▾	Multi-Language Glossary
Science Background ▾	NGSS Information for Parents and Guardians
Standards at a Glance ▾	Print Materials (8.5" x 11")
	Print Materials (11" x 17")
Teacher References	
Lesson Overview Compilation ▾	
Standards and Goals ▾	
3-D Statements ▾	
Assessment System ▾	
Embedded Formative Assessments ▾	
Books in This Unit ▾	
Apps in This Unit ▾	
Flexextensions in This Unit ▾	

Offline Preparation

Teaching without reliable classroom internet? Prepare unit and lesson materials for offline access.

[Offline Guide](#)

Core Unit Planning & Internalization

Unit Title:		1
Overview [Resources: Unit Overview, Teacher's Guide, Coherence Flowchart, Unit Map, 3-D Statements]		
What is the phenomenon/real-world problem students are investigating in your unit?	Student Role:	2 3
Unit Question:	Relationship between the Unit Phenomenon and Unit Question:	4 5
By the end of the unit, students figure out...		6
How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?		7

Unit Guide resources:

- Unit Overview
- Unit Map
- Coherence Flowchart

Unit Guide resources:

- Lesson Overview Compilation
- Unit Overview

Unit Guide resources:

- Unit Map

Unit Guide resources:

- 3D Statements at the Unit Level

Core Unit Planning & Internalization

Unit Title:

Balancing Forces

Overview

[Resources: Unit Overview, Teacher's Guide, Coherence Flowchart, Unit Map, 3-D Statements]

What is the phenomenon/real-world problem students are investigating in your unit?

How is it possible for a train to float?

Student Role:

Engineer

Unit Question:

What can make an object move or not move?

Relationship between the Unit Phenomenon and Unit Question:

In coming to understand how a floating train works, students grasp of an array of foundational concepts in the area of force and motion.

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

More than one force can be exerted on the train at a time. The force of gravity is pulling the train toward Earth, and magnetic force is pushing the train up away from the tracks. Those forces work in opposite directions so when the forces are balanced, the train floats and stays in the air.

How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?

Students plan and conduct investigations, analyze patterns in data (patterns), and obtain information about magnetic force, gravity, and balanced and unbalanced forces. Students write explanations and create physical models and diagram models to show why the train's vertical motion is stable at times and changes at times.

Navigate to a lesson page

AmplifyScience > Balancing Forces > Chapter 1 > Lesson 1.1



Lesson 1.1: Pre-Unit Assessment

Lesson Brief
(2 Activities)



TEACHER
The Floating Train Video



1

WRITING
Students Write Initial
Explanations



2

TEACHER-LED DISCUSSION
Introducing Investigation
Notebooks



RESET LESSON



GENERATE PRINTABLE LESSON GUIDE

Overview

Materials &
Preparation

Differentiation

Standards

Unplugged?

Español

Overview

Students watch a short video about a floating train and write their initial explanations about what they think makes the train rise, float, and then fall. Figuring out how the floating train works is the problem students will solve in this unit. The explanations they provide today serve as a Pre-Unit Assessment for formative purposes, designed to assess students' initial understanding of the unit's core concepts.

Digital Resources

Classroom Slides 1.1 | PowerPoint

Classroom Slides 1.1 | Google Slides

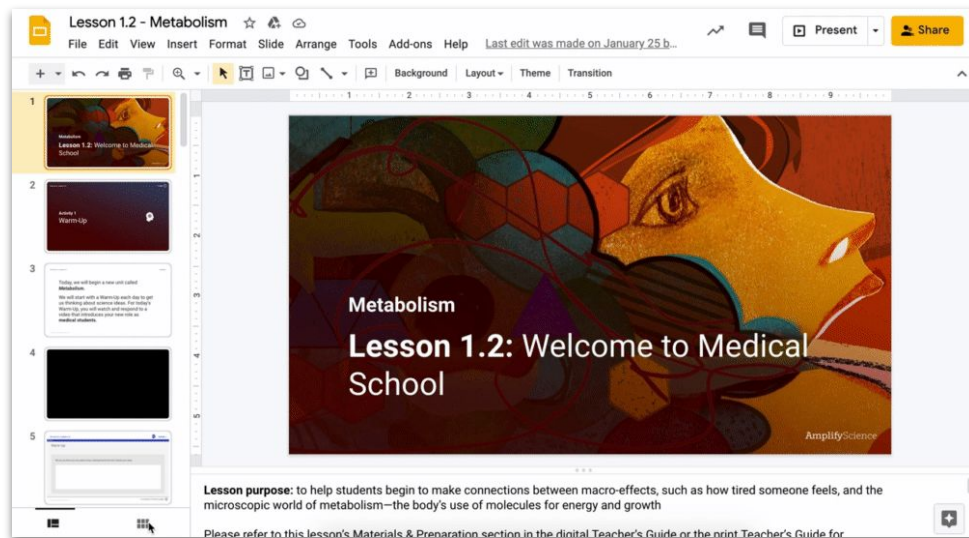
Classroom Videos 1.1 | Zip



Using Classroom Slides as a planning tool

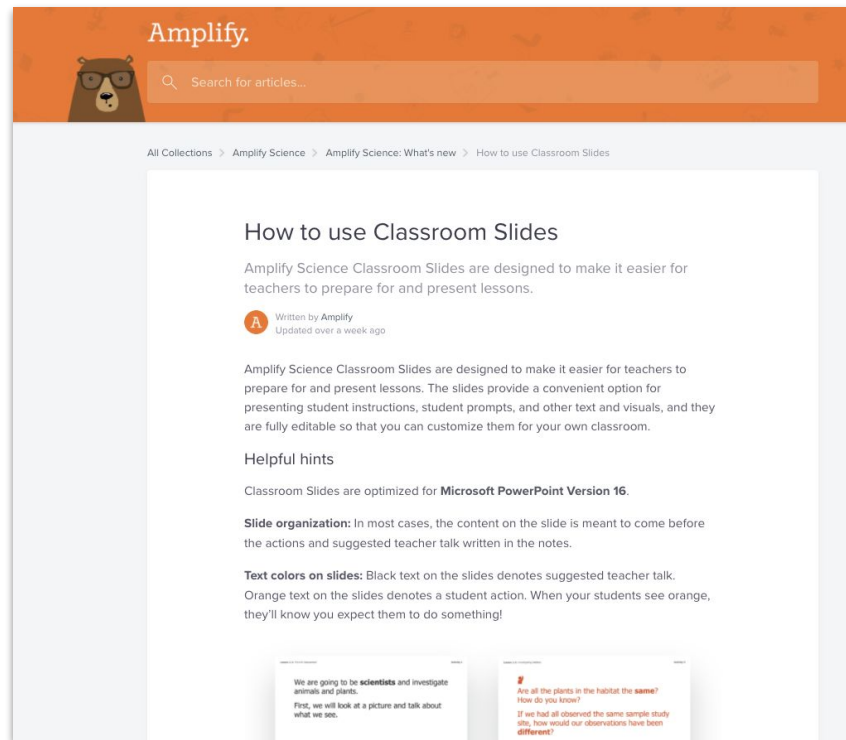
Teacher tip: Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

This is a useful first step for preparing to teach the lesson.



Teaching with Classroom Slides

This detailed guide on the Amplify Science Help Site includes tips for teaching with Classroom Slides and information about the different symbols and activity types you'll find in the slide deck.



4 Easy Steps to Teaching a lesson

DIRECTIONS:

1. Download the **Classroom Slides** for **Lesson 1.1** and review them.
2. Read the **Overview**.
3. Explore the **Materials & Preparation** document.
4. Read the **Differentiation** document.

The screenshot shows the Lesson 1.1 interface. At the top, there's a header with a train illustration and a navigation bar with three tabs: 'Lesson Brief (3 Activities)', 'TEACHER Introducing the Problem', and 'STUDENT-TO-STUDENT DISCUSSION Discussing Initial Ideas'. Below the navigation bar, there's a 'RESET LESSON' button and a 'GENERATE PRINTABLE LESSON GUIDE' button. The main content area is divided into two columns. The left column contains a list of documents: 'Lesson Brief', 'Overview', 'Materials & Preparation', 'Differentiation', 'Standards', 'Vocabulary', and 'Unplugged?'. The right column contains 'Digital Resources' with links to 'Classroom Slides 1.2 | .', 'All Projections', 'Classroom Videos 1.2 | Zip', 'Class Observation Table: Completed', and 'Video: Floating Train'. Four orange arrows with numbers 1, 2, 3, and 4 point to the 'Classroom Slides 1.2 | .' link, the 'Overview' document, the 'Materials & Preparation' document, and the 'Differentiation' document respectively.

Navigation Temperature Check

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

1 = Extremely Uncomfortable

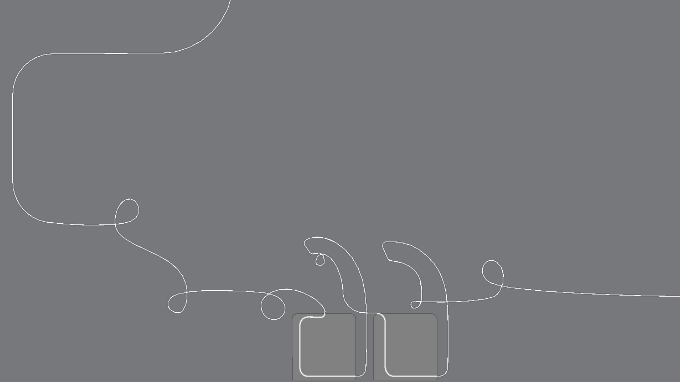
2 = Uncomfortable

3 = Mild

4 = Comfortable

5 = Extremely Comfortable

Questions?





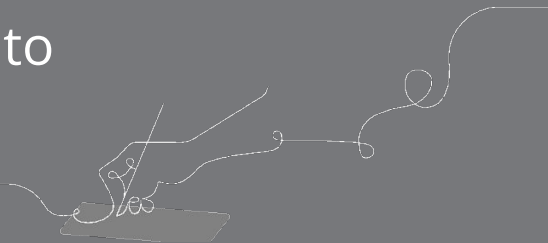
Plan for the day: Part 1

- Introduction and Framing
- Phenomenon-based Instruction
- Program Essentials
- Closing

Overarching goals

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

- ✓ Navigate the full Amplify Science standard curriculum.
- ✓ Understand the program's phenomenon-based approach.
- ✓ Apply the program essentials to prepare to teach.



Closing reflection

Based on our work in Part 1, share:

Head: something you'll keep in mind

Heart: something you're feeling

Feet: something you're planning to do

Additional resources

Welcome, caregivers!

We hope you enjoy learning more about Amplify Science and what students are learning in science this year.

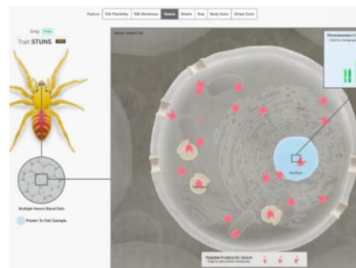
[Para acceder a este sitio en español haga clic aquí.](#)

Amplify welcomes you and your learner to the Science program for the new school year. We are very excited to provide you with exceptional learning opportunities through Science. Below are resources and helpful guides for enabling your student to have the most productive experience with our platform throughout the year.

 [Contact Us](#)



Grades 6-8



LAUSD Microsite-

<https://amplify.com/laUSD-science>

Welcome to Amplify Science!

This site contains supporting resources designed for the LAUSD Amplify Science adoption for grades TK–8.

- Access the [Amplify Science Program Hub](#) (To help orient you to the new design, watch this [video](#) and view this [reference guide](#).)
- Find out more about [Amplify Science@Home](#)
- Share the [Caregiver Hub](#) (Eng/Span) with your families
- For LAUSD ES Teachers- [Amplify Science & Benchmark Advance Crosswalk](#)
- Instructional guidance for a [Responsive Relaunch of Amplify Science in 21-22](#)

Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



Program Hub

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

The screenshot shows the Amplify Science Program Hub interface. At the top, the Amplify Science logo is circled in orange. Below it, the title 'Animal and Plant Defenses' is displayed with a large illustration of a sea turtle. A sidebar on the right contains icons for various resources, with the 'Program Hub' icon circled in orange. The main content area shows a unit overview for 'Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?' with a '5 Lessons' indicator.

This screenshot shows the sidebar of the Amplify Science Program Hub. It includes a user profile section for 'Hello Teacher Martin' and a 'Classroom Language Settings' button. Below these are icons for 'CALIFORNIA INTEGRATED', 'ELA Professional Learning', 'ELA Resources', 'Interim Assessments', 'Program Hub', and 'Science Program Guide'. The 'Program Hub' icon is circled in orange.

The screenshot shows the welcome page of the Amplify Science Program Hub. It features a 'Welcome Science Educators!' message and a list of resources. The 'Remote and hybrid learning resources' section is circled in orange. Other sections include 'Professional Learning Resources', 'Additional Unit Materials', and a 'Let's get started!' button.

The screenshot shows the 'Pushes and Pulls' section of the Amplify Science Program Hub. It features a dropdown menu for '@Home Videos' which is circled in orange. Below the dropdown, there is a table of lessons with links to each lesson.

@Home Videos	
PAP Lesson 1.1	Link
PAP Lesson 1.2	Link
PAP Lesson 1.3	Link
PAP Lesson 1.4	Link
PAP: Lesson 1.5	Link
PAP: Lesson 2.1	Link

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



Please provide feedback on today's session!

Presenter name:

Workshop title:

Part 1: Navigating Program Essentials

Part 2: Guided Planning

Modality:

Remote



End of Part 1