

# Amplify Science

## Standard Curriculum Relaunch / Guided Planning

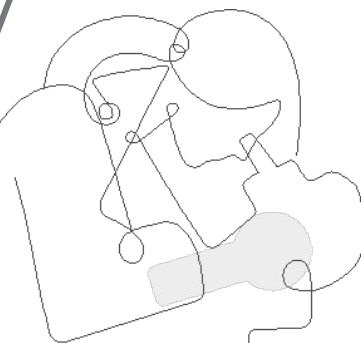
Grade K, Unit 2: Pushes and Pulls

### Part 1

School/District Name: LAUSD

Date: November, 2021

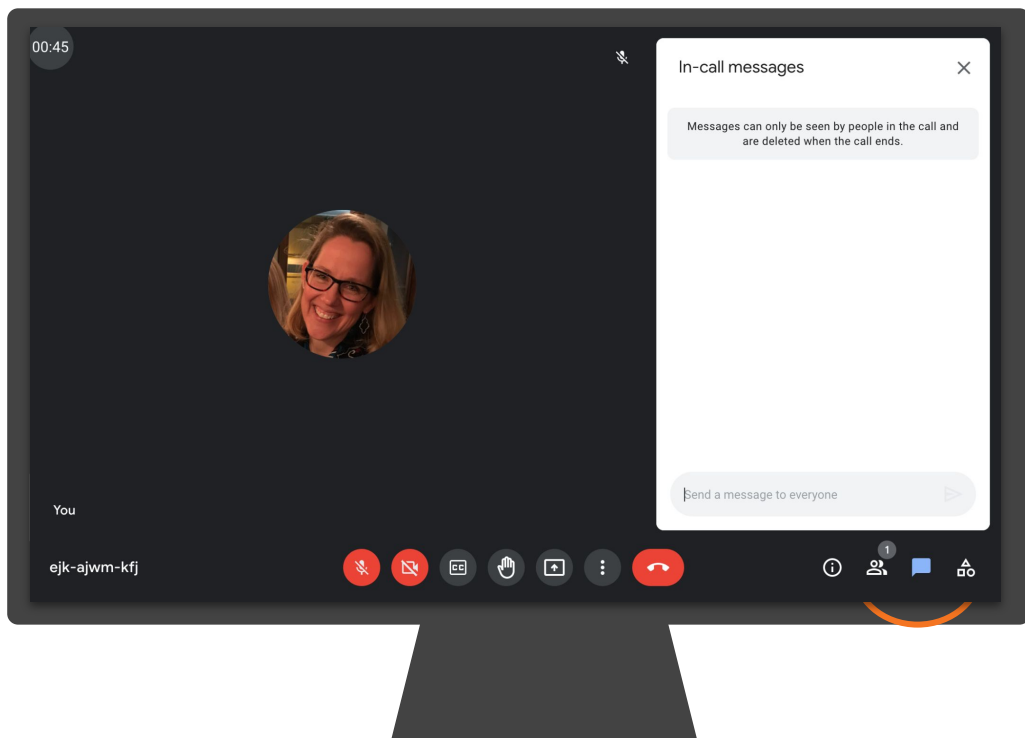
Presented by: Jolene Hori



# 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.



[Home](#) [About Los Angeles Unified](#) [Find a School](#) [Offices](#) [Classic View](#)


**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](mailto:help@amplify.com)  
S: [amplify.com/support/](https://amplify.com/support/)  
**Textbook Title(s):**  
NA



[mCLASS Assessment](#)

**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 Course Admins only


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



[mCLASS Portal](#)


**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 Course Admins only

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





**LOS ANGELES UNIFIED**


**COURSES**





Course Options


 **Materials**


 Updates


 Gradebook


 Grade Setup


 Mastery

 Amplify Reading: Teac...

 Amplify Science: Eleme...


 Amplify Science: Middl...

 mCLASS Portal

 mCLASS Student




# This year's app(s).



LOS ANGELES UNIFIED SCHOOL DISTRICT

About Los Angeles Unified Find a School Offices Classic View



LOS ANGELES UNIFIED SCHOOL DISTRICT

About Los Angeles Unified Find a School Offices Classic View Families Employees

COURSES GROUPS RESOURCES TOOLS

Back to Schoology Home Page

## 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: [udidp.lausd.net](http://udidp.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](mailto:help@amplify.com)  
S: [amplify.com/support/](http://amplify.com/support/)  
Textbook Title(s):  
NA

### Amplify Classwork



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](mailto:help@amplify.com)  
S: [amplify.com/support/](http://amplify.com/support/)  
Textbook Title(s):  
NA

All Amplify Products

Grade Sync for MS Science

 mCLASS Educators: To view or make changes to your account go to [mclass.amplify.com](https://mclass.amplify.com).

Hi, Terin

## Classes

Programs & Licenses

Account Settings

Help Center 



[CKLA Hub](#)



[CKLA Resource Site](#)



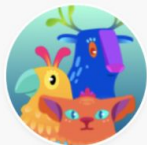
[mCLASS Assessment](#)



[mCLASS Reporting](#)



[Reading 6-8](#)



[Reading K-5](#)



[Science](#)



[Vocabulary](#)



## Amplify. on Schoology

2021-2022

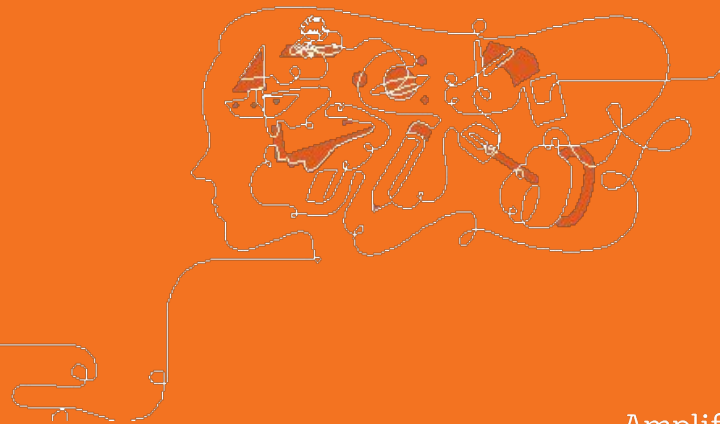


# Join Amplify Science Schoology Group

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

Part 1:

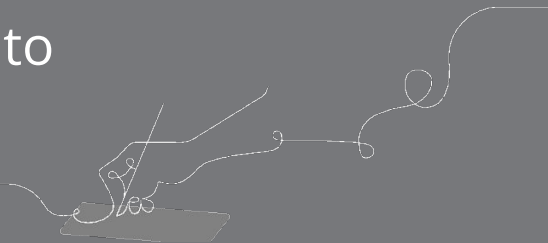
# Amplify Science Standard Curriculum Relaunch



# 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 K-1 are 45 minutes long

# Year at a Glance: Kindergarten

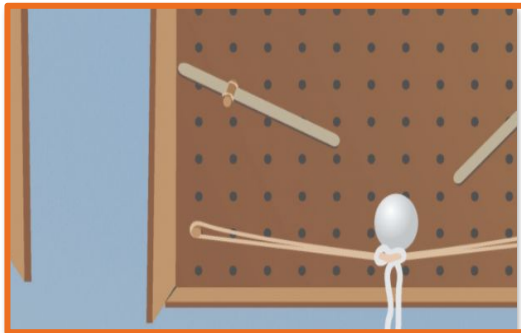


Needs of Plants and Animals

**Domain:** Life Science

**Unit type:** Investigation

**Student role:** Scientist

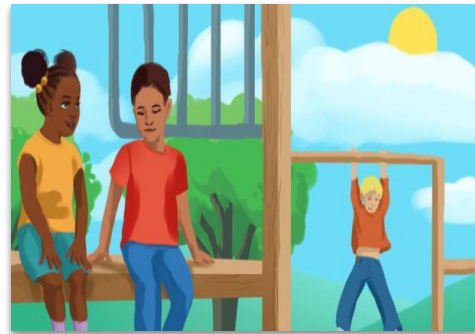


Pushes and Pulls

**Domain:** Physical Science

**Unit type:** Engineering Design

**Student role:** Pinball Engineer



Sunlight and Weather

**Domain:** Earth and Space Science

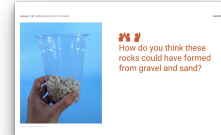
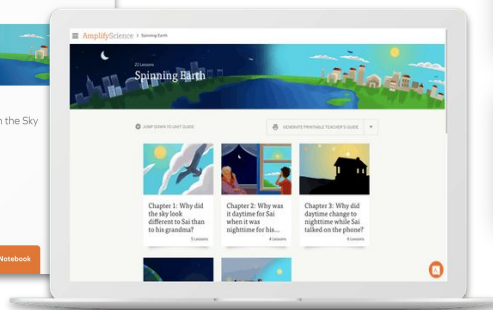
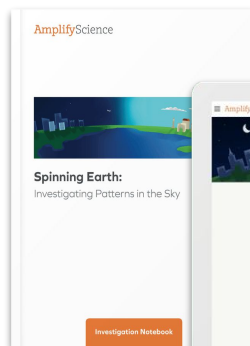
**Unit type:** Modeling

**Student role:** Weather Scientist

# K-5 Program components

## Teacher materials

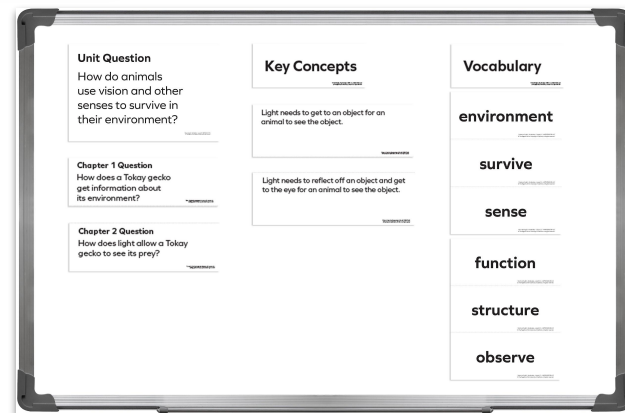
- Teacher's Guide (print and digital)
- Classroom Slides
- Classroom wall materials
- Embedded assessments
- Program Guide
- Program Hub
- Amplify Help Site



Program Hub



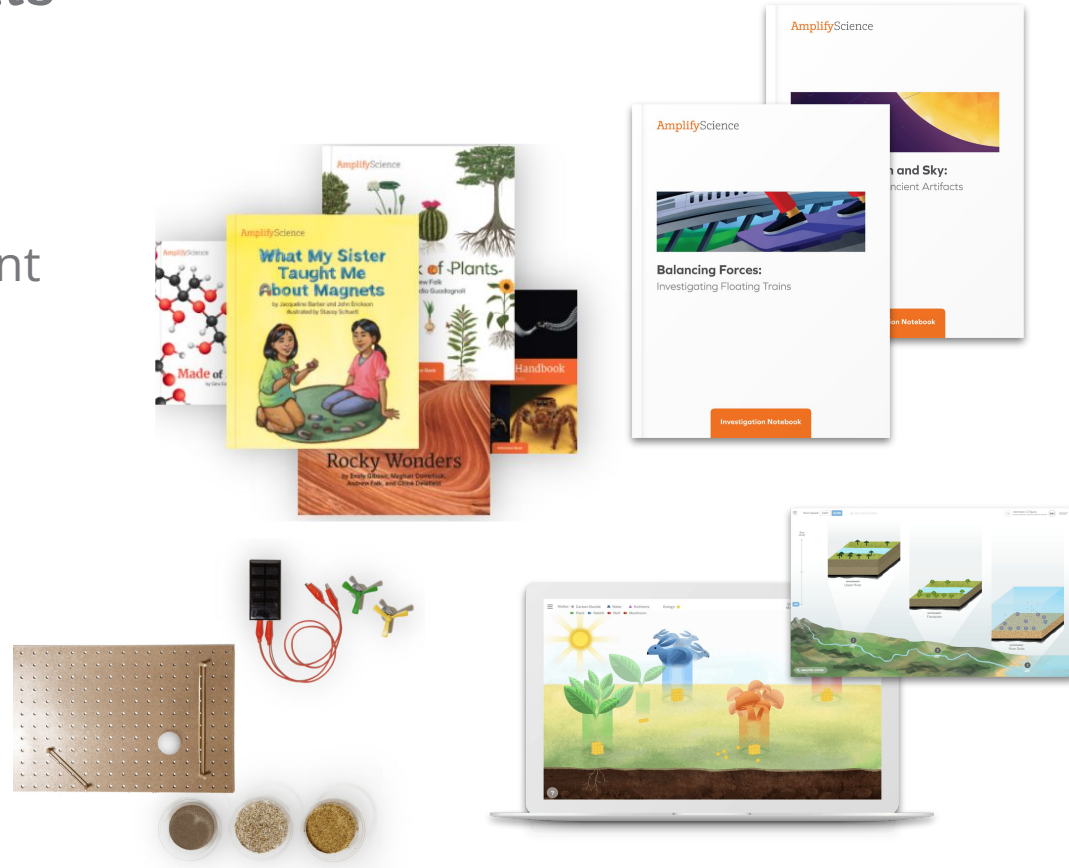
Science Program Guide



# K-5 Program components

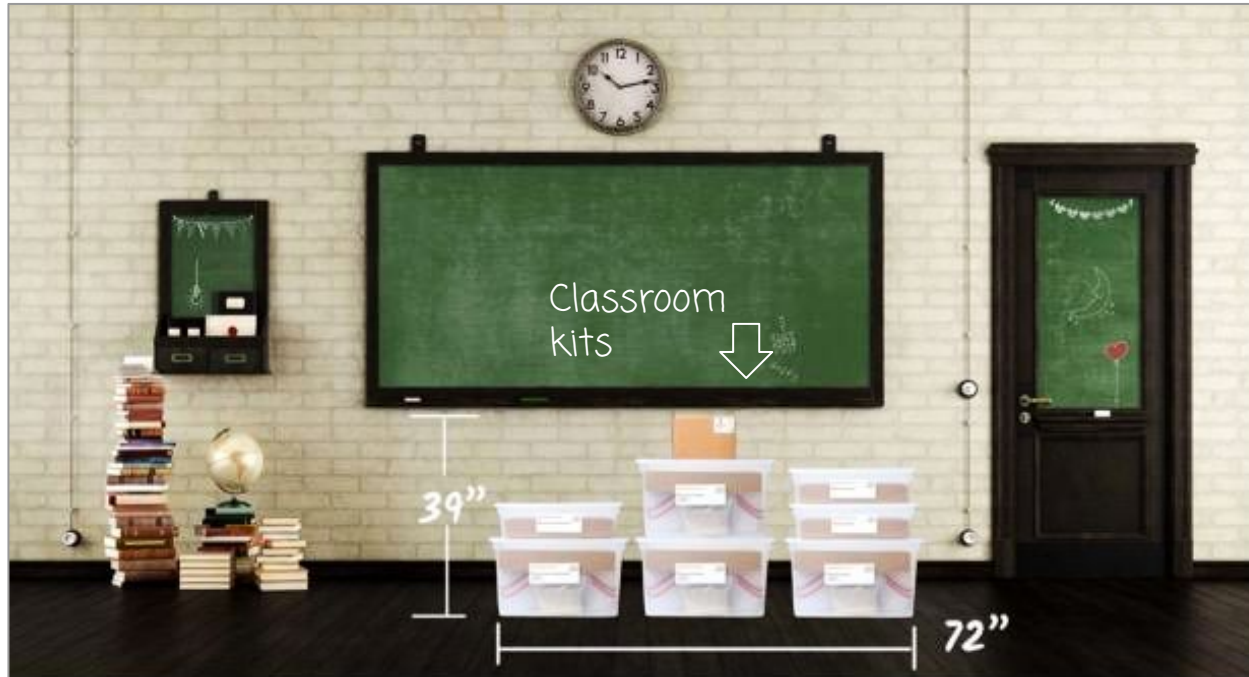
## Student materials

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



# K-5 Program components

## Classroom kits

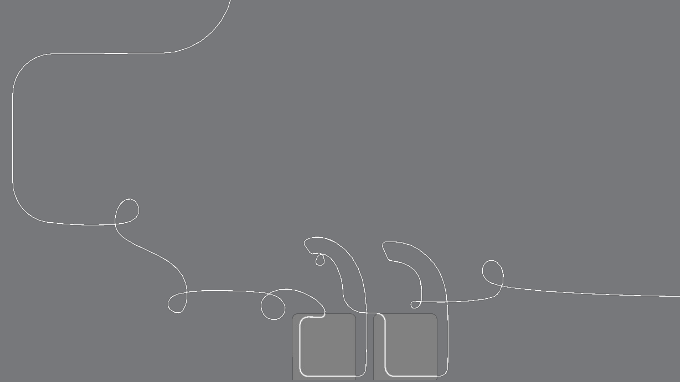


## Classroom Kits

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

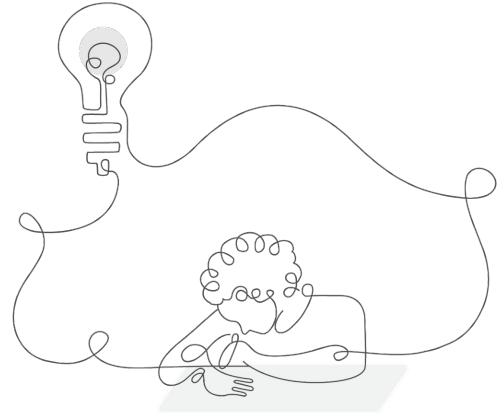


# Previewing the unit

## Introducing the phenomenon

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

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





We have a chance to take on an interesting new challenge!

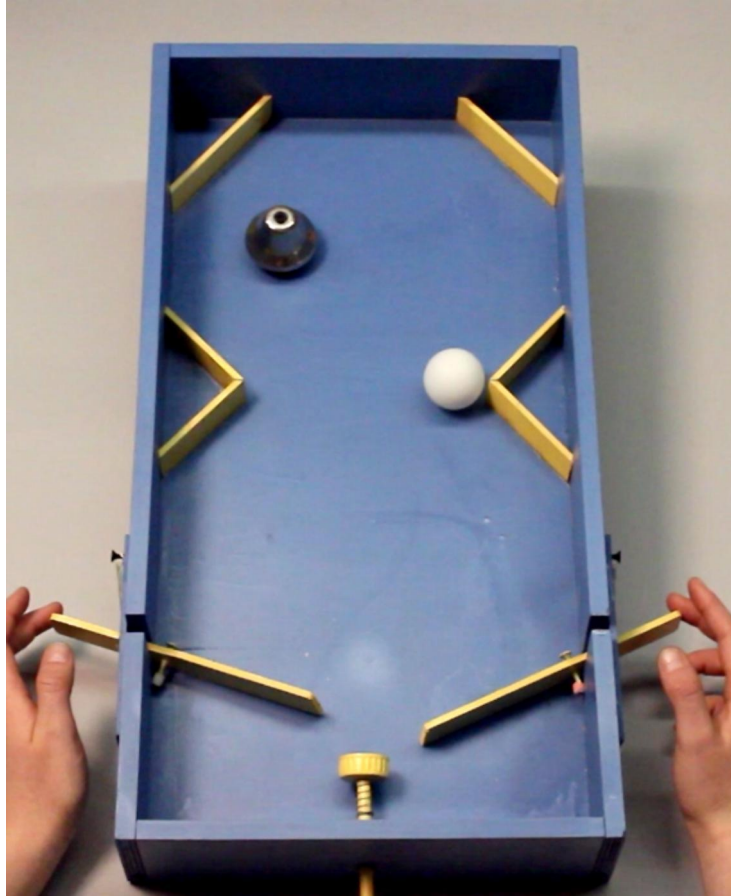
I have been thinking that our class could create our own pinball machine that we could play.

Let's think about what we already know about pinball machines.



Do you know what a **pinball machine** is?

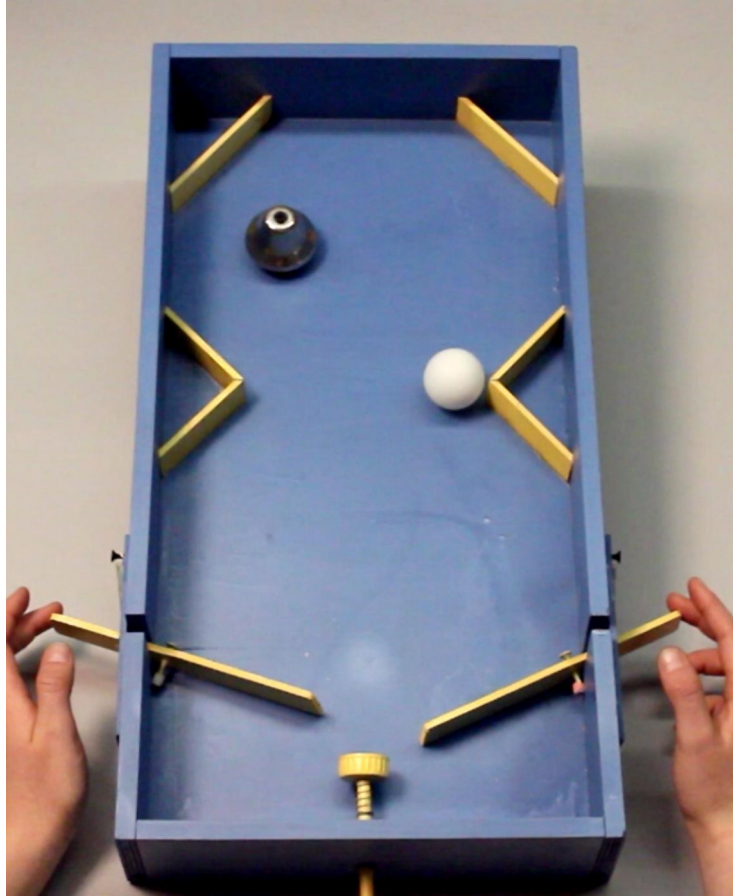
What do pinball machines do?



We will watch a video that shows **what pinball machines do.**

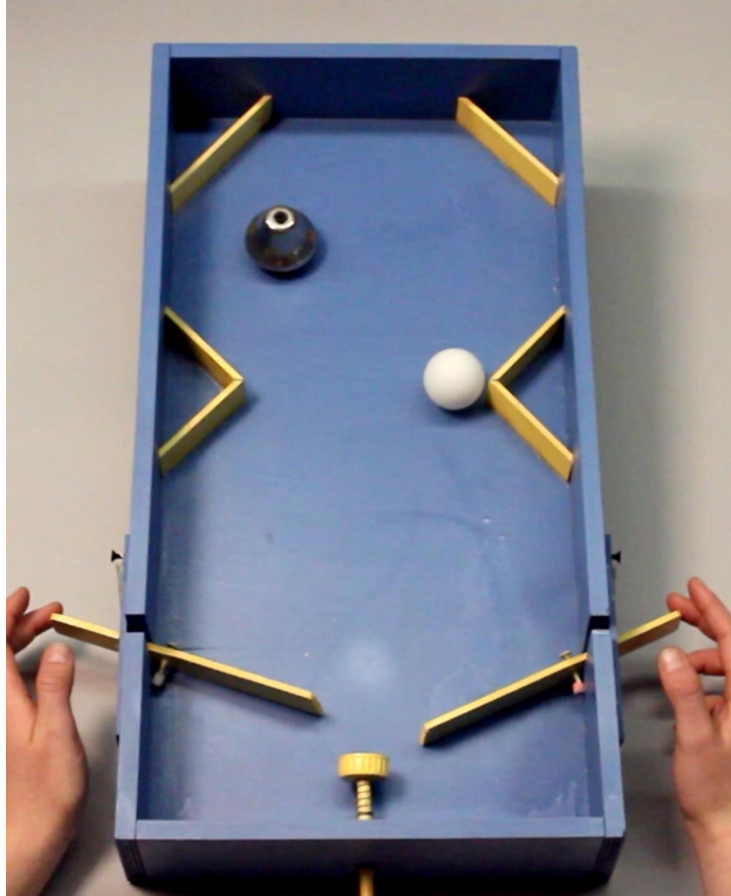
This will help us start thinking about how to make our pinball machine.





I am going to show the video a second time.

This time, pay careful attention to the **different ways that the ball moves.**



Let's talk about what we noticed.



What made the pinball  
**move in different ways** in  
the video?



# **Unit Question**

**Why do things move in different ways?**

# Amplify Science

## Anchoring phenomenon

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



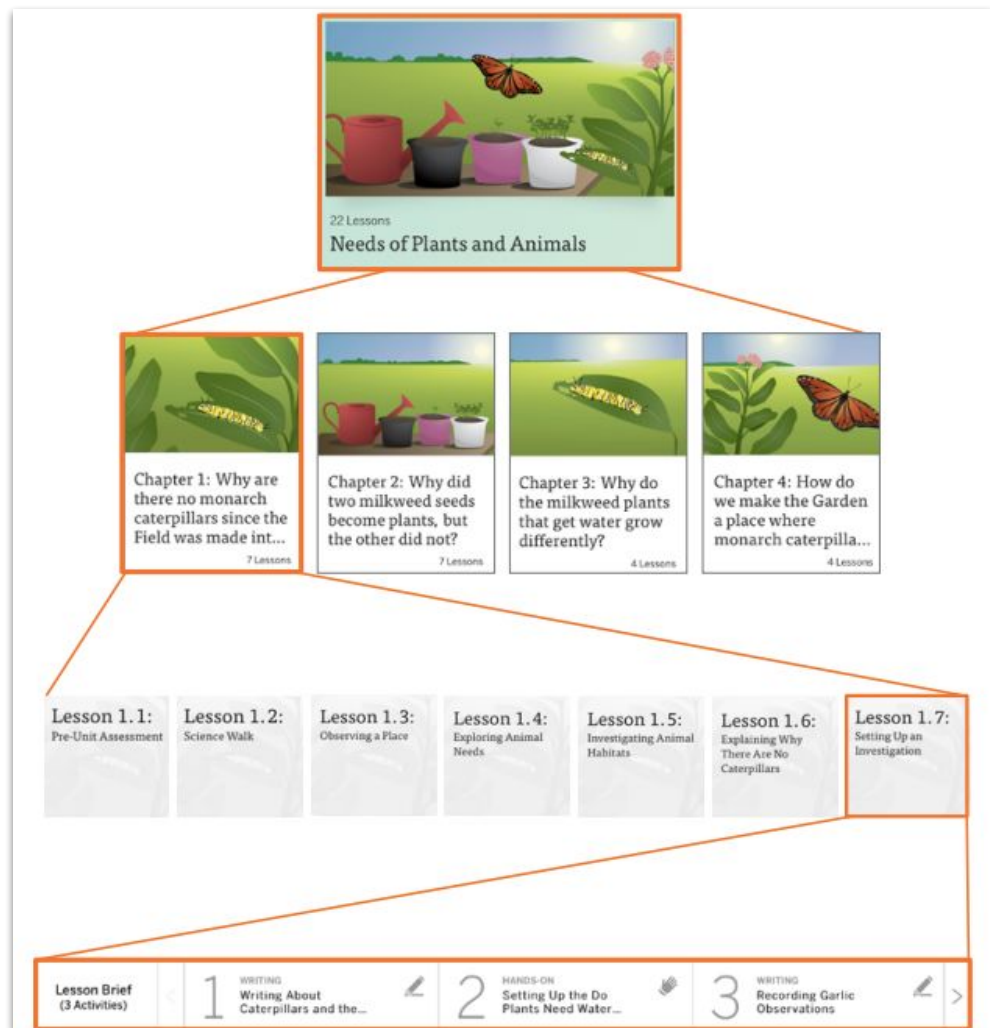
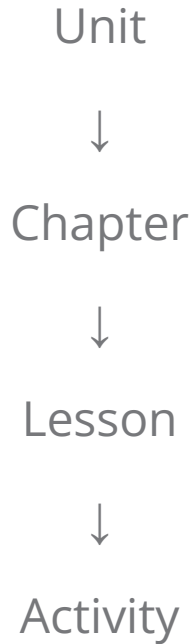




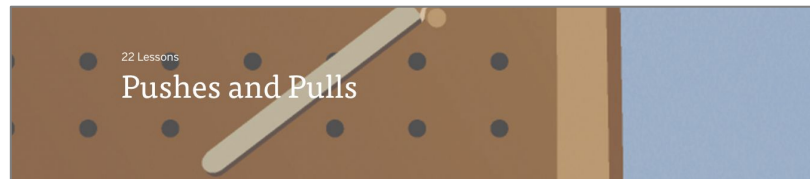
# Plan for the day: Part 1

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

# Unit structure



# Let's Go Live!



22 Lessons

## Pushes and Pulls

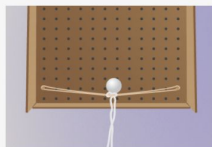
✓ JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE



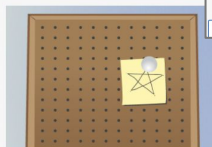
Chapter 1: How do we make a pinball start to move?

5 Lessons



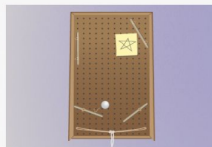
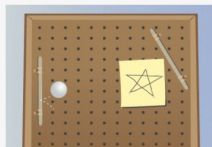
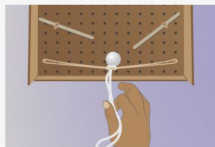
Chapter 2: How do we make a pinball move as far as we want?

3 Lessons



Chapter 3: How do we make a pinball move to a certain place?

5 Lessons



Español

### Lesson 1.1: Pre-Unit Assessment

Lesson Brief  
(3 Activities)

TEACHER  
Leading a Pre-Unit-  
Assessment Conversation

1  
TEACHER-LED DISCUSSION  
Introducing Students' Role  
as Engineers

2  
HANDS-ON  
Movement Hunt

3  
TEACHER-LED DISCUSSION  
Discussing Movement

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

Overview  
Materials &  
Preparation  
Differentiation  
Standards  
Vocabulary

### Overview

#### Students' Initial Explanations

Students are introduced to the unit—*Pushes and Pulls*—and to the context and design problem that motivate the unit. Students learn that they will be designing and building a pinball machine for their class. Students watch a video of a pinball machine being played and then discuss, in pairs and as a class, what they know about movement. The oral explanations students provide in this discussion

### Digital Resources

- Classroom Slides 1.1 | PowerPoint
- Classroom Slides 1.1 | Google Slides
- Classroom Videos 1.1 | Zip
- Video: Pinball

### Chapter 1: How do we make a pinball start to move?

✓ JUMP DOWN TO CHAPTER OVERVIEW

Lesson 1.1:  
Pre-Unit Assessment

Lesson 1.2:  
Talking About Forces

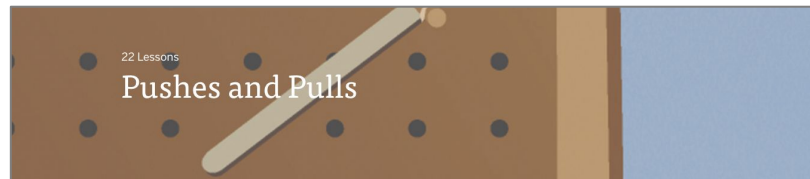
Lesson 1.3:  
Forces Happen  
Between Two Objects

Lesson 1.4:  
We Are Engineers

Lesson 1.5:  
Writing About  
Forces

Chapter Overview

# Explore the Essentials



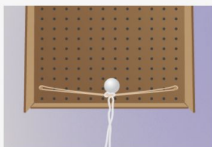
✓ JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE



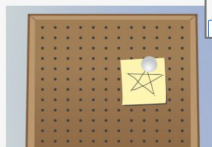
Chapter 1: How do we make a pinball start to move?

5 Lessons



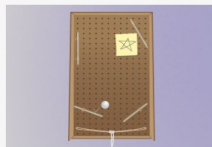
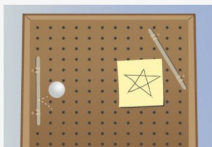
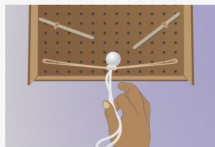
Chapter 2: How do we make a pinball move as far as we want?

3 Lessons



Chapter 3: How do we make a pinball move to a certain place?

5 Lessons



Español

## Lesson 1.1: Pre-Unit Assessment

Lesson Brief (3 Activities)

TEACHER Leading a Pre-Unit Assessment Conversation

1 TEACHER-LED DISCUSSION Introducing Students' Role as Engineers

2 HANDS-ON Movement Hunt

3 TEACHER-LED DISCUSSION Discussing Movement

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

### Overview

#### Students' Initial Explanations

Students are introduced to the unit—*Pushes and Pulls*—and to the context and design problem that motivate the unit. Students learn that they will be designing and building a pinball machine for their class. Students watch a video of a pinball machine being played and then discuss, in pairs and as a class, what they know about movement. The oral explanations students provide in this discussion

#### Digital Resources

- Classroom Slides 1.1 | PowerPoint
- Classroom Slides 1.1 | Google Slides
- Classroom Videos 1.1 | Zip
- Video: Pinball

### Chapter 1: How do we make a pinball start to move?

✓ JUMP DOWN TO CHAPTER OVERVIEW

Lesson 1.1:  
Pre-Unit Assessment

Lesson 1.2:  
Talking About Forces

Lesson 1.3:  
Forces Happen  
Between Two Objects

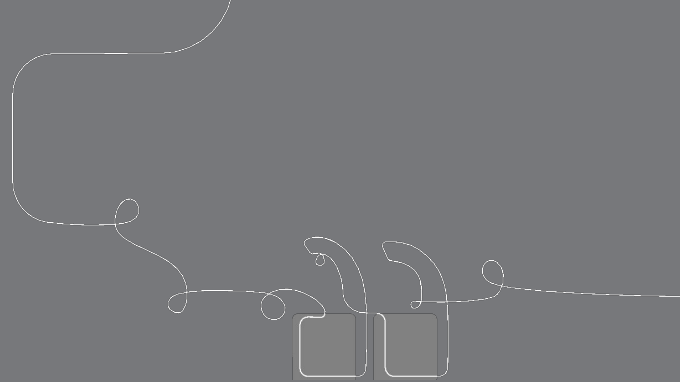
Lesson 1.4:  
We Are Engineers

Lesson 1.5:  
Writing About  
Forces

Chapter Overview

# 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*



# Key Unit Guide Documents for Planning

The interface is divided into two main columns. The left column contains a list of documents, each with a dropdown arrow. The right column contains a list of printable resources, each with a PDF icon and a dropdown arrow. A section titled 'Offline Preparation' is located at the bottom right of the right column.

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

### Offline Preparation

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

Offline Guide

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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:

Unit Question:

Relationship between the Unit Phenomenon and Unit Question:

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

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

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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:

Unit Question:

Relationship between the Unit Phenomenon and Unit Question:

### Suggested resource:

- Unit Overview / Unit Map/ Coherence Flowchart

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



## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

**Suggested resource:**

- Unit Overview / Unit Map

Relationship between the Unit Phenomenon and Unit Question:

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

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Relationship between the Unit Phenomenon and Unit Question:

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

**Suggested resource:**

- Lesson Overview  
Compilation / Unit  
Overview

How do

phenomenon/real-world problem in your unit?

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

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

**Suggested resource:**

- Lesson Overview  
Compilation / Unit Overview

Ho

phenomenon/real-world problem in your unit?

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

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

How do students engage with three-dimensional learning to...

**Suggested resource:**

- Unit Map

Try to summarize what the students figure out at the end of the unit.

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

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

To make a pinball move, they have to exert a strong or weak force on the ball to make it go a further or a shorter distance, in the direction we want it. If we want the ball to change direction, we have to exert another force on it.

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

**Suggested resource:**

- Unit Map

Try to summarize what the students figure out at the end of the unit.

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

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

To make a pinball move, they have to exert a strong or weak force on the ball to make it go a further or a shorter distance, in the direction we want it. If we want the ball to change direction, we have to exert another force on it.

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

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

By the end of

To make  
further  
we have

**Suggested resource:**

- **3D Statements**

ak force on the ball to make it go a  
If we want the ball to change direction,

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

## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

By the end of

To make  
further  
we have

**Suggested resource:**

- **3D Statements**

ak force on the ball to make it go a  
If we want the ball to change direction,

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

Students plan and carry out investigations to determine how force effects the movement of an object, its direction and its distance.



## Core Unit Planning & Internalization

Unit Title:

Pushes and Pulls

### 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 can we create a pinball machine for our class!

Student Role:

Pinball Engineers

Unit Question:

Why do things move in different ways?

Relationship between the Unit Phenomenon and Unit Question:

Students use their understanding of the phenomena of force and motion to identify pushes and pulls more broadly in their lives.

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

To make a pinball move, they have to exert a strong or weak force on the ball to make it go a further or a shorter distance, in the direction we want it. If we want the ball to change direction, we have to exert another force on it.

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

Students plan and carry out investigations to determine how force affects the movement of an object, its direction and its distance.

# 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

# 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 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](mailto:help@amplify.com)



800-823-1969



Amplify Chat



# Please provide feedback on today's session!

**Presenter name:**

**Workshop title:**

Part 1: Relaunching the Standard Curriculum

Part 2: Guided Planning (Planning for a Lesson)

**Modality:**

Remote



# End of Part 1



# Break

10:00 - 10:30

# Amplify Science

## Standard Curriculum Relaunch / Guided Planning

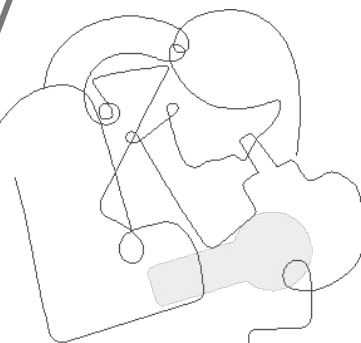
Grade K: Pushes and Pulls

### Part 2

School/District Name: LAUSD

Date: ,

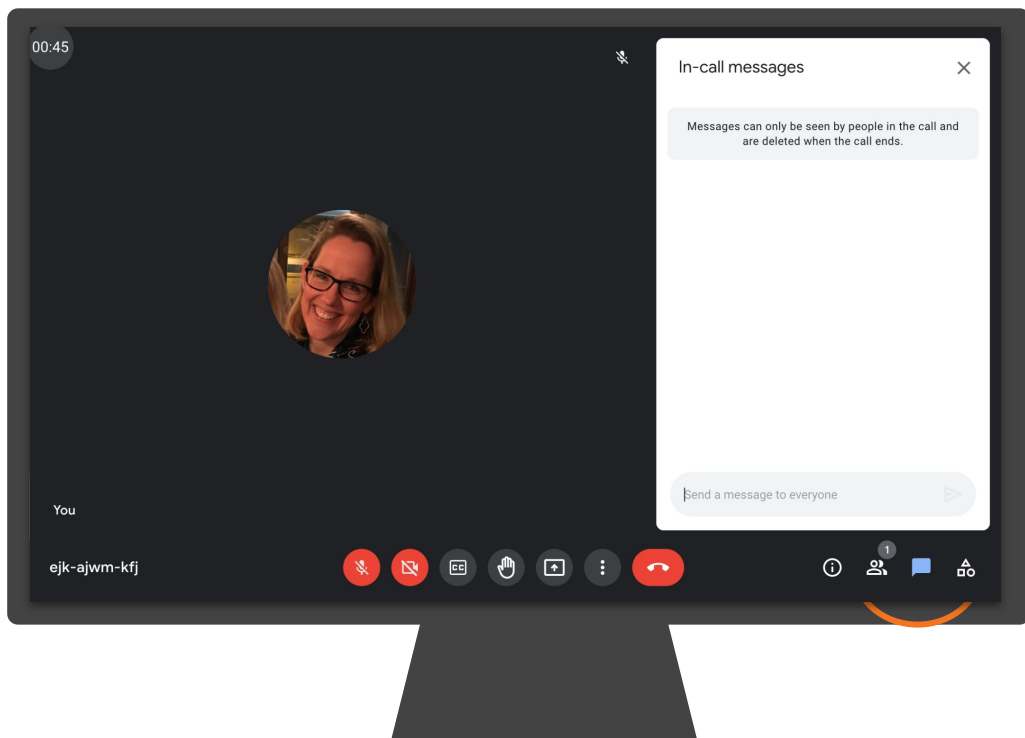
Presented by:



# Ice Breaker!

## Who do we have in the room today?

- **Question:** Now that we have gone through Part 1, which aspects of Amplify Science do you feel more comfortable with or have a greater understanding of?



# 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**.

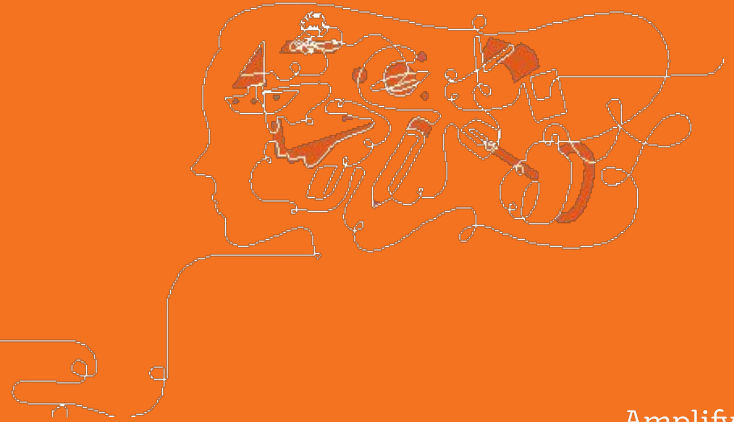
Sincerely,  
Amplify

# 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.

# Part 2:

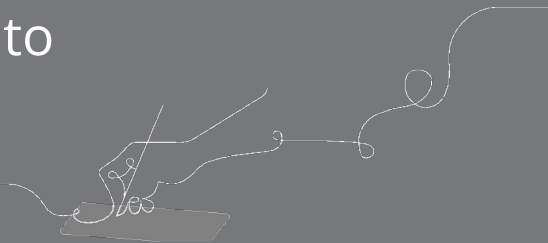
## Guided Planning (for a lesson)



# Overarching goals

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

- ❑ Navigate the Amplify Science curriculum.
- ❑ Describe what teaching and learning look like in Amplify Science.
- ❑ Apply the program essentials to prepare to teach.





## Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing





## Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

# Beginning the Unit

The first lesson of every Unit is a pre-unit assessment.

Chapter 1: How do we make brighter or darker areas?

✓ JUMP DOWN TO CHAPTER OVERVIEW

**Lesson 1.1:**  
Pre-Unit Assessment

**Lesson 1.2:**  
Can You See in the Dark?

**Lesson 1.3:**  
Light-Source Hunt

**Lesson 1.4:**  
Making Sense of Light Sources and Brightness

**Lesson 1.5:**  
Light Makes Surfaces Look Bright

Chapter Overview

# Pushes and Pulls Family Connection

Lesson Brief  
(3 Activities)

TEACHER  
Leading a Pre-Unit-  
Assessment Conversation

RESET LESSON

Overview  
Materials & Preparation  
Differentiation  
Standards  
Vocabulary

Español

Les  
Pre-

1

Pushes and Pulls Family Connections Letter

Dear Families,

In science class, we are working as pinball engineers to design a pinball machine. We'll be working to answer the question, *Why do things move in different ways?*

Sharing some of your own ideas, connections, expertise, or stories related to what we will be learning about can help prepare students for their work in science class. It can help students see that what we study in science is connected to their lives, families, and communities.

Use the following questions to think about your personal connections to students' science learning, then share them with your student.

- What does our work in science make you think of?
- Do you have any memories, stories, or experiences about something related to what we will be investigating?
- What have you heard or learned about these topics?
- What do you wonder?

re-  
res


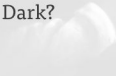



ural

# Beginning the Unit

We will be looking at Chapter 1, Lesson 2, for our model lesson.

Chapter 1: How do we make brighter or darker areas?

▼ JUMP DOWN TO CHAPTER OVERVIEW

<p><b>Lesson 1.1:</b> Pre-Unit Assessment</p> 	<p><b>Lesson 1.2:</b> Can You See in the Dark?</p> 	<p><b>Lesson 1.3:</b> Light-Source Hunt</p> 
<p><b>Lesson 1.4:</b> Making Sense of Light Sources and Brightness</p> 	<p><b>Lesson 1.5:</b> Light Makes Surfaces Look Bright</p> 	

Chapter Overview ▼



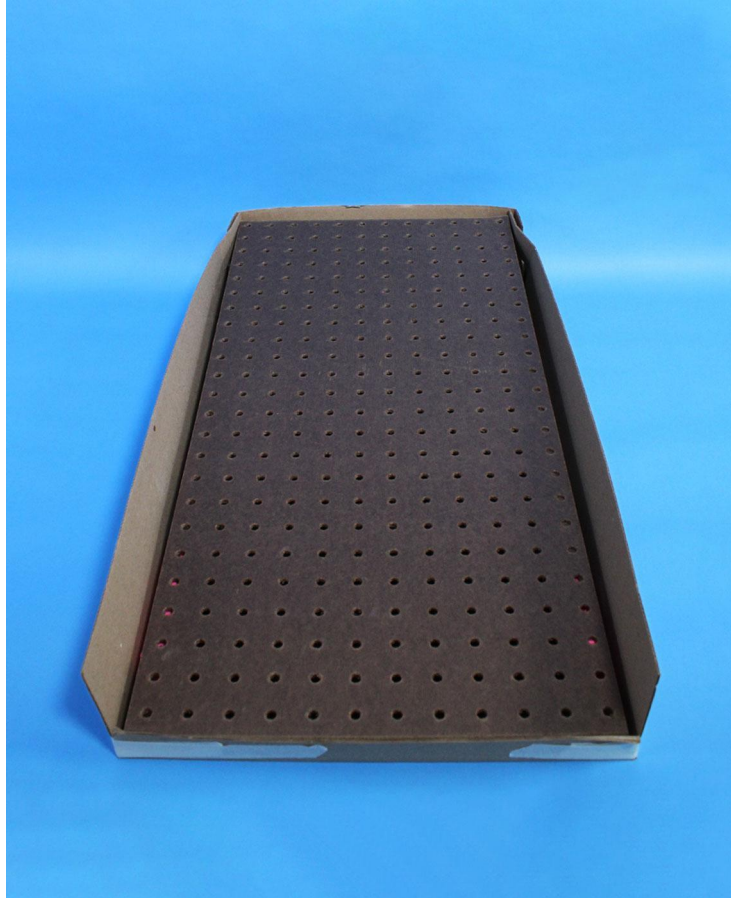
Grade K | Pushes and Pulls

# Lesson 1.2: Talking About Forces

## Activity 1

# Exploring and Describing Movement





We are **engineers**, and we are working to design a **pinball machine** for our classroom.

We will build our pinball machine in this box.

### What Engineers Do

Find out about a problem.



One thing engineers do is  
**find out about a problem.**

Our problem is that we  
need to figure out how to  
make this pinball  
machine so that it makes  
a pinball **start to move.**



Investigation Question:

What makes an object start to move?

In the last lesson, we made objects in the classroom start to move.



What are some **objects** we made move with our bodies?

How did we make those objects **start to move**?



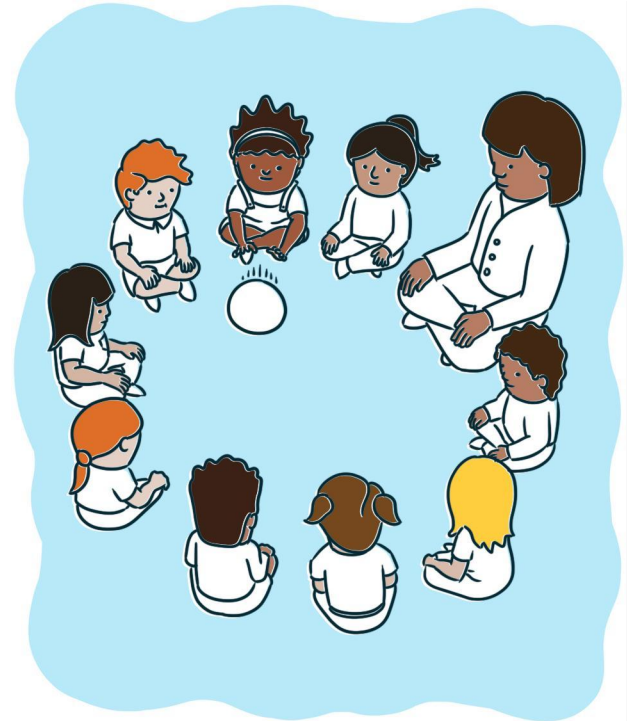
Today, we will play a game called **Rugball**.

This is a game we will play many times as we learn about **movement** and work as **engineers** to design a pinball machine.

## Playing Rugbyball: Introduction

**We are trying to start moving the ball.**

1.  
**Sit in a circle** so everyone can see.
2.  
**Start the ball moving** with a push—not a throw or a kick.
3.  
**Keep the ball in the circle.** If the ball goes outside the circle, wait for the teacher to ask a student to get it.



## Activity 2

# Visualizing Movement



In the Movement Hunt and when we played Rugbyball, we made **objects** move. I wonder if there are things other than people that can make things start to move.

We will look at pictures that show objects moving and **visualize** what is happening. I will **show you how**.



This is a picture. I cannot see anything moving.

I'll share how I **imagine the movement** to better understand what is happening.

I will show you some more pictures. For each one, **visualize** what is happening.

Think about **what is moving**, and **what is making that object move**.

You can also **act out** what is happening with your body.





Engineers work together to learn more about the things they study.



As you look at the pictures share your ideas with your partner and talk about how to answer this question: **What movements did you visualize in the picture?**









## Vocabulary



**visualize**

to make a picture in your mind

## Activity 3

# Explaining with Because



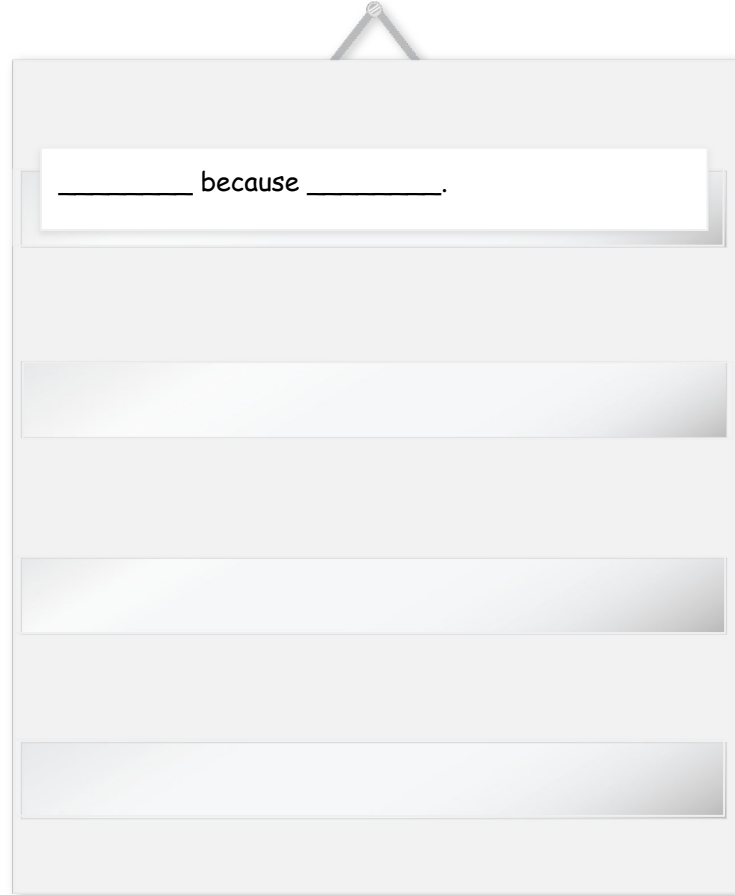
We explored making the rugby ball move and visualized how different objects were moving in pictures. Now, we are going to **try some movements** of our own to practice talking about them like scientists and engineers.

Scientists and engineers use the word **because** to explain why something happened.





I am going to **stand on one foot**. Watch my movements carefully.

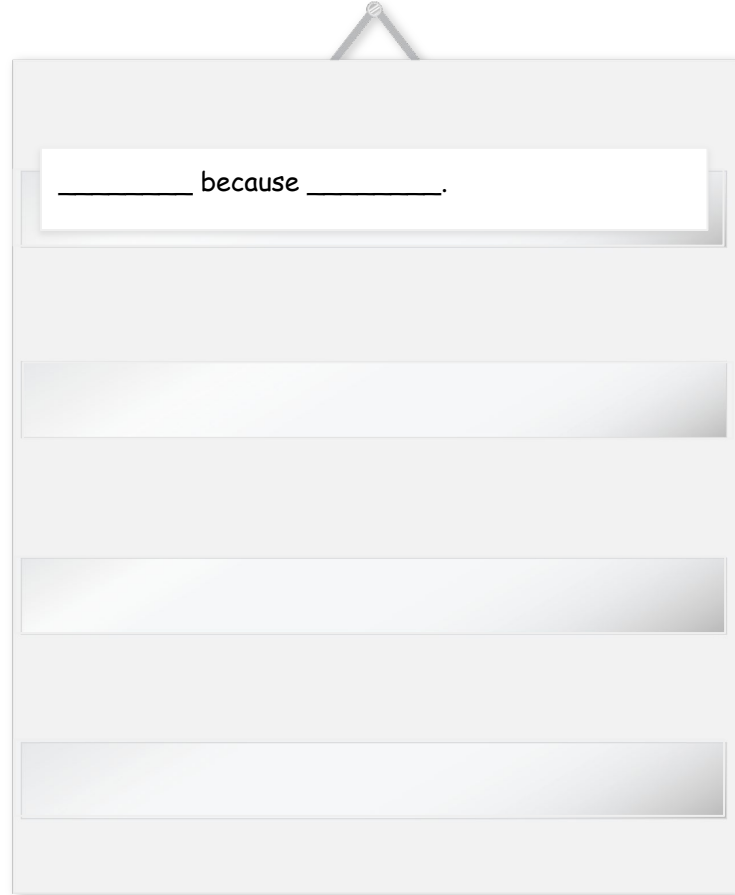


\_\_\_\_\_ because \_\_\_\_\_.

We can explain what happened and why with “because.”



What happened when I tried to **balance**?



\_\_\_\_\_ because \_\_\_\_\_.

\_\_\_\_\_

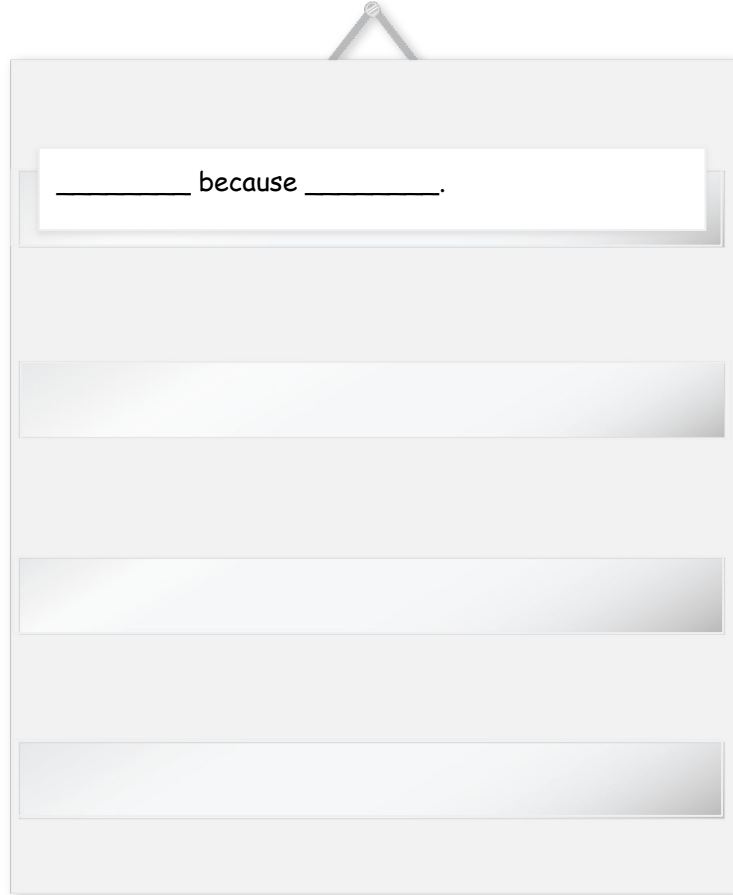
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I tipped over **because** I stood on one foot.

The word **because** means that the first part of what I said made the second part happen.

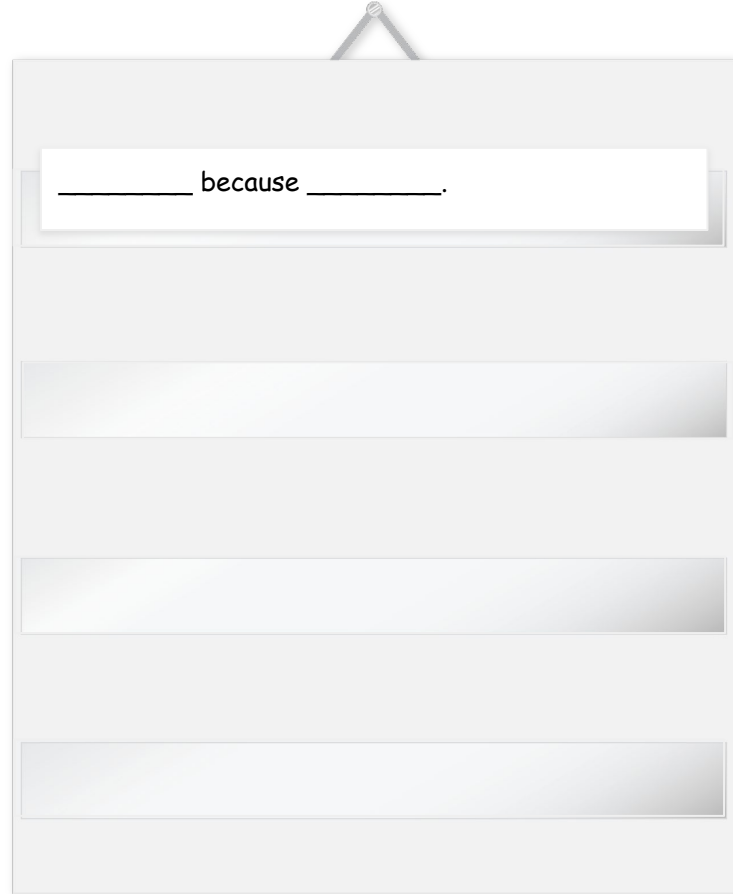


\_\_\_\_\_ because \_\_\_\_\_.

Let's try a different movement together.



**Run in place.**

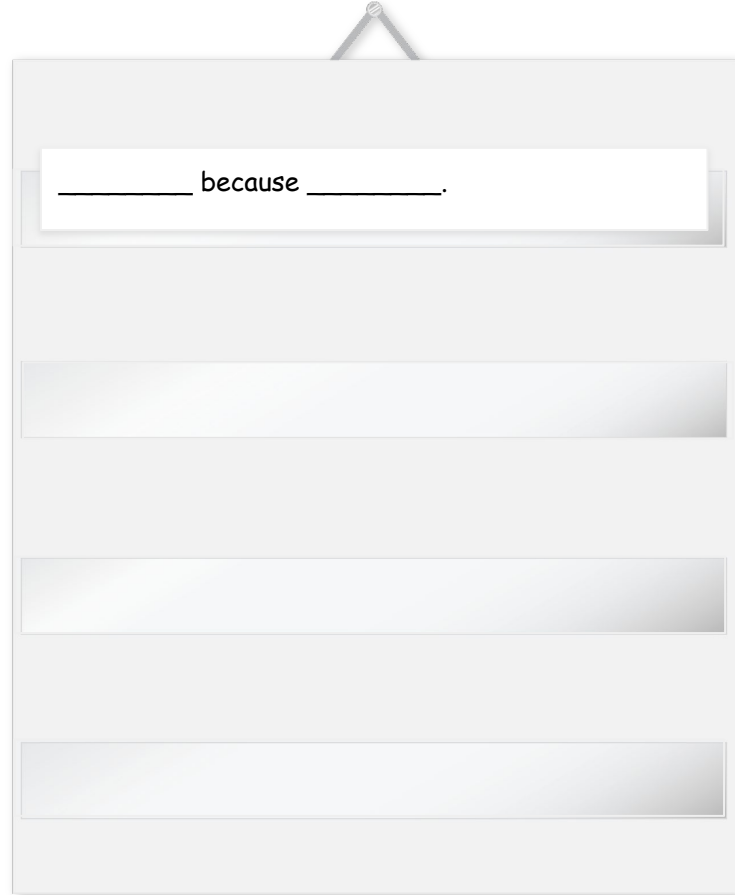


\_\_\_\_\_ because \_\_\_\_\_.

Let's make a sentence about it.



Raise your hand if you  
**feel tired or out  
of breath.**



\_\_\_\_\_ because \_\_\_\_\_.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

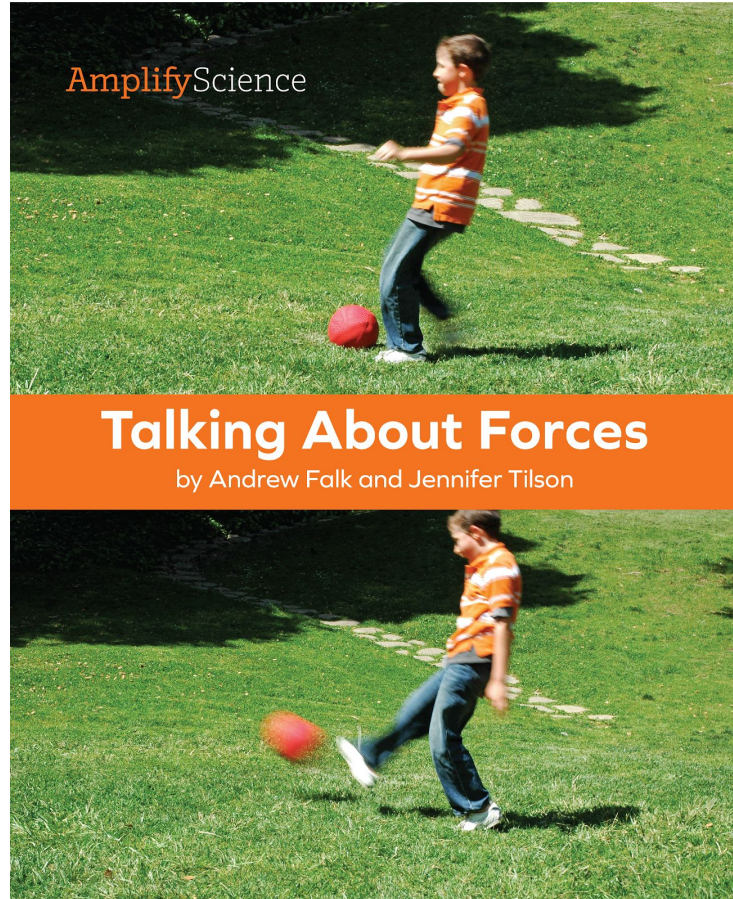
\_\_\_\_\_

Let's try out a few more examples, and make sentences explaining what happened with **because**.

## Activity 4

# Reading: Talking About Forces





This book is called *Talking About Forces*. We will read to find out more about **forces**.

We will **visualize** what is happening in the pictures and words.





It was a beautiful day at the park! Everywhere you looked, there were kids making things move.



We have many ways of talking about what happens when one thing makes another thing move.

**Scientists** and **engineers** have their own way of **explaining** what is happening. They talk about **forces**. They say that when one thing makes another thing move, it **exerts** a force on it.

Let's see some examples!



Scott pushed Francis on the swing, and Francis moved. She sailed forward in the swing, high into the air.

What would a scientist or engineer say happened here?



Here is what a scientist or engineer would say:

Francis moved because Scott exerted a force on her.



Faheem jumped into the wagon and asked for a ride. Francis pulled on the handle of the wagon, and the wagon rolled up the hill with Faheem in it!

What would a scientist or engineer say happened here?





Here is what a scientist or engineer would say:

The wagon and Faheem moved because Francis exerted a force on the wagon.



Mia and Scott played catch in the field. When it was her turn to throw, Mia threw the ball and it flew away from her.

What would a scientist or engineer say happened here?



Here is what a scientist or engineer would say:

The ball moved because Mia exerted a force on the ball.



Another ball was sitting on the grass. Jess ran up and kicked the ball. Wham! The ball bounced away over the grass. Jess scored a goal!

What would a scientist or engineer say happened here?





Here is what a scientist or engineer would say:

The ball moved because Jess exerted a force on the ball.



The kids had fun playing in the park and making things move. A scientist or engineer would agree that they had fun playing in the park. A scientist or engineer might also say they exerted forces on lots of **objects** in the park!

Scientists and engineers know that any time you see an object start to move, it is because another object exerted a force on it. When you see one object start to move, look for the other object that made it move. Forces always happen between two objects.

We are really starting to talk like  
**pinball engineers!**

In the next lesson, we will keep figuring out  
how **forces** work, so we can get ready to start  
working on our pinball machines.

# End of Lesson



THE LAWRENCE  
HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

Published and Distributed by Amplify. [www.amplify.com](http://www.amplify.com)





## Plan for the day: Part 2

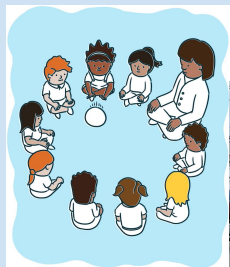
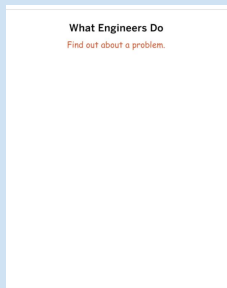
- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

# Gathering evidence

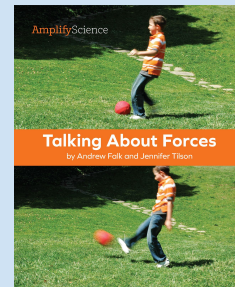
## Pushes and Pulls 1.2

How do we make a pinball start to move?

What makes an object start to move?



\_\_\_\_\_ because \_\_\_\_\_.



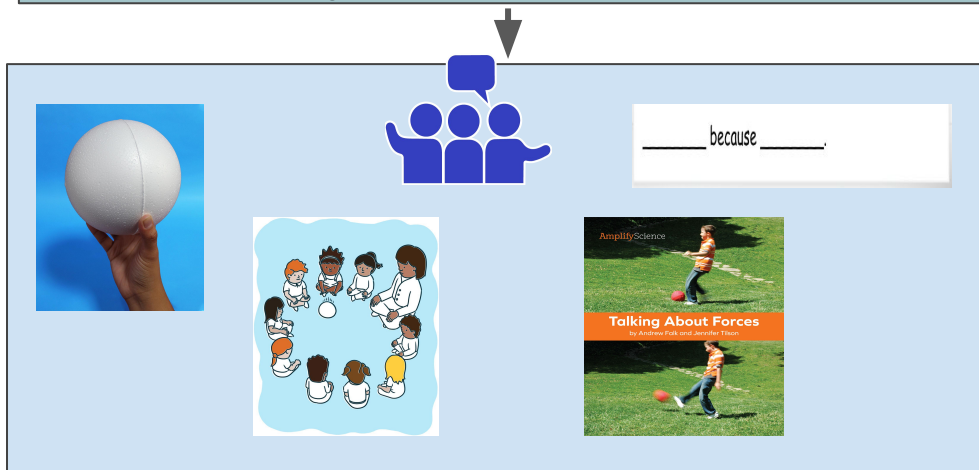
What have students figured out so far?

# Evidence sources work together


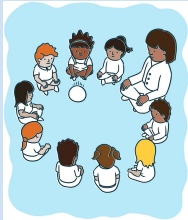
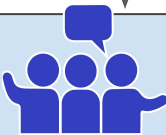
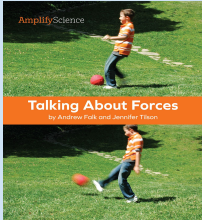
## Investigating and discussing observations

How do these activities  
**work together** to  
support understanding of  
what makes an object  
move?

Investigation Question: What makes an object start to move?



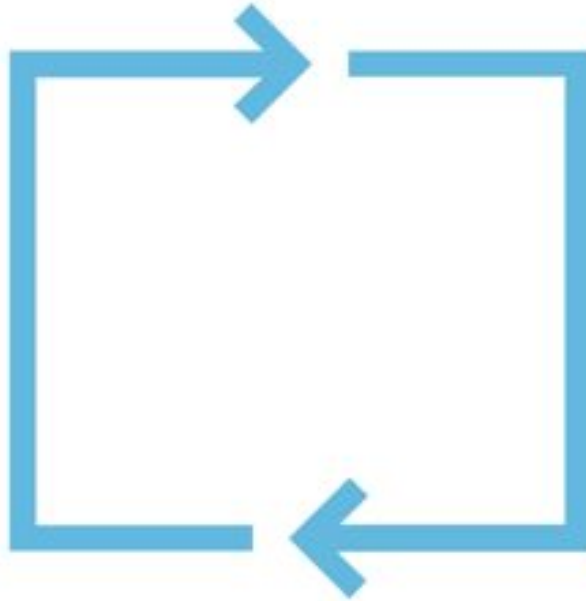
The diagram illustrates how various evidence sources are used to investigate the question: "What makes an object start to move?". An arrow points from the investigation question to a central area containing four evidence sources:

-  A photograph showing a hand holding a white ball, representing the object of study.
-  An illustration of a teacher and students sitting in a circle, representing the activity of discussing observations.
-  A graphic of three stylized people with a speech bubble, symbolizing discussion or communication.
-  A book cover titled "Talking About Forces" by Andrew Felt and Jennifer Trean, showing children playing with a ball on a grassy field.

Below the investigation question, there is a text box with the prompt:            because           .

# Multimodal learning

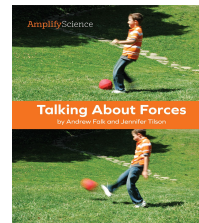
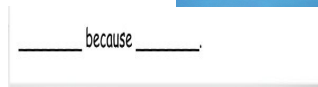
Gathering evidence over multiple lessons



**Do,  
Talk,  
Read,  
Write,  
Visualize**

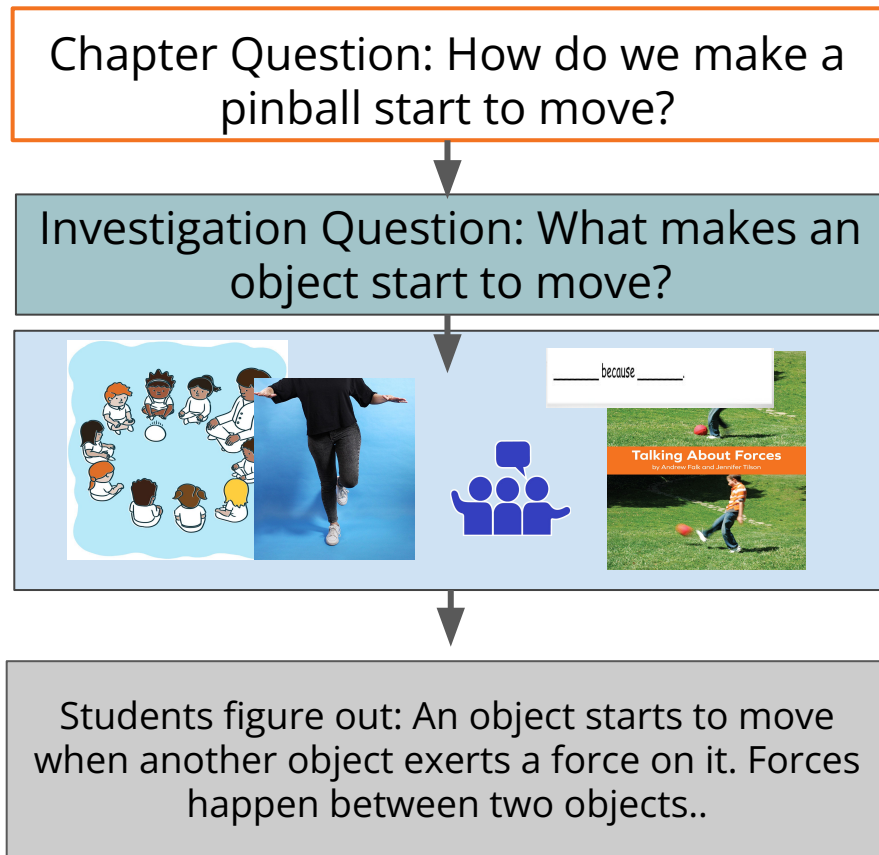
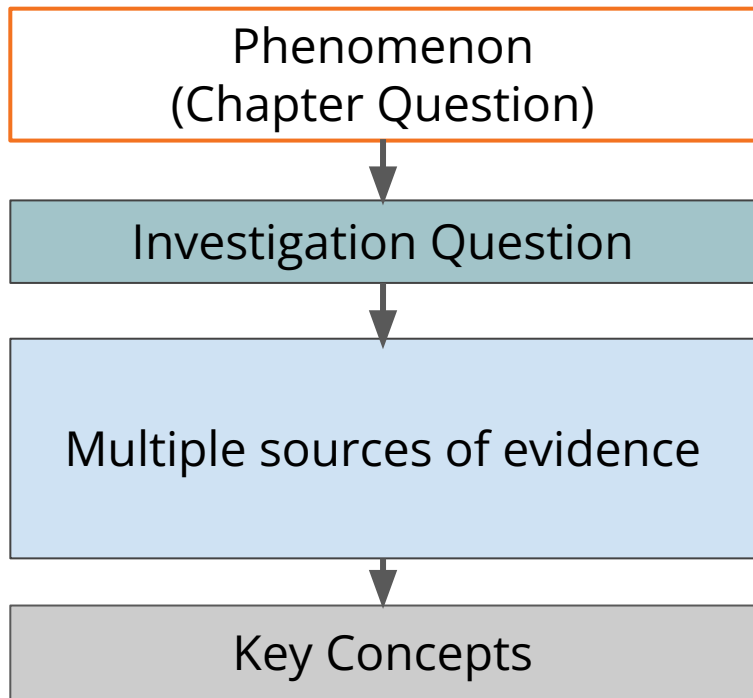
# Evidence sources work together

**Teacher tip:** Every evidence source plays an important role in student learning. Be sure to teach every activity in order!



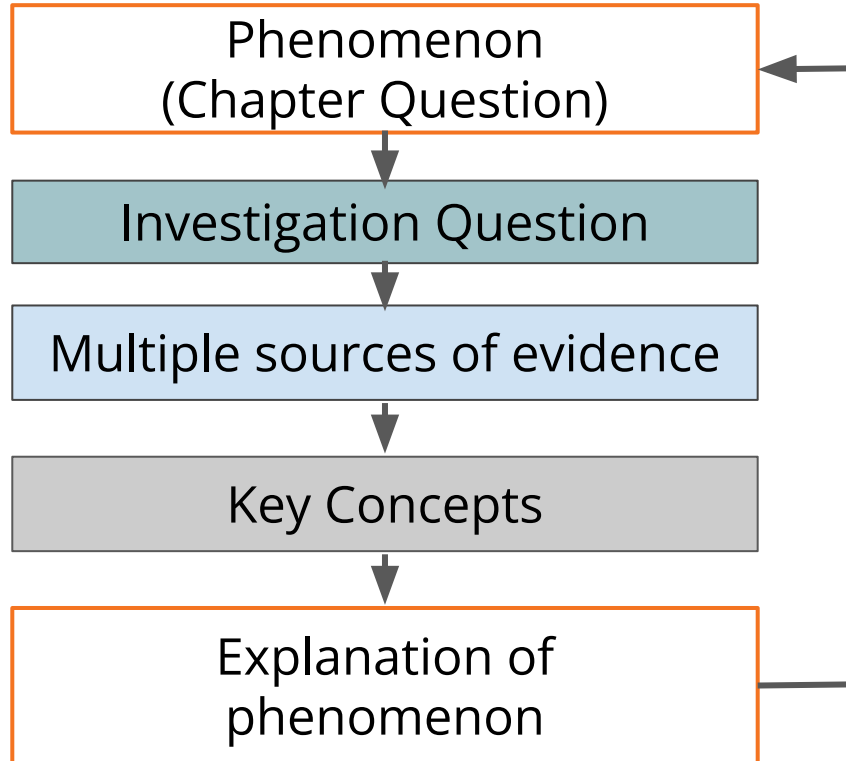
# Coherence Flowchart

## A diagram of student learning

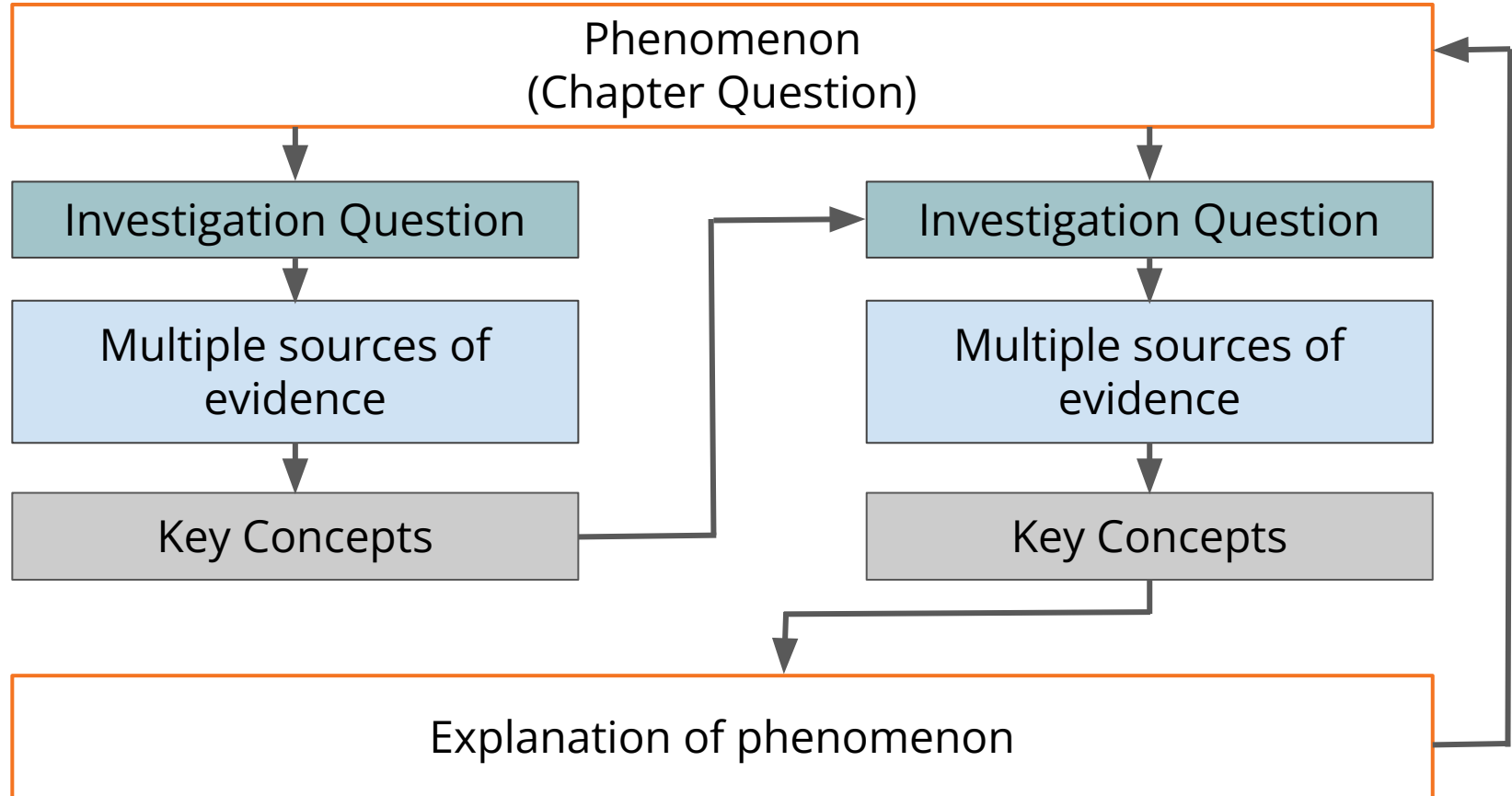


# Coherence Flowchart

A diagram of student learning



# Coherence Flowchart





## Unit Design Problem

*Problem students work to solve*

### Chapter-level Anchor Phenomenon Chapter 1 Question

### Investigative Phenomena Investigation Questions

### Evidence sources and reflection opportunities

### Key concepts

### Application of key concepts to problem

### Explanation that students can make to answer the Chapter 1 Question

## Pushes and Pulls: Designing a Pinball Machine

We want to create a pinball machine that lets us control the way a pinball moves.  
*How can we create a pinball machine for our class?*

Sometimes a pinball starts to move.  
*How do we make a pinball start to move?*

Sometimes an object starts to move.  
*What makes an object start to move? (1.1-1.4)*

- Investigate how to make objects start to move in a classroom Movement Hunt (1.1)
- Investigate making an object start to move in full-class Rugby routine (1.2)
- Use recognizable images of objects moving to visualize movement (1.2)
- Practice using cause and effect to explain everyday scenarios (1.2)
- Read Talking About Forces (1.2)
- Investigate how to make an object move by exerting a force on it using Forces Investigation materials (1.3)
- Use Explanation Language Frame to explain forces and movement in Forces Investigation (1.3)

- An object starts to move when another object exerts a force on it. (1.3)
- Forces happen between two objects. (1.3)

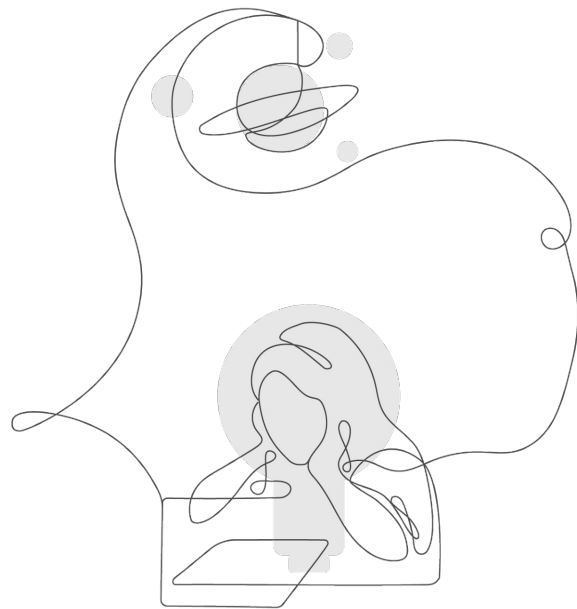
- Design launchers to make a pinball start to move in individual student Box Models (1.4)
- Diagram Box Model launcher design (1.4)
- Add a launcher to make the pinball start to move in Class Pinball Machine (1.5)
- Shared Writing to explain the Chapter 1 Question (1.5)
- Revisit Talking About Forces to use Explanation Language Frame to explain how objects move in the text (1.5)

To make our pinball start to move, we must exert a force on the pinball. We can use a rubber band launcher to exert a force on the pinball.

# Explore the Coherence Flowchart

Skim the Chapter 1 Coherence Flowchart of your first unit.

How can the Coherence Flowchart serve you as a planning tool as you begin teaching Amplify Science?



# Questions?





## Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

# Navigate to the Lesson Brief

## Lesson 1.1: Pre-Unit Assessment

Lesson Brief  
(3 Activities)

T  
TEACHER  
Leading a Pre-Unit-  
Assessment Conversation

1  
TEACHER-LED DISCUSSION  
Introducing Students' Role  
as Engineers

2  
HANDS-ON  
Movement Hunt

3  
TEACHER-LED DISCUSSION  
Discussing Movement

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

Overview

Materials &  
Preparation

Differentiation

Standards

Vocabulary

### Overview

#### Students' Initial Explanations

Students are introduced to the unit—*Pushes and Pulls*—and to the context and design problem that motivate the unit. Students learn that they will be designing and building a pinball machine for their class. Students watch a video of a pinball machine being played and then discuss, in pairs and as a class, what they know about movement. The oral explanations students provide in this discussion

### Digital Resources

Classroom Slides 1.1 | PowerPoint

Classroom Slides 1.1 | Google Slides

Classroom Videos 1.1 | Zip

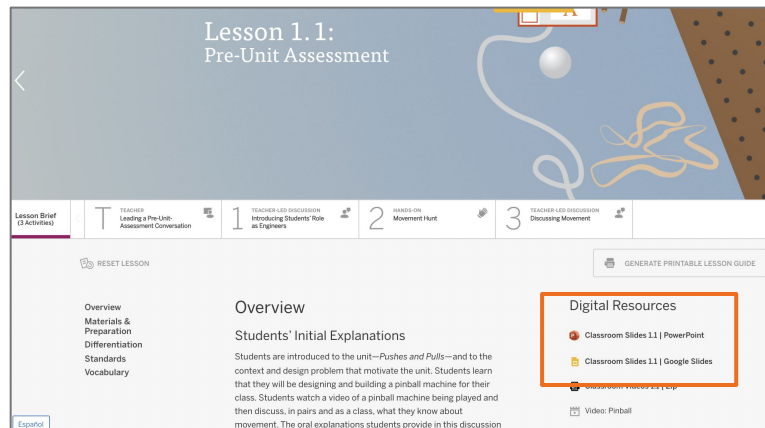
Video: Pinball

Español

# Preparing to teach

## Classroom Slides

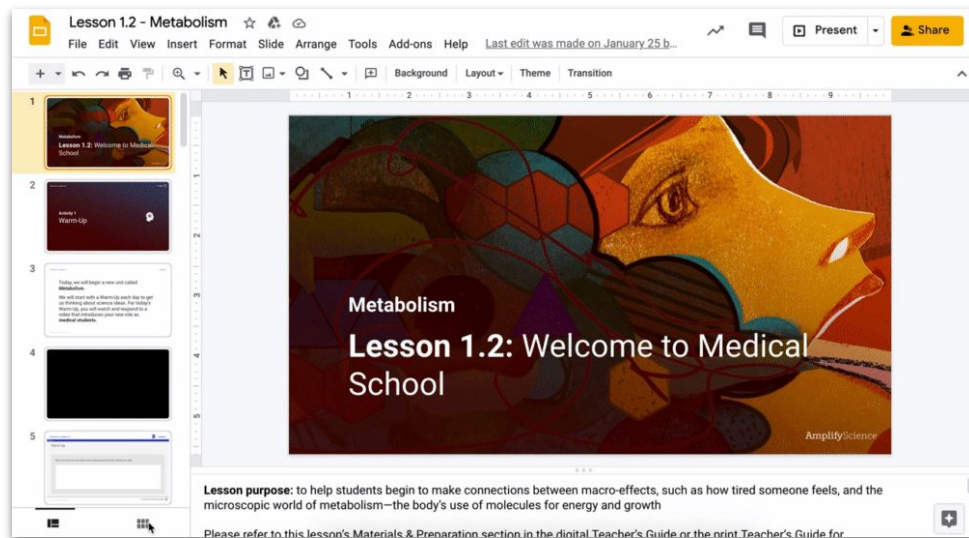
1. Open the Classroom Slides under the Digital Resources.
2. Read through the Classroom Slides including the **presenter notes** to gain a better understanding of the lesson.
3. Consider:
  - What features of the Classroom Slides will support you in teaching this lesson?



# Using Classroom Slides as a planning tool

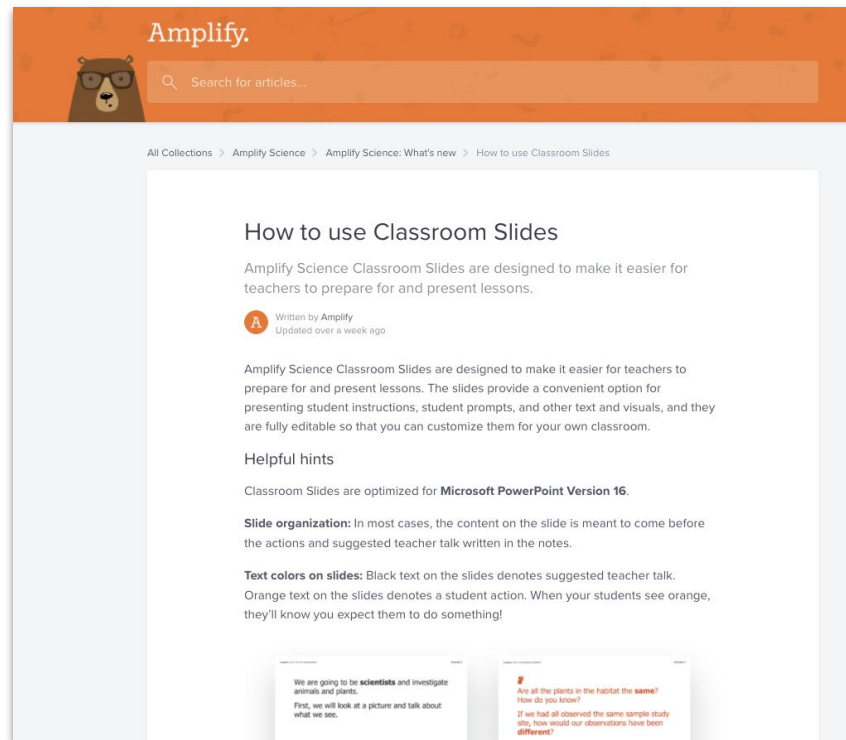
**Teacher tip:** Classroom Slides are a great visual summary of a lesson. Many teachers download and flip through a lesson's Classroom Slides deck to preview what happens in the lesson.

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 Steps for Starting Your Lesson

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

The screenshot shows a lesson interface with a top navigation bar and a main content area. The navigation bar has four tabs: 1. Overview and Describing (hand icon), 2. STUDENT-TO-STUDENT DISCUSSION Visualizing Movement (speech bubble icon), 3. TEACHER-LED DISCUSSION Explaining with Because (person icon), and 4. READING Reading: Talking About Forces (book icon). The main content area has a left sidebar with a 'RESET LESSON' button and a list of links: Overview, Materials & Preparation, Differentiation, Standards, and Vocabulary. The main content area is titled 'Overview' and contains text about students talking about forces using their own words, playing a game called Rugby, and examining a slideshow. The right sidebar is titled 'Digital Resources' and contains links to 'Classroom Slides 1.2 | PowerPoint', 'Classroom Slides 1.2 | Google Slides', 'All Projections', and 'Class Pinball Machine Preparation: Lesson 1.2'. Four orange arrows with numbers 1 through 4 point to specific elements: Arrow 1 points to the 'Classroom Slides 1.2 | Google Slides' link. Arrow 2 points to the 'Overview' link in the sidebar. Arrow 3 points to the 'Materials & Preparation' link in the sidebar. Arrow 4 points to the 'Differentiation' link in the sidebar.

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

Overview

Students begin to talk about forces using their own words. First, they play a game called Rugby, which involves moving a ball across the carpet and describing its movement. Next, they examine a slideshow featuring images of objects starting to move, visualizing the movement of the objects. Students practice using the word *because* to explain a variety of everyday events, which serves as an introduction to the crosscutting concept of Cause and Effect. They listen to this language again and practice using the visualizing

Digital Resources

- Classroom Slides 1.2 | PowerPoint
- Classroom Slides 1.2 | Google Slides
- All Projections
- Class Pinball Machine Preparation: Lesson 1.2

Lesson ____	Activity Overview	
What is the purpose of this lesson? Access prior knowledge about rocks. Make observations of rocks.	<b>Activity 1</b> <b>(##min)</b>	
What will students learn?	<b>Activity 2</b> <b>(##min)</b>	
3-D Statement (identify SEP, CCC, and DCI):	<b>Activity 3</b> <b>(##min)</b>	
Student Resources:	<b>Activity 4</b> <b>(##min)</b>	
Assessment Opportunities:	<b>Activity 5</b> <b>(##min)</b>	

Lesson <u>1.2</u>	Activity Overview	
<p><b>What is the purpose of this lesson?</b></p> <p>The purpose of this lesson is to connect students' discoveries about movement with scientific language, which, in turn, prepares them for explaining forces when they build their Box Models to test how a pinball machine works.</p>	<p><b>Activity 1</b> (10 min)</p>	<p><b>Exploring and Describing Movement</b></p>
<p><b>What will students learn?</b></p> <ul style="list-style-type: none"> <li>•An object starts to move when another object exerts a force on it</li> <li>•Visualizing is making a picture in your mind and it can be used to notice forces.</li> <li>•Scientists often talk about how things are connected.</li> <li>•Scientists and engineers search for cause and effect relationships to explain natural events.</li> </ul>	<p><b>Activity 2</b> (10 min)</p>	<p><b>Visualizing Movement</b></p>
<p><b>3-D Statement (identify SEP, CCC, and DCI):</b></p> <p>Students observe ball movements to construct explanations through discussion, and by using a because Explanation Language Frame, to think about cause and effect. They obtain information from Talking About Forces about how scientists describe pushes and pulls using scientific language (cause and effect).</p>	<p><b>Activity 3</b> (10 min)</p>	<p><b>Explaining with Because</b></p>
<p><b>Student Resources:</b></p> <p>n/a</p>	<p><b>Activity 4</b> (15 min)</p>	<p><b>4: Reading: Talking About Forces</b></p>
<p><b>Assessment Opportunities:</b></p> <p>On-The-Fly, Activity 2</p>	<p><b>Activity 5</b> (## min)</p>	

# Remember to plan for...

## **Student work:**

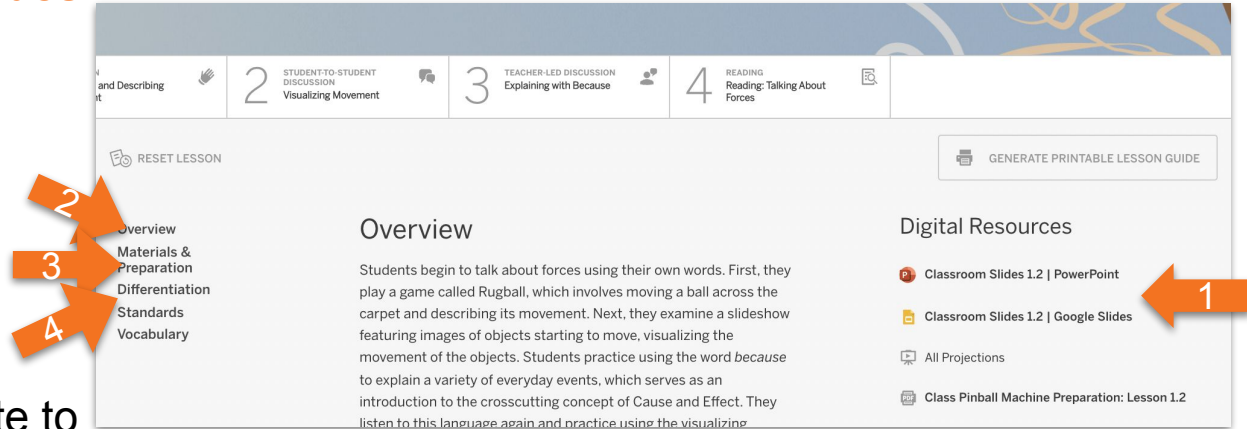
- How do you plan to collect evidence of student work?

## **Differentiation:**

- How do you plan to differentiate the lesson for diverse learners?

# 4 Steps for Starting Your Lesson

1. Download **Classroom Slides** and review them.
2. Read the **Overview**.
3. Review the **Materials & Preparation** document.
4. Read the **Differentiation** document.
5. If you have time, navigate to **Lesson 1.3** and repeat steps 1-4.



# Questions?





## Plan for the day: Part 2

- Teaching and Learning in an Amplify Science Lesson
- Instructional Approach Reflection
- Planning a Lesson
- Closing

# 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



Grades 6-8



[Caregivers](#)



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 left contains a 'JUMP DOWN TO UNIT GUIDE' button and two chapter cards: 'Chapter 1: How does Spruce the Sea Turtle do what she needs to do to survive?' (5 Lessons) and 'Chapter 2: How does Spruce the Sea Turtle do what she needs to do to survive?'. At the bottom left, there is a language toggle for 'Español'.

The screenshot shows the Amplify Science mobile app interface. The Amplify Science logo is at the top. Below it, there is a 'Hello Teacher Martin' greeting and a 'Log Out' button. A 'Go To My Account' button is also visible. A 'Classroom Language Settings' button is located below the account section. The main content area features a grid of icons for 'CALIFORNIA INTEGRATED', 'ELA Professional Learning', 'ELA Resources', 'Inferno Resources', 'Program Hub', and 'Science Program Guide'. The 'Program Hub' icon is circled in orange. At the bottom, there are buttons for 'FLORIDA EDITION Standards Map' and 'Help'.

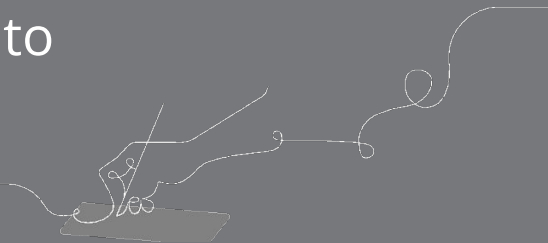
The screenshot shows the Amplify Science Program Hub desktop interface. The Amplify Science Program Hub logo is at the top. Below it, there is a 'Welcome Science Educators!' message. The main content area features three sections: 'Remote and hybrid learning resources' (circled in orange), 'Professional Learning Resources', and 'Additional Unit Materials'. The 'Remote and hybrid learning resources' section includes a sub-header 'Amplify Science@Home makes remote and hybrid learning easier.' and an illustration of a laptop. The 'Professional Learning Resources' section includes a sub-header 'Let's get started!' and an illustration of three people. The 'Additional Unit Materials' section includes a sub-header 'Additional resources to complement the units you're teaching.' and an illustration of a book. A 'HELP CENTER' link is visible in the top right corner.

The screenshot shows the Amplify Science Program Hub desktop interface, specifically the 'Pushes and Pulls' section. The section title 'Pushes and Pulls' is at the top. Below it, there is a navigation bar with tabs: '@Home Unit', '@Home Videos' (circled in orange), 'Hands-on investigations videos', and 'Read-Aloud Videos'. The '@Home Videos' tab is selected. Below the navigation bar, there is a language dropdown menu set to 'English'. The main content area features a grid of lesson cards: 'PAP Lesson 1.1', 'PAP Lesson 1.2', 'PAP Lesson 1.3', 'PAP Lesson 1.4', 'PAP: Lesson 1.5', and 'PAP: Lesson 2.1'. Each card has an external link icon in the top right corner.

# Overarching goals

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

- ☑ Navigate the Amplify Science curriculum.
- ☑ Describe what teaching and learning look like in Amplify Science.
- ☑ Apply the program essentials to prepare to teach.



# Closing reflection

Based on our work today in Part 2, share:

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

**Heart:** something you're feeling

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

# Additional resources and ongoing support

## Customer Care

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



[help@amplify.com](mailto:help@amplify.com)



800-823-1969



Amplify Chat



# Please provide feedback!

**Presenter name:**

**Workshop title:**

Part 1: Relaunching the Standard Curriculum

Part 2: Guided Planning (Planning for a Lesson)

**Modality:**

Remote

