Amplify.

Welcome to Amplify Science!

This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

All LAUSD schools have access to Amplify Science resources at this time.

Click here for Remote Learning Resources for Amplify Science

Click here to go back to the LAUSD homepage.

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



https://amplify.com/lausd-science/

Do Now: Please use the chat to self-reflect on your ability to navigate the Amplify Science curriculum (1= very uncomfortable to 5 = very comfortable).

Amplify Science

Unit Internalization Part I

Deep-dive and strengthening workshop Pushes and Pulls, Grade K

LAUSD

12/x/2020 Presented by Your Name In a new tab, please log in to your Amplify Science account through Schoology.

Norms: Establishing a culture of learners



Please keep your camera on, if possible. Take some time to orient yourself to the platform

• "Where's the chat box? What are these squares at the top of my screen?, where's the mute button?"



Mute your microphone to reduce background noise unless sharing with the group



The chat box is available for posting questions or responses to during the training



Make sure you have a note-catcher present



Engage at your comfort level - chat, ask questions, discuss, share!

Use two windows for today's webinar

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	PORCES REAL PRODUCTS BUILD Progress Build Level 1: The Earth's entire outer layer (below the water and soil that we see) is made of solid reck that is divided into plates. Earth's plates can move. Undersaft the outer layer of Earth's peoplement, the solid part of our rocky plane. This outer layer of Earth's covered entirely with hard, solid nock that is divided into plates.		34	
	Progress Build Level 2: The plates move on top of a soft, solid layer of rock called the match. At plate boundne's where the plates are moving away from each other, rock rises from the mantle and hardens, adding new solid rock to the edges of the plates. At plate boundries where plates are moving toward each other, one plate moves underneath the other and atios into the mantle. Underneath the solt, vegetation, and water that we see on the surface of Earth is the outer layer of Earth's geosphere. The solid part of our rocky	Offline Preparation Teaching without reliable classroom internet? Prepare and and lesson materials for offline access.	Lesson Brief (4 Activities) RESET LESSON	e C C C C C C C C C C C C C C C C C C C
	Getting Ready to Teach ~ Español Materials and Preparation ~		Lesson Brief	Digital Resources
			Overview ~	All Projections
			Materials & Preparation ~	Completed Scientific Argumentation Wall Diagra
			Differentiation ~	Video: Meet a Pa
			Español rds ~	The Ancient Mesosaurus



Plan for the day

- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: early childhood
- Unit internalization
- Program Hub
- Reflection and closing











Plan for the day

- Framing the day
 - Instructional materials

- Workshop goals
- Instructional approach: early childhood
- Unit internalization
- Program Hub
- Reflection and closing

Elementary school 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

Amplify Science



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Instructional materials options

Related but unique resources



@Home Videos

2-Part Unit-specific PD

Part I: Today

Focus on learning the Pushes and Pulls **unit content** and the **early childhood instructional approach** in Amplify Science

Part II: January

Planning to **teach the unit remotely**



Accessing Amplify Science@Home Amplify Science Program Hub

- New site containing Amplify Science@Home and additional PL resources
- Accessible via the Global Navigation menu



Workshop goals

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

- Explain the science concepts students will figure out in your upcoming unit
- Describe the unit's anchor phenomenon and key activities students will use as evidence in explaining the phenomenon
- Navigate to @Home resources when they become available



Plan for the day

- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: Early childhood
- Unit internalization
- Program Hub
- Reflection and closing

Instructional approach: Early childhood Oral language development as a precursor to scientific writing

- Student-to-student discourse routines (shared listening, think-draw-pair-share)
- Sentence stems and language frames
- Explicit vocabulary instruction
- Shared writing

	\wedge
The	started to move because the
exerted	d a force on it.



Instructional approach: Early childhood Modeling expert reading of complex texts

- Big books
- Read-alouds of most complex texts
- Shared reading
- Instructional guide supports teacher modeling, think-alouds, and questioning



Student Books

Big Books



Instructional approach: Early childhood Repetition and practice

- Gathering evidence for key science concepts in multiple modalities
- Revisiting texts over multiple days
- Viewing videos multiple times



Instructional approach: Early childhood Attending to developmental attention span

- Short activities (generally 15-minute max)
- Kinesthetic connections
- Movement and talking breaks
- Opportunities for personal connections



Instructional approach: Early childhood Co-constructed charts to track learning

- Visual representation of the science ideas students figure out
- Revisited and added to throughout the unit to reflect new understanding
- Supports students' mental models or visualization of science concepts





Plan for the day

- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: early childhood
- Unit internalization
- Program Hub
- Reflection and closing

Grade K | Pushes and Pulls Lesson 1.1: Pre-Unit Assessment

AmplifyScience



Activity 1 Introducing Students' Role as Engineers



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.



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

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



Part 1: Unit-level internalization

Unit title:

What is the	phenomenon	students are	investigating	in your unit?
-------------	------------	--------------	---------------	---------------

Unit Question:

Student role:

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

What science ideas do students need to figure out in order to explain the phenomenon?

Unit Guide Resources

Planning for the Unit		Printable Resources
Unit Overview	~	Article Compilation
Unit Map	~	Coherence Flowchart
Progress Build	~	Copymaster Compilation
Getting Ready to Teach	~	Flextension Compilation
Materials and Preparation	~	Investigation Notebook
Science Background	~	Information for Parents and Guardians
Standards at a Glance	~	Print Materials (8.5" x 11")
Teacher References		Print Materials (11" x 17")
Lesson Overview Compilation	~	Offline Preparation
Standards and Goals	~	Teaching without reliable classroom internet? Prepare unit and lesson
3-D Statements	~	materials for offline access.
Assessment System	~	Offline Guide
Embedded Formative Assessments	~	
Articles in This Unit	~	
Apps in This Unit	~	
Flextensions in This Unit	~	

Unit Guide resources

Once a unit is selected, select JUMP DOWN TO UNIT GUIDE in order to access all unit-level resources in an Amplify Science unit.

Planning for the unit

Unit Overview	Describes what's in each unit, the rationale, and how students learn across chapters
Unit Map	Provides an overview of what students figure out in each chapter, and how they figure it out
Progress Build	Explains the learning progression of ideas students figure out in the unit
Getting Ready to Teach	Provides tips for effectively preparing to teach and teaching the unit in your classroom
Materials and Preparation	Lists materials included in the unit's kit, items to be provided by the teacher, and briefly outlines preparation requirements for each lesson
Science Background	Adult-level primer on the science content students figure out in the unit
Standards at a Glance	Lists Next Generation Science Standards (NGSS) (Performance Expectations, Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts), Common Core State Standards for English Language Arts, and Common Core State Standards for Mathematics
Teacher references	
Lesson Overview Compilation	Lesson Overview of each lesson in the unit, including lesson summary, activity purposes, and timing
Standards and Goals	Lists NGSS (Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts) and CCSS (English Language Arts and Mathematics) in the unit, explains how the standards are reached
3-D Statements	Describes 3-D learning across the unit, chapters, and in individual lessons
Assessment System	Describes components of the Amplify Science Assessment System, identifies each 3-D assessment opportunity in the unit
Embedded Formative Assessments	Includes full text of formative assessments in the unit
Books in This Unit	Summarizes each unit text and explains how the text supports instruction
Apps in This Unit	Outlines functionality of digital tools and how students use them (in grades 2-5)
Printable resources	·
Copymaster Compilation	Compilation of all copymasters for the teacher to print and copy throughout the unit
Investigation Notebook	Digital version of the Investigation Notebook, for copying and projecting
Multi-Language Glossary	Glossary of unit vocabulary in multiple languages
Print Materials (8.5" x 11")	Digital compilation of printed cards (i.e. vocabulary cards, student card sets) provided in the kit
Print Materials (11" x 17")	Digital compilation of printed Unit Question, Chapter Questions, and Key Concepts provided in the kit



Unit title:		
What is the phenomenon students are investigating	in your unit?	
Unit Question:	Student role:	
By the end of the unit, students figure out		
What science ideas do students need to figure out in	order to explain the phenomenon?	
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Unit Map

Planning for the Unit	Printable Resources	
Unit Overview	✓ ☐ Article Compilation	
Unit Map		
Progress Build	v =	
Getting Ready to Teach	Flextension Compilation	
Materials and Preparation	Investigation Notebook	
Science Background	→ NGSS Information for Parents Guardians	and
Standards at a Glance	Print Materials (8.5" x 11")	
Teacher References	Print Materials (11" x 17")	
Lesson Overview Compilation	Y Offline Preparation	
Standards and Goals	 Teaching without reliable classroo internet? Prepare unit and lesson 	m
3-D Statements	materials for offline access.	
Assessment System	✓ Offline Guide	
Embedded Formative Assessments	×	
Articles in This Unit	~	
Apps in This Unit	~	
Flextensions in This Unit	~	

Modeling Matter

Planning for the Unit

Unit Map A

Unit Map

What happens when two substances are mixed together?

In the role of food scientists working for Good Food Production, Inc. students are introduced to the ideas that all matter is made of particles to small to see and that each different substance is made of particles (molecules) that are unique. Students are then challenged to solve two problems: One problem requires them to separate a mixture, and the other problem requires them to make unmixed as ubstances mix. Students are challenged to use the particulate model of matter to explain their work to the president of the company. In so doing, students figure out that the properties of materials are related to the properties of the nanoparticles that make whose materials.

Chapter 1: Why did the food coloring separate into different dyes?

Students figure out: The different dyes that are mixed together have different properties (colors), so they are made of different molecules. The molecules in the mixture that are carried up the paper by the water are attracted to the water and mix with it. As the water travels up the paper, different kinds of molecules travel different distances because their molecules are different sizes or have a different attraction to the paper.

How they figure it out: Students conduct a chromatography test on the dye mixture and observe as it separates. The class explores and critiques a variety of physical models before creating their own models of what might be happening at the nanoscale. Students share, critique, and revise their diagram models and write scientific explanations.

Chapter 2: Why do some salad dressings have sediments, and others do not?

Students figure out: Salad dressings with sediments contain solids that are not soluble; salad dressings without sediments contain soluble solids. The molecules of water and the molecules of different solids are different from one another. When a solid dissolves in water (it is soluble), it means that the molecules of the solid are attracted to water molecules. When a solid does not dissolve in water, it means that the molecules of the solid are not attracted to water molecules. When a solid does not dissolve in water, it means that the molecules of the solid are not attracted to water molecules.

How they figure it out: Students get hands-on experience with solids that dissolve and solids that do not dissolve. They then explore the phenomenon of a solid dissolving at the nanoscale in the Modeling Matter Simulation. Students create their own diagram models and write scientific explanations of dissolving.

Chapter 3: Why can salad-dressing ingredients separate again after being mixed?

Students figure out: When liquids do not mix together, they form layers. The A molecules and the B molecules are not attracted to one another, so they do not mix together, in addition to the level of attraction between A molecules and B molecules. A molecules have a level of attraction to other A molecules, and B molecules have a level of attraction to other B molecules. Liquid ingredients in a salid dressing separate after being mixed if the attraction between molecules of one liquid is greater than the attraction between molecules of different liquids. However, if an emulsilier is added, the liquids can mix because the molecules of the emulsifier are strongly attracted to both A molecules and B molecules.

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Pages 2-3

e Simulation to figure out i of mixing and non-mixing dis to mix, students then ion enables them to expreain how emulsifiers u

Modeling Matter Planning for the Unit

Pushes and Pulls	
/hat is the phenomenon students are investigating in your unit?	
Pinball machines make pinballs move in di-	fferent ways.
Init Question:	Student role:
Why do things move in different ways?	Pinball engineers
y the end of the unit, students figure out	<mark>-</mark>
/hat science ideas do students need to figure out in order to explain the phenor	menon?
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/hat science ideas do students need to figure out in order to explain the phenor	menon?

Student pinball machines

In the Pushes and Pulls unit in the standard Amplify Science curriculum, students use kit materials to build their own model pinball machines, called Box Models.

As they figure out new ideas about how things move in different ways, they redesign their Box Models to make their pinball move in that new way.



is the phenomenon students are investigating in your unit? Pinball machines make pinballs move in different ways. Question: /hy do things move in different ways?	
Pinball machines make pinballs move in different ways. Question: /hy do things move in different ways? Pinball engineers	
Question: /hy do things move in different ways? Pinball engineers	
e end of the unit, students figure out	
now to make their Box Models do all the things a real pinball nachine can do.	
science ideas do students need to figure out in order to explain the phenomenon?	

Part 1: Unit-level internalization		
Pushes and Pulls		
What is the phenomenon students are investigating in your unit?		
Pinball machines make pinballs move in di	ifferent ways.	
Why do things move in different ways?	student role: Pinball engineers	
By the end of the unit, students figure out		
how to make their Box Models do all the the machine can do.	hings a real pinball	
What science ideas do students need to figure out in order to explain the pheno	omenon?	

Progress Build

Page 4

Pushes and Pulls
Planning for the Unit

Progress Build

Progress Build

Overview: Progress Build

A Progress Build describes the way in which students' explanations of the central phenomenon should develop and deepen over the course of a unit. It is an important tool in understanding the design of the unit and in supporting students' learning. A Progress Build organizes the sequence of instruction, defines the focus of the assessments students' understanding of the content, specifically at each of the Critical Juncture Assessments found throughout the unit. A Critical Juncture Assessments founds through the focus of the assessment squide decisions related to the instruction designed to address specific gaps in students' understanding. This document will serve as an overview of the *Pushes and Pulis: Designing a Pinball Machine Progress* Build. Since the Progress Build is an increasingly complex yet integrated explanation, we represent it below by including the new ideas for each level in bold. Depending on the standards for a given grade level, a unit may include additional supporting content; however, the Progress Build serves as the conceptual core of the unit.

In the *Pushes and Puls* unit, students will learn to construct scientific explanations that describe the different ways that an object moves as caused by different forces exerted on the object. In particular, students will focus on investigating and explaining the different distances and directions that a pinball can be made to move in a pinball machine.

Prior knowledge (preconceptions): There is no significant prior knowledge assumed. Students will certainly have experience with observing moving objects, including rolling balls, as well as making objects move in different ways. Students will have experience moving objects by pushing or pulling. But they likely have not thought carefully about how those objects do so. Students will have opportunities to explore these kinds of actions more carefully over the course of the unit.

Progress Build Level 1: An object starts moving when a force is exerted on it.

When an unmoving object starts to move, it is because another object exerted a force on it.

Progress Build Level 2: Stronger force causes an object to move a longer distance.

When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause the object to move a long distance, while a gentle force will cause the object to move a short distance.

Progress Build Level 3: An object starts to move in the direction of the force exerted on it.

When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause the object to move a long distance, while a gentle force will cause the object to move a short distance. The object starts moving in the same direction as the force that was exerted on it.

Progress Build Level 4: Moving objects can change direction because of a force from a moving or still object.

When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause the object to move a long distance, while a gentle force will cause the object to move a short distance. The object starts moving in the same direction as the force that was exerted on it. If the object changes the direction it is moving, it is because a moving or still object exerted a force on it.

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Planning for the Unit		Printable Resources
Unit Overview	~	Article Compilation
Unit Map	~	Coherence Flowchart
Progress Build		
Cotting Ready to Teach	~	
Materials and Preparation	~	Investigation Notebook
Science Background	~	INGSS Information for Parents and Guardians
Standards at a Glance	~	Print Materials (8.5" x 11")
Teacher References		Print Materials (11" x 17")
Lesson Overview Compilation	~	Offline Preparation
Standards and Goals	~	Teaching without reliable classroom internet? Prepare unit and lesson
3-D Statements	~	materials for offline access.
Assessment System	~	Offline Guide
Embedded Formative Assessments	~	
Articles in This Unit	~	
Apps in This Unit	~	
Flextensions in This Unit	~	

Share your thinking!

After reading the Progress Build, what are your ideas about the prompt:

What science ideas do students need to figure out in order to explain the phenomenon?

Depending on the standards for a given grade level, a unit may include additional supporting content: however, the Progress Build serves as the conceptual core of the unit. In the Pushes and Pulls unit, students will learn to construct scientific explanations that describe the different ways that an object moves as caused by different forces exerted on the object. In particular, students will focus on investigating and explaining the different distances and directions that a pinball can be made to move in a pinball machine, Prior knowledge (preconceptions): There is no significant prior knowledge assumed. Students will certainly have Guided Unit Internalization experience with observing moving objects, including rolling balls, as well as making objects move in different ways. Students will have experience moving objects by pushing or pulling, but they likely have not thought carefully about how those objects do so. Students will have opportunities to explore these kinds of actions more carefully over the course of Part 1: Unit-level internalization the unit Progress Build Level 1: An object starts moving when a force is exerted on it. Unit title: Pushes and Pulls When an unmoving object starts to move, it is because another object exerted a force on i Progress Build Level 2: Stronger force causes an object to move a longer distance When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause What is the phenomenon students are investigatin the object to move a long distance, while a gentle force will cause the object to move a short distance Progress Build Level 3: An object starts to move in the direction of the force exerted on i Pinball machines make When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause the object to move a long distance, while a gentle force will cause the object to move a short distance. The object starts moving in the same direction as the force that was exerted on it. Progress Build Level 4: Moving objects can change direction because of a force from a moving or still object Unit Question: When an unmoving object starts to move, it is because another object exerted a force on it. A strong force will cause the object to move a long distance, while a gentle force will cause the object to move a short distance. The object starts moving in the same direction as the force that was exerted on it. If the object changes the direction it is moving, it is Why do things move in d because a moving or still object exerted a force on it. By the end of the unit, students figure out ... © The Reports of the University of Californ 1 ...how to make their Box Models do all the things a real pinball machine can do. What science ideas do students need to figure out in order to explain the phenomenon?

Progress Build

Progress Build

Pushes and Pulls

Overview: Progress Build

A Progress Build describes the way in which tabletel's explanations of the central preferomenon should devoke and degree over the course of a writ. It is an important bot in indertificating the design of the unaid in supporting students' interming. A Progress Build erg annows the sequence of instruction, defines the local of the assessments and Advanced to the second students' and the sequence of instruction. The second students' in the second students' and the second students' and the second students' in the second students' and the second students' and the second students' intermediates and the second students' and the second students' and the second students' intermediates and environments' and the second students' and the second students' intermediates and the second students' and the second students' and the second students' is an environment of Beginning on the standards for a grain grade level, such that such the second students' is beginning on the standards for a grain grade level, such that such the second students' is provident on the standards for a grain grade level, such that such the second students' is provident on the standards for a grain grade level, such that such the second students' is provident on the standards for a grain grade level, such that such additional seguering content; however, the Progress Build stances the conceptual care of the unit.

Part 1: Unit-level internalization		
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What is the phenomenon students are investigating in your unit?		ן ו
Pinball machines make pinballs move in d	ifferent ways.	
Why do things move in different ways?	student role: Pinball engineers	
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What science ideas do students need to figure out in order to explain the pheno An object starts moving when a force is exe causes an object to move a longer distance.	erted on it. Stronger force An object starts to move in	
the direction of the force exerted on it. Moving a direction because of a force from a moving a	ng objects can change or still object.	
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Chapter-by-Chapter walkthrough



Lesson Overview Compilation

Planning for the Unit	Printable Resources	
Unit Overview	✓	
Unit Map	✓ Coherence Flowchart	
Progress Build	Copymaster Compilation	
Getting Ready to Teach	Flextension Compilation	
Materials and Preparation	Investigation Notebook	
Science Background	VGSS Information for Parents and Guardians	
Standards at a Glance	→ Print Materials (8.5" x 11")	
Teacher References	🔁 Print Materials (11" x 17")	
Lesson Overview Compilation		
Standards and Goals	 Teaching without reliable classroom internet? Prepare unit and lesson 	
3-D Statements	materials for offline access.	
Assessment System	✓ Offline Guide	
Embedded Formative Assessments	×	
Articles in This Unit	v	
Apps in This Unit	~	
Flextensions in This Unit	~	

	Lesson Overview Compilation		Pushes and Pulls Teacher References
Pushes and Teacher Refe	Pulis rrences Les	son Overview Compilation	
Pushes and Pulls Teacher References	Lesson Overview Compilation		certain distance and
Chapters at a Glance Unit Question			
Why do things move in different ways? Chapter 1: How do we make a pinball st	tart to move?	something	
Chapter Question			
How do we make a pinball start to move?			
Investigation Questions			
What makes an object start to move? (11, 1.2, 1.3)	.1.4)		
Key Concepts			vant it to do?
An object starts to move when another object exe	rts a force on it. (1.3)		
Porces nappen between two objects. (1.5)	1		
Chapter 2: How do we make a pinball n	nove as far as we want?		
How do we make a pinball move as far as we want?			
Investigation Questions			
What makes an object move shorter or longer dis	tances? (2.1, 2.2, 2.3)		
Key Concepts			its of the University of California
An object moves a long distance when a strong for	orce is exerted on it. (2.2)		
An object moves a short distance when a gentle f	orce is exerted on it. (2.2)	A the University of Conference	
Chapter 3: How do we make a pinball n	nove to a certain place?	ar one conversity of California	
Chapter Question			_
How do we make a pinball move to a certain place?			
	© The Regents of the University of California 3		

Pages 5-7

Unit internalization tools

		Pa	ıge
Part 2: Chapter interna Complete the tables bel	lization ow using information in the Le	sson Overview Compilation.	
	Chapter 1	Chapter 2	
This chapter mostly focuses on			
Important science concepts students learn include			and the second
	Chapter 3	Chapter 4	
This chapter mostly focuses on			
Important science concepts students learn include			
	Chapter 5	Chapter 6	
This chapter mostly focuses on			
Important science concepts students learn include			
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		Page 1
Part 3: Key routines and As the presenter talks thr	activities ough the unit, use this table to make space about key routines and activities.	
Key routine or activity	Notes	
	-	
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Chapter internalization tool

Key routines and activities tool

Chapter 1

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

Key Concepts:

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





Chapter Internalization: Complete the tables below using information in the Lesson Overview Compilation.

	Chapter 1	Chapter 2	
This chapter mostly focuses on	Making objects start to move		
Important science concepts students learn include	Forces make things start to move and they happen between two objects		



	Chapter 3	Chapter 4
This chapter mostly focuses on		
Important science concepts students learn include		

	Chapter 5	Chapter 6
This chapter mostly focuses on		
Important science concepts students learn include		

Chapter 1

How do we make a pinball start to move?



Rugball routine Chapters 1-4



Do: The Rugball routine is a chance for students to figure out how to make an object move in different ways.

Talk: Students practice using unit vocabulary and using the word "because" as they explain how they made the ball move.

Student Box Models Chapters 1-5



Students make changes and updates to their Box Models to meet design goals in every Chapter.

Explanation Language Frames and Shared Writing All K-1 units

because	Shared Writing
	What did we do to make the pinball start to move?
The started to move becau	
exerted a force on it.	

Talk: Oral language development as a precursor to scientific writing

Write: Students contribute to end-of-chapter explanation through Shared Writing

Work time

Read about Chapters 2-4

Use the Lesson Overview Compilation to get to know Chapters 2-4. Make notes in your Chapter internalization tool.

Please come back ready to share the key ideas students figure out in each chapter.

	Lesson Overv	iew Compilation		Pushes and Pulls Teacher References	
	Pushes and Pulls Teacher References		Lesson Overview Compilation		
Pushes and Pulls Teacher References	s	Lesson Overview Compi	ilation	6	
Chapters at a Glan	ice			certain distance and	
/hy do things move in diff	ferent ways?		something	_	
hapter 1: How do	we make a pinball start to move?			Pa	ge 9
hapter Question	I start to move?				
vestigation Question	s				
What makes an object	ct start to move? (11, 1.2, 1.3, 1.4)				
ey Concepts				vant it to do?	
An object starts to me	ove when another object exerts a force on it. (1.3)				
 Forces happen between the second secon	ien two objects. (1.3)				
hapter 2: How do	we make a pinball move as far as we want?				
hapter Question	I mone as far as we want?	Part 2: Chapter interna Complete the tables bel	lization low using information in the Lesson Overview	Compilation.	
westigation Question		This shapter mostly	Chapter 1	Chapter 2	A COM
 What makes an object 	t move shorter or longer distances? (2.1, 2.2, 2.3)	focuses on			
ey Concepts		Important science			
 An object moves a lor 	ng distance when a strong force is exerted on it. (2.2)	concepts students learn include			
An object moves a sh	ort distance when a gentle force is exerted on it. (2.2)				
hapter 3: How do	we make a pinball move to a certain place		Chapter 3	Chapter 4	
hapter Question		This chapter mostly focuses on			
low do we make a pinball	I move to a certain place?				
		Important science concepts students learn include			
	3				
					fv.

Pages 5-7

Chapter-by-Chapter walkthrough



Chapter 5 How can we make the pinball machine do all the things we want it to do?



Chapter 6

Where are forces around us?















Plan for the day

- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: early childhood
- Unit internalization
- Program Hub
- Reflection and closing

Accessing Amplify Science@Home Amplify Science Program Hub

- New site containing Amplify Science@Home and additional PL resources
- Accessible via the Global Navigation menu



Program Hub: Self Study Resources



Video Pathway: Amplify Science K-5

You'll start with the big picture ("Getting Started"), then move on to examining increasingly detailed aspects of the program ("Main Topics"). Finally, you'll take a closer look at content from your specific grade level ("Unit orientation videos").

Getting Started: Navigation

- K-5 Program Overview
- K-5 Navigation and logging in

Main Topics: Planning









Plan for the day

- Framing the day
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- Reflection and closing
 Amplify.

Reflecting on our goals Are you able to:

- Explain the science concepts students will figure out in your upcoming unit
- Describe the unit's anchor phenomenon and key activities students will use as evidence in explaining the phenomenon
- Navigate to @Home resources when they become available

2-Part Unit-specific PD

Part II: Today

Focus on learning the Pushes and Pulls **unit content** and the **early childhood instructional approach** in Amplify Science

Part II: January

Planning to **teach the unit remotely**



Upcoming LAUSD Office Hours

Monthly through January:

- Thursday, 12/10 (4-5pm)
- Thursday, 1/14 (4-5pm)



http://bit.ly/TK-6OfficeHours

Amplify.

Welcome to Amplify Science!

This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

All LAUSD schools have access to Amplify Science resources at this time.

Click here for Remote Learning Resources for Amplify Science

Click here to go back to the LAUSD homepage.

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



https://amplify.com/lausd-science/

Additional Amplify resources



Program Guide

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

https://cascience.wpengine.com/content/welcome _k-8/integrated-model/

Amplify Help

Find lots of advice and answers from the Amplify team. **my.amplify.com/help**

Additional Amplify resources



Caregivers site

Provide your students' families information about Amplify Science and what students are learning **amplify.com/amplify-science-familyresource-intro/**

Additional Amplify Support

Customer Care

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



scihelp@amplify.com



800-823-1969



When contacting the customer care team:

- Identify yourself as an Amplify Science user.
- Note the unit you are teaching.
- Note the type of device you are using (Chromebook, iPad, Windows, laptop).
- Note the web browser you are using (Chrome or Safari).
- Include a screenshot of the problem, if possible.
- Copy your district or site IT contact on emails.

Thank you for your feedback!

Session: Unit Internalization Part I

Presenter: xx

