Amplify.

Welcome to Amplify Science!

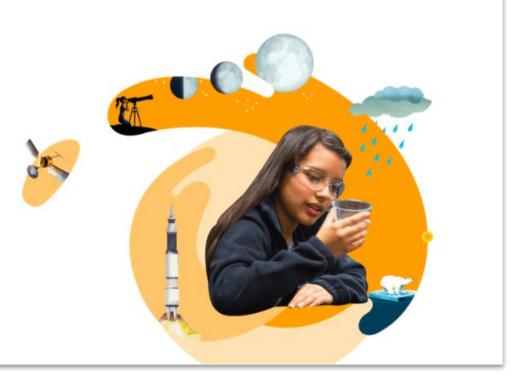
This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

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 Properties of Materials, Grade 2

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

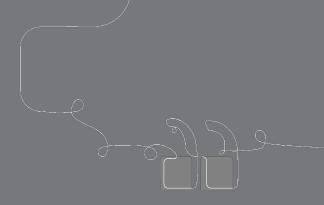
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		왕 ²¹ 🗐 _{You} 🎱 🚷	■ AmplifyScience CALIFORNIA > Plate Motion > Chapter 1 > Lesson	1.2
Window #1	Mile Cay of Navagetion Prog. x	– 9 X 204progene-bald ◆ ☆ 🖪 🕄 🚺 I	Lesson 1.2: Using Fossils to Understand Earth	
	OPEN PRIVALLE PROGRESS BUILD Progress Build Level 1: The Earth's entire outer layer (below the water and soil that we see) is made of solid rock that is divided into plates. Earth's plates can move. Underneath the solik vegetation, and water that we see on the surface of Earth's the outer layer of Earth's goosphere. The solid part of our rocky plane. This sourch part of Earth's goosphere. The solid part of our rocky		24	-
	is divided into sections called plates. And, these plates can move. Progress Build Level 2: The plates move on top of a soft, solid layer of rock called the mantles. A plate bundhreis where the plates are moving away from each other, rock rises from the martle and hardrens, adding new solid rock to the edges of the plates. At plate boundaries where plates are moving toward each other, one plate moves underneath the other and sinks into the martle. Underneath the soli, vegetation, and water that we see on the surface of	Print Materials (8.5° x 11°) Offline Preparation Teaching without reliable classroom internet? Prepare unit and lesson materials for offline access.	Lesson Brief (4 Activities) 4 1 WARM-UP (4 Activities) 9 T TEACHER Why Geologists Vali Fossils	Introducing Mesos
	Each is the outer layer of Earth's geosphere, the solid part of our rocky Getting Ready to Teach Materials and Preparation	Offine Guide	Lesson Brief	Generate printable Lesso Digital Resources
			Overview ~	💭 All Projections
			Materials & Preparation ~	Completed Scientific Argumentation Wall Diagr.
			Differentiation ~	📅 Video: Meet a Pal
			Español rds ~	The Ancient Mesosaurus





Plan for the day

- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: K-2
- Unit internalization
- Program Hub
- Reflection and closing











Plan for the day

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 - Instructional materials
 - o Workshop goals
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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





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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 Properties of Materials **unit content** and the **K-2 instructional approach** in Amplify Science

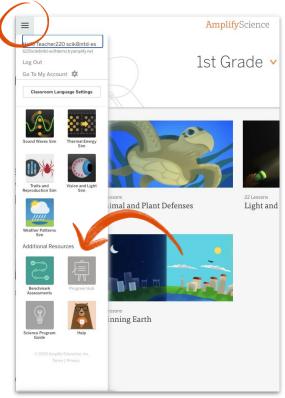
Part II: January

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

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K-2 Instructional approach Oral language support and highly scaffolded scientific writing

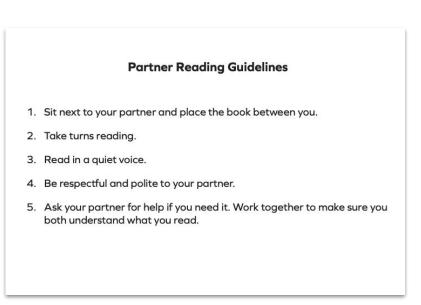
- Student-to-student discourse routines (shared listening, think-draw-pair-share)
- Sentence stems and language frames
- Explicit vocabulary instruction
- Shared writing and robust teacher modeling





K-2 Instructional approach Modeling expert reading of complex texts

- Shared reading and partner reading approach
- Explicit instruction for reading scientific texts (text features, comprehension strategies)
- Instructional guide supports teacher modeling, think-alouds, and questioning



K-2 Instructional approach Repetition and practice

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



K-2 Instructional approach

Attending to developmental attention span

- Short activities
- Kinesthetic connections
- Movement and talking breaks
- Opportunities for personal connections



K-2 Instructional approach Co-constructed charts to track learning

- Collaboratively built records of student learning
- Revisited and added to throughout the unit to reflect new understanding
- Serve as reference resource for students

Properties of Glue Ingredients: Completed

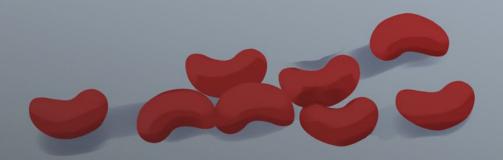
	Observations		Sticky Test	
Ingredient	Dry ingredient	Ingredient + water	Predictions	Results
salt	white, hard, tiny pieces	grainy, a bit clear, some dissolves	0	
baking soda	white, scratchy powder	makes a smooth runny paste	2	
flour	white, soft, fluffy, blows easily	thick, stretchy, sticks to spoon	12	
cornstarch	bright, white, soft, squeaky powder	white, thick, flows, but is hard	8	





Plan for the day

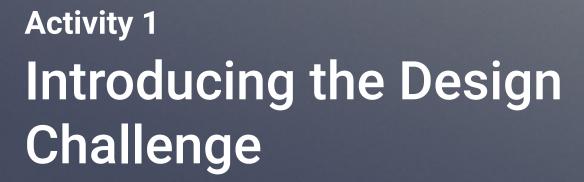
- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: K-2
- Unit internalization
- Program Hub
- Reflection and closing



Grade 2 | Properties of Materials

Lesson 1.2: What If Rain Boots Were Made of Paper?

AmplifyScience







Unit Question

How can you design a mixture for a certain purpose?

The principal heard that we're starting the *Properties of Materials* unit and thinks we can **help the school** with a **problem**.

I'll read a letter that the principal wrote us. As I read, think about what the problem is and what we will send the principal at the end of the unit.

∨ ∧ ⊠ ☆ 値

Dear Second Grade Students,

Teachers have told me they are worried about some of the supplies at our school. One of the supplies we need to improve is our glue. I talked with a few teachers, and we decided that your second grade class will take on the challenge of designing a new glue for our school.

For the next few weeks, you will become glue engineers. You will make a new glue that can be shared with other classrooms. You will need to learn about glue and the ingredients needed to make glue. You will create your own glue recipes and test them. After that, you will use the evidence from your tests to make your glue even better.

Once you have a final recipe, you will share the recipe with your teacher and me. Thank you so much for your help!

Sincerely,

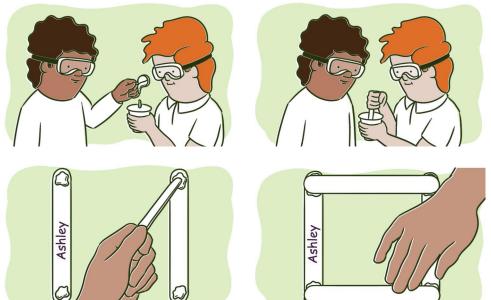
Your Principal

An **engineer** is a person who uses science knowledge to design something in order to **solve a problem**.

The problem we need to solve is **how to make a glue for our school**. We will take on the role of **glue engineers** as we design the glue.

End-of-unit glue designs Students iterate throughout the unit to develop a final glue recipe





Guided Unit Internalizatio	n
----------------------------	---

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 compliation 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?	
		Amplify

Unit Map

Planning for the Unit		Printable Resources
Unit Overview	~	Article Compilation
Unit Map		
Progress Build	Ŷ	
Getting Ready to Teach	~	Flextension Compilation
Materials and Preparation	~	Investigation Notebook
Science Background	~	NGSS 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	~	

Properties of Materials

Chapter 1: How can you make a sticky glue?

properties than it had before.

smooth and sticky glue.

determining cause-and-effect relationships.

choose the ingredients that provide the properties you are seeking.

How can we design a glue mixture that is better than what the school uses now? As glue engineers, students are challenged to create a glue for use at their school that meets a set of design goals. Students present an evidence-based argument stating why their glue mixture would solve their school's need for a

Students figure out: Glue is a mixture of several ingredients such as flour, water, and cornstarch, and depending on the properties of those ingredients and how they are combined, you can create different glues. Some glues might be stickier or stronger than others. By understanding materials and observing and testing different recipes, you can

How they figure it out: To set context, students gather evidence about materials and their properties by reading a book about everyday things and what they are made of. They investigate the properties of two mystery glues and make scientific arguments about whether they are the same or different glues. The class goes on to observe and test possible

glue ingredients for their sticky properties, graph test data, and search for information about ingredients in the unit's reference book. Using all the gathered evidence, students plan, make, and test their own glue recipes. Chapter 2: Can heating a substance (and returning it to its original temperature) make a better glue? Students figure out: When water is heated and returned to room temperature, the properties go back to the way they were, but the properties of some other materials change after heating and going back to room temperature. For example, when a mixture of cornstarch and water is heated and then returned to room temperature, it has different

How they figure it out: Students investigate how heating a substance may help them make a better glue by conducting tests to determine the properties of possible glue ingredients before and after heating. This supports them in

How they figure it out: Students are inspired by reading a book that shows the design process in action. They decide that the glue they create for the school should have an additional design criteria-the property of strength-a key and useful feature for its intended purpose at the school. Students set about testing evidence-based plans that include the best ingredients for a strong glue mixture. By the end of the chapter, student teams make and test a second glue recipe.

2

Chapter 3: What ingredients can be used to make a glue that is sticky and strong? Students figure out: Sometimes, the properties of glue are a combination of the properties of the substances that make up that glue, such as a flour-water combination. Ingredients can be combined to create different glues that have different properties. For example, baking soda, which is smooth, and flour, which is sticky, can be combined to make

Planning for the Unit

Unit Map

better glue.



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3

perties of Materials	
Planning for the Unit	
mixture) that meets the	
perties, glue engineers can	
to support each design	
atively test additional glue	
cts of specific glue	
ably about their choices	

he unit.

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Pages 2-3

Unit title: Properties (of Matorials		
Propernes (JI MATERIAIS		
What is the phenomenon stude	nts are investigating in your unit?		
Engineers can r	make glue with different prop	erties.	
0	0 1 1		
Unit Question:		Student role:	
How can you des	sign a mixture for a certain	Glue engineers	
purpose?			
		<u>i</u>	
By the end of the unit, students	figure out	<mark>.</mark> i	
By the end of the unit, students	figure out	<mark>.</mark>	
By the end of the unit, students	figure out		
By the end of the unit, students	figure out		
By the end of the unit, students	figure out		
	figure out need to figure out in order to explain the phenome	non?	
		non?	
		non?	

End-of-unit glue designs

Students iterate throughout the unit to develop a final glue recipe

Design Goals

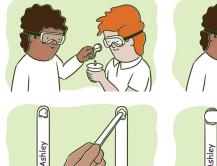
Goals for Our Glue

- must be sticky
- must be strong

Additional student-generated goals, such as:

- dries hard
- spreadable
- not smelly









it title: Properties of Materials		
nat is the phenomenon students are investigating in your unit?		
Engineers can make glue with different prop	erties.	
How can you design a mixture for a certain purpose?	Student role: Glue engineers	
he end of the unit, students figure out		
how to design a glue that is sticky, strong, ar student-generated design criteria.	nd meets other	
	-	
t science ideas do students need to figure out in order to explain the phenomer	ion?	

Guided Unit Internalization Part 1: Unit-level internalization		Page 8
Unit title: Properties of Materials		
What is the phenomenon students are investigating in your unit?		
Engineers can make glue with different prope	erties.	
Unit Question: How can you design a mixture for a certain purpose?	Student role: Glue engineers	
By the end of the unit, students figure out		
how to design a glue that is sticky, strong, an student-generated design criteria.	d meets other	
What science ideas do students need to figure out in order to explain the phenomen	on?	
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Progress Build

Planning for the Unit		Printable Resources
Jnit Overview	×	Article Compilation
Jnit Map	~	Coherence Flowchart
Progress Build		
Ready to Teach	~	ب
Materials and Preparation	~	Investigation Notebook
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Embedded Formative Assessments	~	
Articles in This Unit	~	
Apps in This Unit	~	
Elextensions in This Unit	~	

Properties of Materials Planning for the Unit



Progress Build

A Progress Build decrities the way in which students' explanations of the central phenomenon should develop and degree now the ourse of a unit. It as in involved the student student students and the substance of the unit and in supporting students' learning. A Progress Build capanies the sequence of instruction, defines the focus of the assessments, and growth informerse abstander's understanding of the contrat, specifically at and the Chickal Juncture assessments found throughout the unit. A Chickal Juncture is the differentiated instruction designed to address specific again in Instrument's understanding of the contrat will are use as now-wine of the Chickal Juncture Progress Build Sector Build is an increasingly complex yet integrated explanation, we represent it below by including the me distance for each one) to build.

In the Properties of Materials unit, students will learn to design a mixture with desired properties for a specific purpose.

Price Incoveledge (preconceptions): It is expected that students will have a basic familiarity with the idea that stuff is made from other stuff (chocolate milk is made from milk and chocolate sauce; a desk is made of wood and metal; a toy is made of metal and plastic).

Progress Build Level 1: Different materials have different properties.

Materials are the stuff that makes up everything. Materials have properties. These properties are observable things such as color, texture, smell, and taste. Different materials have different properties.

Progress Build Level 2: Mixtures have different properties, depending on their ingredients.

Materials are the stuff that makes up everything. Materials have properties. These properties are observable things such as color, texture, smell, and taste. Different materials have different properties. Sometimes a material is made of a combination of other materials; we call this combination a mixture, and we call the materials that make it up substances. Some mixtures have different properties, depending on their ingredents.

Progress Build Level 3: Heating or cooling a substance can change it to a new substance.

Materials are the stuff that makes up oneything. Materials have properties. These properties are observable things such as color, texture, mult, and stats. Different materials have different properties. Sometimes a national of a combination of other materials, we call this combinations and user, and we call the materials that make it a substance. Some multiple state of themps profiles. Generalizing on the ingolistics. The profiles of substances can additional to the substance state of the substance state and the substance state or consider, so they have different properties when high youth. The profiles the productions constrained or consider, so they have different properties when high youth. The profiles the properties and the adjust the production of the provider state of the profiles of the progenities and the state to be adjusted to the properties when high youth. The provider properties were high youth to their drigital temperature.

Progress Build Level 4: A mixture may have a combination of the properties of its ingredients.

Materials are the staff that makes up emptying Materials have properties. These properties are observable things such as costs octaves, more and status. Different materials have alterineer properties. Screenings and are such a combination of other materials; we call this combinations an initiate, and we call the materials that make 4 up substances. Some mutures have different properties, depending one their ingredest. The properties of substances can change when they are heated or socials, so they have a heated or cooled, so they have heated or cooled. so they have heated or cooled, so they have heated or cooled so they have have heated or cooled so they have

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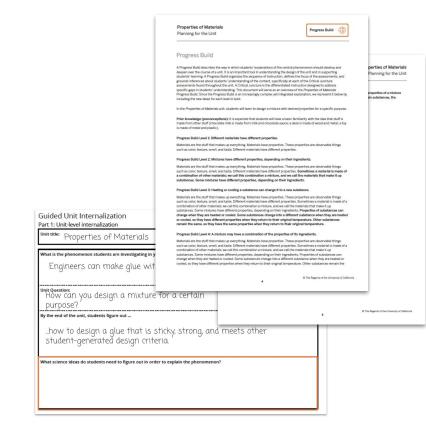
perties of Materials Planning for the Unit properties of a mixture in substances, the

Pages 4-5

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?



What is the phenomenon students are investigating in your unit? Engineers can make glue with different properties. Unit Question: How can you design a mixture for a certain purpose? By the end of the unit, students figure out how to design a glue that is sticky, strong, and meets other student-generated design criteria. What science ideas do students need to figure out in order to explain the phenomenon? • Different materials have different properties. • Mixtures have different properties, depending on their ingredients. • Heating or cooling a substance can change it to a new substance. • A mixture may have a combination of the properties of its ingredients.	Unit title: Properties of Materials		
How can you design a mixture for a certain purpose? By the end of the unit, students figure out how to design a glue that is sticky, strong, and meets other student-generated design criteria. What science ideas do students need to figure out in order to explain the phenomenon? Different materials have different properties. Mixtures have different properties, depending on their ingredients. Heating or cooling a substance can change it to a new substance.		roperties.	\neg
 how to design a glue that is sticky, strong, and meets other student-generated design criteria. What science ideas do students need to figure out in order to explain the phenomenon? Different materials have different properties. Mixtures have different properties, depending on their ingredients. Heating or cooling a substance can change it to a new substance. 	How can you design a mixture for a certain		
 Different materials have different properties. Mixtures have different properties, depending on their ingredients. Heating or cooling a substance can change it to a new substance. 	how to design a glue that is sticky, strong,	and meets other	
	 Different materials have different properties. Mixtures have different properties. Heating or cooling a substance can change 	ties. ding on their ingredients. e it to a new substance.	

Chapter-by-Chapter walkthrough



Lesson Overview Compilation

Planning for the Unit		Printable Resources
Unit Overview	~	Article Compilation
Unit Map	~	Coherence Flowchart
Progress Build	~	Copymaster Compilation
Getting Ready to Teach	~	Flextension Compilation
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3-D Statements	~	materials for offline access.
Assessment System	~	Offline Guide
Embedded Formative Assessments	~	
Articles in This Unit	~	
Apps in This Unit	~	

Lesson Overview Compilation	Teacher References	
Chapters at a Glance		
Unit Question		Lesson Overview Compilation
How can you design a mixture for a certain purpose?		Lesson Overview Compilat
Chapter 1: How can you make a sticky glue?		
Chapter Question		
		2.1)
How can you make a sticky glue?		ere heated or cooled. (2.2)
Investigation Questions		e a different substance. (2.2)
What can be noticed about different materials? (1.2, 1.3)		glue that is sticky and strong?
How can you tell if substances are different? (1.4)		
+ How can the properties of a mixture change? (1.5, 1.6, 1.7)		
Which ingredients should we use (or not use) in our glue? (18,19)	ing?
Key Concepts		
Properties include how materials smell, look, taste, feel, an	d sound. (1.2)	1, 3.4, 3.5)
Different materials have different properties. (1.3)		
You can tell if materials and substances are different by ob-	serving their properties. (1.3)	consequences and an
You can tell if materials and substances are different by ob-	serving their properties or by testing them. (1.4)	ents. (3.2)
Properties of mixtures can change when other ingredients	are added. (1.5)	
Properties of substances are the same whether you have a	small amount or a large amount. (1.7)	s with certain properties. (3.4)
Engineers test their designs to find out whether they meet	their design goals. (1.7)	our design goals?
Chapter 2: Can heating an ingredient make a	better glue?	
Chapter Question		
Can heating a substance (and returning it to its original temper	ature) make a better glue?	
Investigation Questions		
What can happen after a substance has been heated or con	oled and returns to its original temperature? (2.1, 2.2)	
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		-
		© The Regents of the University of California
	7	

Pages 6-7

Unit internalization tools

Page 9

	Chapter 1	Chapter 2	
stly			
Important science concepts students learn include			
maude			
	Chapter 3	Chapter 4	
This chapter mostly focuses on			
Important science			
concepts students learn			

		Page 1
Part 3: Key routines and		
As the presenter talks thr	ough the unit, use this table to make space about key routines and activities. Notes	
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Chapter internalization tool

Key routines and activities tool

Page 5

Chapter 1

Chapter Question: How can you make a sticky glue?

Key Concepts about materials:

- Properties include how materials smell, look, taste, feel, and sound.
- Different materials have different properties.
- You can tell if materials and substances are different by observing their properties or by testing them.



Page 5

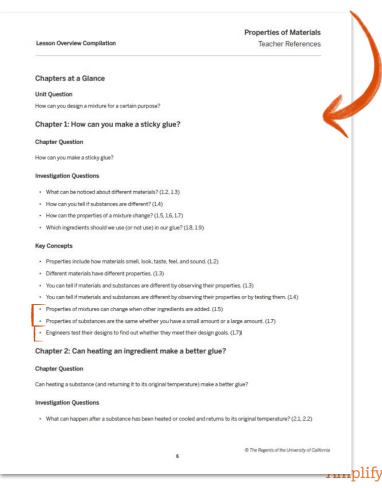
Chapter 1

Key Concepts about mixtures:

- Properties of mixtures can change when other ingredients are added.
- Properties of substances are the same whether you have a small amount or a large amount.

Key Concepts about engineering:

• Engineers test their designs to find out whether they meet their design goals.



Part 2: Chapter internalization

Complete the tables below using information in the Lesson Overview Compilation.

	Chapter 1	Chapter 2
This chapter mostly focuses on	Setting a foundation about properties of materials and making a sticky glue.	
Important science concepts students learn include	Ideas about properties of materials, ideas about mixtures and substances, ideas about engineering.	



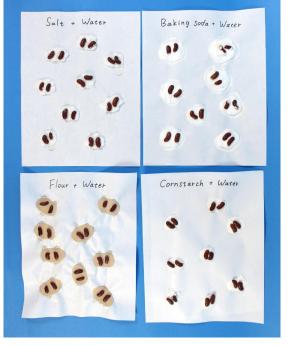
	Chapter 3	Chapter 4
This chapter mostly focuses on		
Important science concepts students learn include		

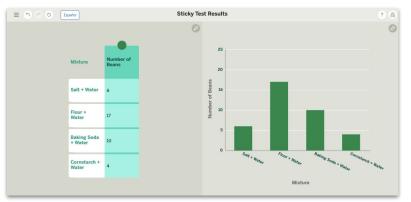
Chapter 1: How can you make a sticky glue? Lessons 1.1-1.4: Focus on materials and properties



Chapter 1: How can you make a sticky glue? Lessons 1.5-1.9: Focus on mixture and designing glue











Pages 6-7

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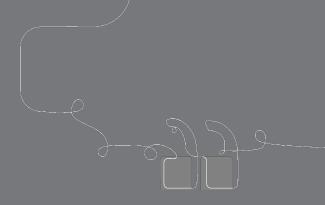
Work time

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 Overview Compilation		rties of Materials eacher References			\mathbf{N}
Chapters at a Glance					
Unit Question					
How can you design a mixture for a certain purpose?			on Overview Compila	ation	
Chapter 1: How can you make a sticky g	lue?			_	
Chapter Question					
How can you make a sticky glue?				1	
Investigation Questions			(2.2)		
What can be noticed about different materials? (1	2.1.2)		w. (2.2)		
	6, 1.3)		cky and strong?		
How can you tell if substances are different? (1.4)			ony and sciolig!		
How can the properties of a mixture change? (1.5,					
 Which ingredients should we use (or not use) in or 	ir glue? (1.8, 1.9)				_
Key Concepts					Page 1
Properties include how materials smell, look, tast	e, feel, and sound. (1.2)				I USU I
Different materials have different properties. (1.3)					-
· You can tell if materials and substances are differe	nt by observing their properties. (1.3)				
· You can tell if materials and substances are different	nt by observing their properties or by test	ing them. (1.4)			
· Properties of mixtures can change when other ing	redients are added. (1.5)				
· Properties of substances are the same whether yo	u have a small amount or a large amount.	(1.7)			
· Engineers test their designs to find out whether th	ey meet their design goals. (1.7)		ies. (3.4)		
			s?		
Chapter 2: Can heating an ingredient n	ake a better glue?				
Chapter Question					
Can heating a substance (and returning it to its origina	I temperature) make a better glue?				
Investigation Questions		N			
	Part 2: Chapter intern	alization slow using information in the	Lesson Overview Compilation	n	
What can happen after a substance has been hear	ed or coole		Chapter :		- 2
	This does not be	Chapter 1	Chapter :	2	
	This chapter mostly focuses on				Constant and
	6				
	Important science	-			
	concepts students learn				
	include				
					_
					_
		Chapter 3	Chapter	4	
	This chapter mostly focuses on				
	Important science concepts students learn				
	include				







Unit internalization tools

		Page 9			Page
Chapter 1	Chapter 2		ane or activity	Notes	
Chapter 3	Chapter 4				
	w using information in the Le	w using information in the Lesson Overview Compilation. Chapter 1 Chapter 2	Ization w using information in the Lesson Overview Compilation.	Zation w using information in the Lesson Overview Compilation. Chapter 1 Chapter 2 Ch	Zation w using information in the Lesson Overview Curview Chapter 1 Chapter 1 Chapter 2 Chapter

Chapter internalization tool

Key routines and activities tool

Sticky tests Chapters 1-3







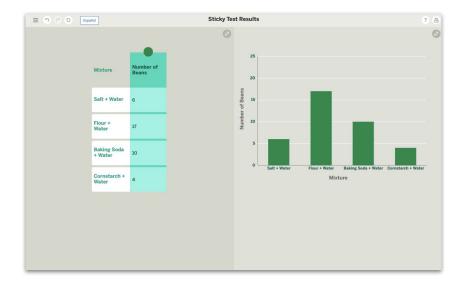
Chapter 3

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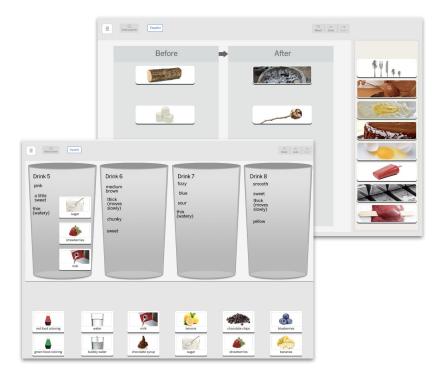
Chapter 1

Chapter 2









Sorting tools

Word relationships routine

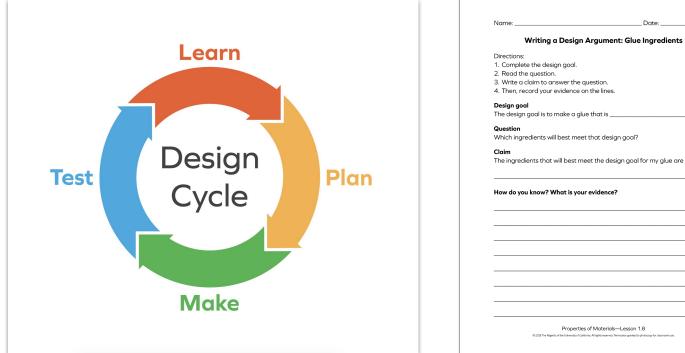


Talk: Students work together, using cards, to build sentences illustrating the relationships among unit vocabulary

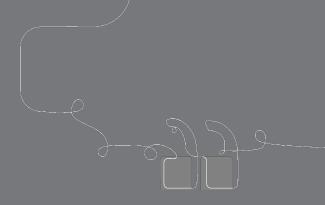
Write: This activity is a chance for students to practice building sentences about the unit's science ideas before formal writing tasks.

Engineering practices

Design Cycle and writing design arguments



23











Plan for the day

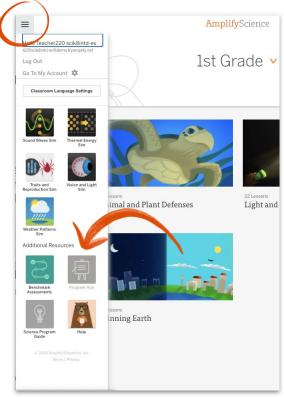
- Framing the day
 - Instructional materials
 - Workshop goals
- Instructional approach: K-2
- Unit internalization

Program Hub

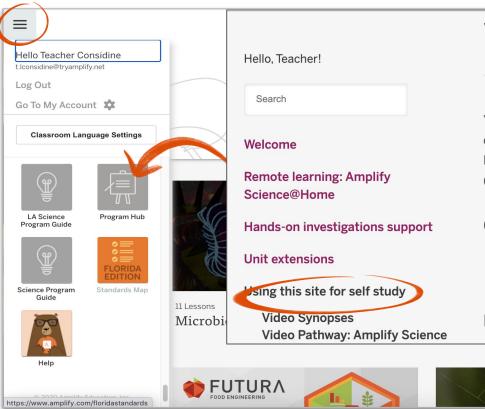
Reflection and closing

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



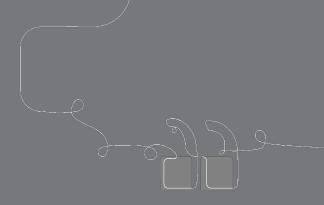
Video Pathway: Amplify Science K-5

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
 - Instructional materials
 - Workshop goals
- Instructional approach: K-2
- Unit internalization
- Program Hub
- Reflection and closing

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 I: Today

Focus on learning the Properties of Materials **unit content** and the **K-2 instructional approach** in Amplify Science

Part II: January

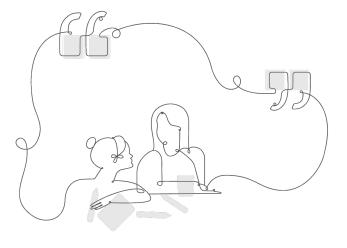
Planning to **teach the unit remotely**



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!

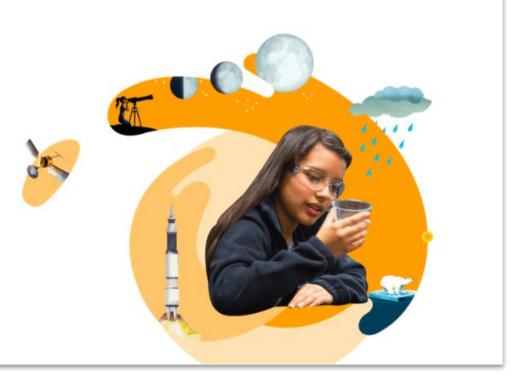
This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

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-family**resource-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

