Amplify Science

Unit 3: Sunlight & Weather (with an assessment focus)

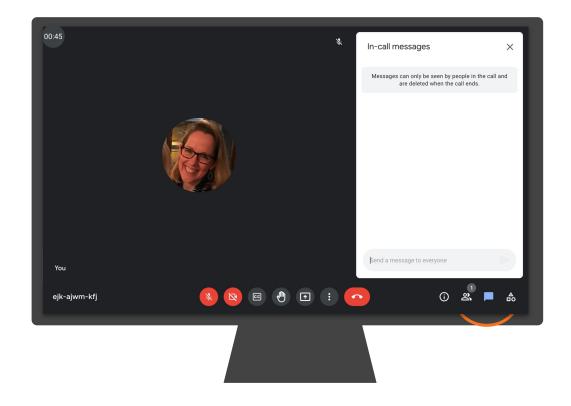
Grade K, Part 1

School/District Name: LAUSD Date: Presented by:



Ice Breaker!

• Question: In the chat, share what experience you have had with assessments in the Amplify Science curriculum.



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.



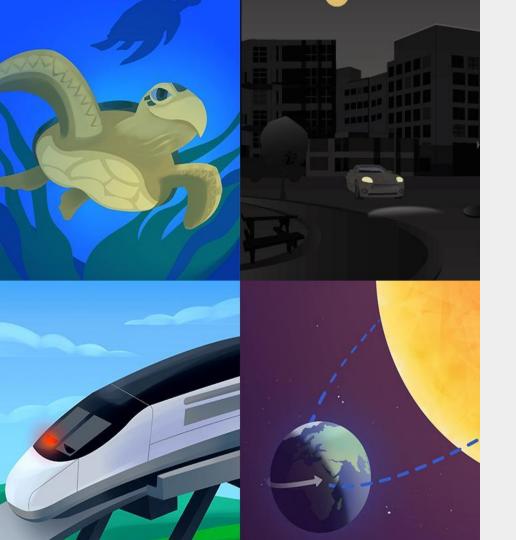
• To join Amplify ES Group: W4PK-W466-63F5B



Part 1







Plan for the day: Part 1

- Introduction and Framing
- Unit Overview
- Formative Assessments
- Closing

Overarching goals

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

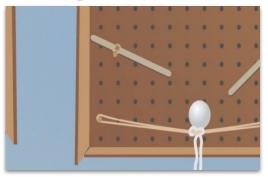
- □ Internalize the unit
- Describe the overall structure of the Assessment System
- Describe the overall structure and purpose the Formative Assessments.

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Year at a Glance: Kindergarten



Needs of Plants and Animals



Pushes and Pulls



Sunlight and Weather

Domain: Life Science

Unit type: Investigation

Student role: Scientist

Domain: Physical Science

Unit type: Engineering

Student role: Pinball

Design

Engineer

Domain: Earth and Space Science

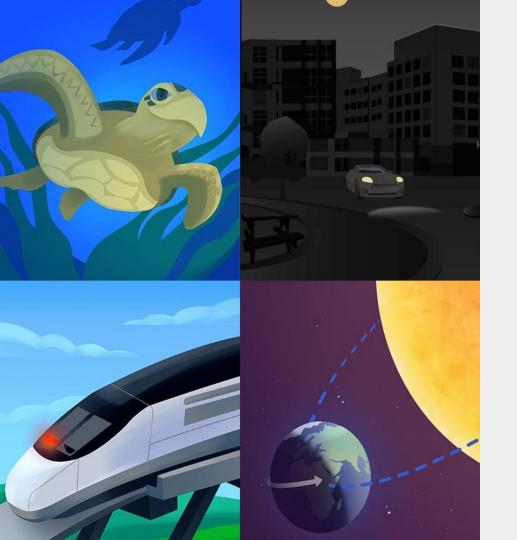
Unit type: Modeling

Student role: Weather Scientist

Amplify Science Approach

Introduce a **phenomenon** and a related problem Collect **evidence** from multiple sources Build increasingly complex **explanations** **Apply** knowledge to solve a different problem

S



Plan for the day: Part 1

- Introduction and Framing
- Unit Overview
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- Closing

Sunlight and Weather

How do sunlight and different types of weather affect places?





Sunlight and Weather

Problem: Why are the playgrounds at two schools different temperatures? Why does one playground flood?

Role: Weather Scientists

Students gather data from models of the sun and of Earth's surface and observe their own playgrounds to figure out how sunlight causes changes in the temperature of different surfaces.

Sunlight and Weather

Coherent Storylines





Chapter 1: What is the weather like on the playgrounds?

4 Lessons



Chapter 2: Why do the playgrounds get warm?

4 Lessons



Chapter 3: Why are the playgrounds warmer in the afternoon?

4 Lessons



Chapter 4: Why is Woodland Elementary School's playground always... 4 Lessons



Chapter 5: Why does only Woodland Elementary School's playground flood?

6 Lessons

Explaining the phenomenon: Science Concepts

What **science concepts** do you think students need to understand in order to **explain the phenomenon?**



Sunlight and Weather Progress Build

Assumed prior knowledge (preconceptions): Students are assumed to be generally aware that the sun is in the sky during the daytime. They are expected to have some experience with different aspects of weather including warmer and cooler temperatures, clouds, wind, rain, and perhaps snow



Prior knowledge Deep, causal understanding

Key Unit Guide Documents for Planning

Planning for the Unit	Printable Resources	
Unit Overview	✓	4
Unit Map	✓ i Copymaster Compilation	
Progress Build	✓ Image: Section Section Compilation	
Getting Ready to Teach	V Investigation Notebook	
Materials and Preparation	V Multi-Language Glossary	
Science Background	V Information for Paren Guardians	ts and
Standards at a Glance	∽	
Teacher References	Print Materials (11" x 17")	
Lesson Overview Compilation	~	
Standards and Goals	Offline Preparation	
3-D Statements	Teaching without reliable class internet? Prepare unit and less materials for offline access.	
Assessment System	materiais for offline access.	
Embedded Formative Assessments	✔ Offline Guide	
Books in This Unit	×	
Apps in This Unit	×	
Flextensions in This Unit	~	

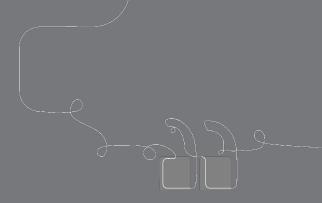
Core Unit Planning & Internalization

Unit Title:

Sunlight and Weather

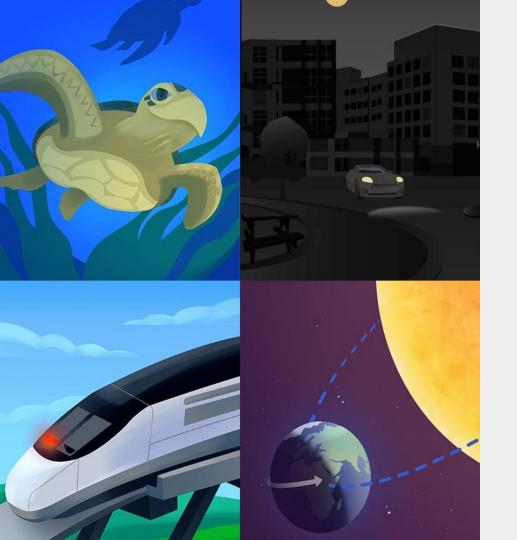
What is the phenomenon/real-world problem students are investigating in	Student Role:	
your unit? Why are the playgrounds at two schools different temperatures? Why does one playground flood?	Weather Scientists	
Unit Question: How do sunlight and different types of weather affect places?	Relationship between the Unit Phenomenon and Unit By providing students with a preliminary understanding of weather—a general awareness and vocabulary of different weather conditions, this unit serves as a foundation for students future learning about a range of Earth science phenomena.	
By the end of the unit, students figure out Woodland Elementary's playground has a darker surface playground. Woodland's playground is warmer because surfaces when the sun shines on them.	e than Carver Elementary's dark surfaces get warmer than pale T	
How do students engage with three-dimensional learning to figure out the phenomenon/real-world problem in your unit?		
Students use models and collect and analyze data to de Earth's surfaces. They do this to explain what is causing different temperatures (cause and effect, energy and m	two school playgrounds to be	

1



Questions?





Plan for the day: Part 1

- Introduction and Framing
- Unit Overview
- Assessment System
- Closing

Why do we assess our students?

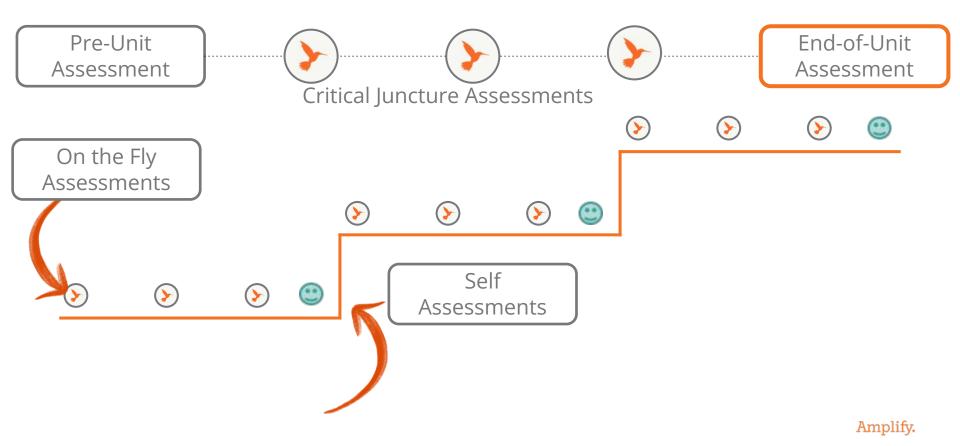
Assessment

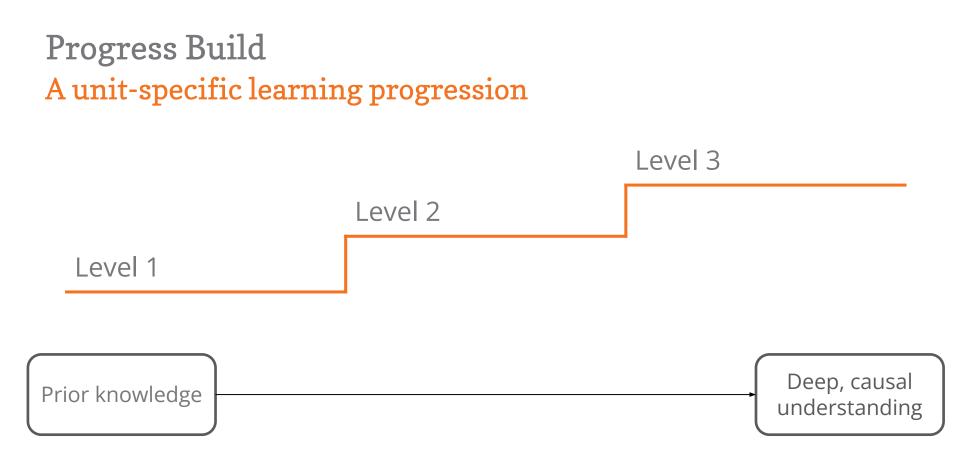
To monitor progress and provide timely support To evaluate students' mastery and communicate with stakeholders Why do we assess our students?

Assessment

Formative assessment Summative assessment

K-5 Assessment System

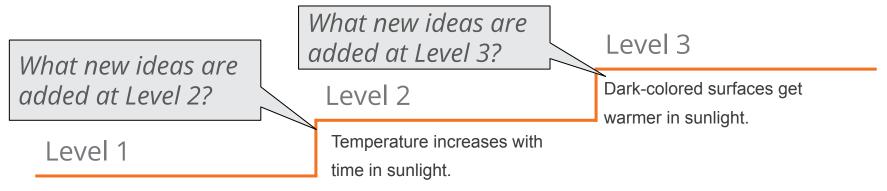




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Sunlight and Weather Progress Build

Assumed prior knowledge (preconceptions): Students are expected to have had previous opportunities to think about the needs of different organisms and the relationship between meeting needs and survival.



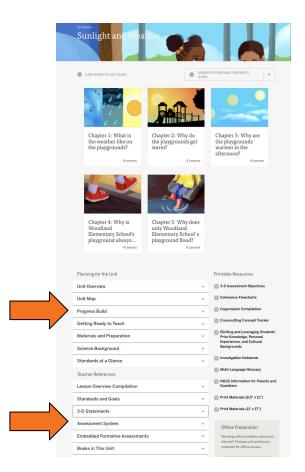
Surfaces get warm in sunlight.



Deep, causal understanding

Assessment System and Progress Build Work time

- Browse the Assessment System
- Read and analyze your unit's Progress Build.





On-the-Fly Assessments

- Track student progress within a Progress
 Build level
- Embedded into instruction
- Assessment resource includes "Look for" and "Now what"

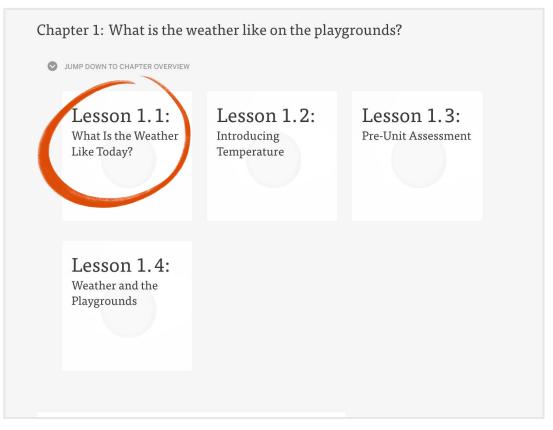
Level 3

Level 2

Where is the first On-the-fly assessment in Spinning Earth?

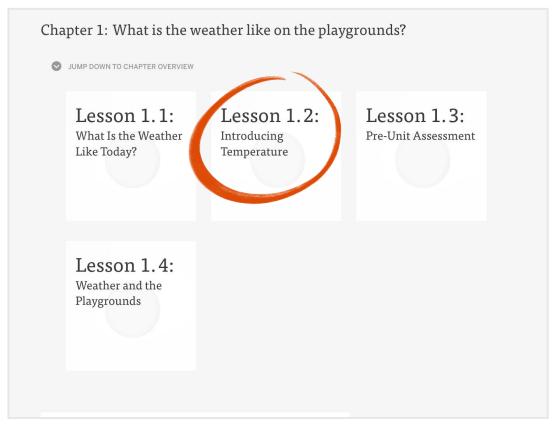
Level 1

Leading up to Lesson 1.2



Grade K | Sunlight and Weather Lesson 1.1: What Is the Weather Like Today?

Leading up to Lesson 1.2



Lesson 1.2: Introducing Temperature Grade K | Sunlight and Weather





Activity 1 Observing Local Weather





Types of Weather

sunny cloudy



Last time, we found out that we are learning to be weather scientists.

What have we found out about **weather** so far?



Weather Observations

Step 1 Go outside.

Step 2 Look up at the sky. **Discuss the weather** with your partner.

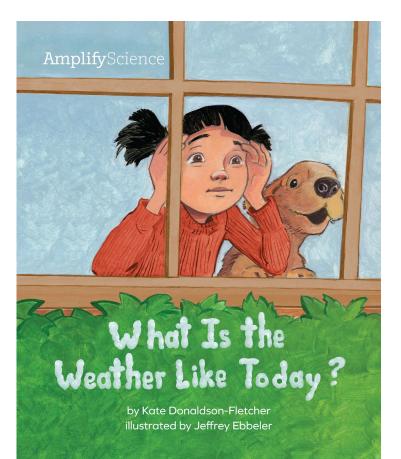
Step 3 Tell your partner how hot or cold it is today.





Activity 2 Revisiting What Is the Weather Like Today?



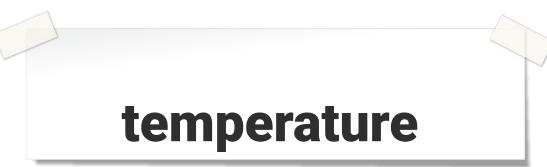




What did we **learn** from this book in the last lesson?

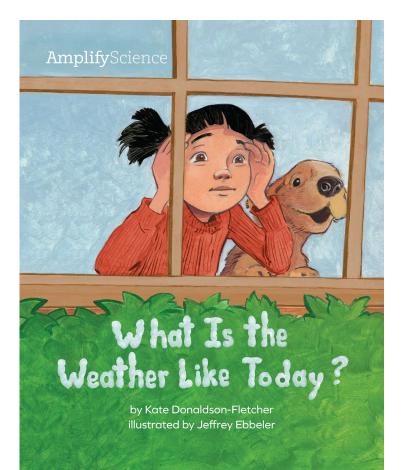
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Vocabulary



how hot or cold something is





We will read the second half of this book to figure out how we can **describe temperature**.

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After breakfast, I am dressed and ready to go to school, but I have another question.

Every day before I leave for school, I always ask, "What is the **temperature** today?"

Days can be different temperatures. For example, the temperature can be cold, cool, warm, or hot.



I open the door and step out on the porch.

Brrr! I am glad I have my coat and hat.

What is the temperature today?



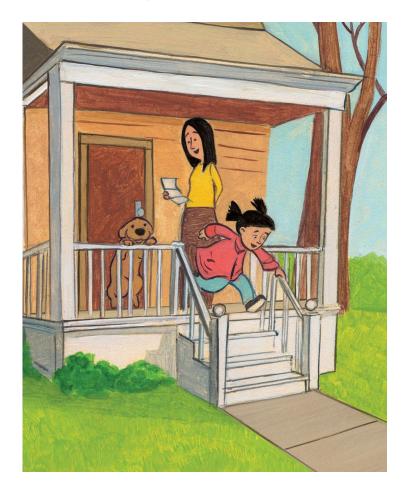


The temperature today is cold.

The air feels like the inside of my refrigerator! On cold days, I like to puff air out and form little clouds with my breath.

Today is a little warmer than before. I am going to leave my hat at home, but I still need to wear my coat.

What is the temperature today?



I can **make a prediction.** The girl said it is a bit warmer than the cold day. She does not need a hat, but she needs a coat.





The temperature today is cool.

On cool days, I like to run around on the playground to stay warm. If I stand still, I feel too cold! I need to ask my teacher to help me zip up my coat again.



I don't need a coat today! I am going to school wearing my favorite sweatshirt.

What is the temperature today?



I don't need a coat today! I am going to school wearing my favorite sweatshirt.

What is the temperature today?

Now what? As students share their predictions with the class, repeat one or two that were based on the pictures or text. Highlight the way that students took what could be seen in the images and described in words to make their predictions. For example, you might say something such as, "I noticed Rosa pointed out what the girl in the book was wearing as she shared her prediction with her partner. She noticed the girl was not wearing a coat but still wearing a long-sleeve sweatshirt." Continue to support students in making predictions with the remainder of the book, and discuss examples as necessary.

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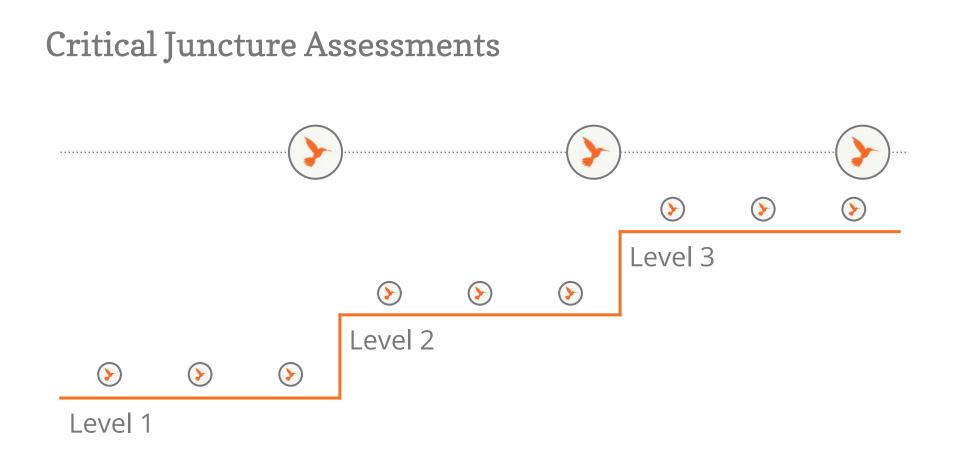
Additional formative assessment information

On-the-Fly Assessments

In addition to assessing concepts in the Progress Build, some On-the-Fly Assessments provide data about:

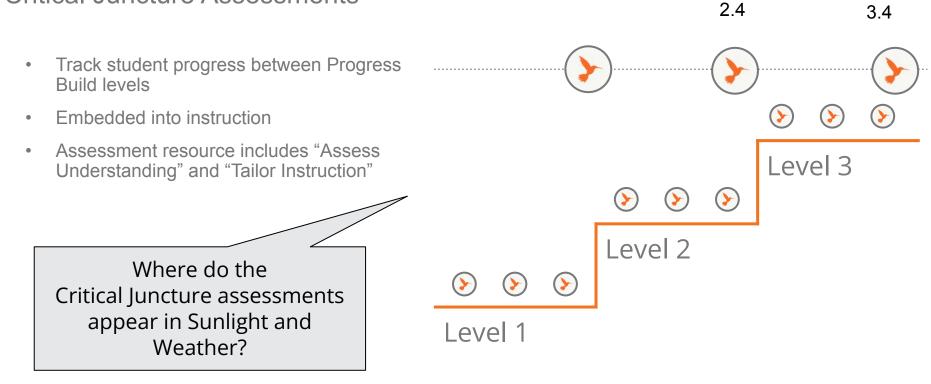
- Science and Engineering Practices
- Crosscutting Concepts
- Literacy skills
- Student collaboration





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Critical Juncture Assessments



Grade K | Sunlight and Weather Lesson 2.4: Applying Sunlight Warming Earth's Surface

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Activity 1 Think and Walk



Chapter 2 Question

Why do the playgrounds get warm?





Woodland Playground





What have we learned so far about why **surfaces**, such as playgrounds, get **warm**?

Activity 1

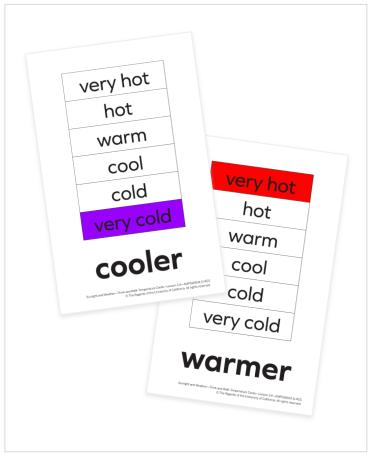
Key Concept

When light shines on a surface, the surface

gets warmer.

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Activity 1



We will do another **Think** and **Walk** activity.



Think and Walk







2.

A

ha warm cool cool wery cool Warrow

3.

Look at the pictures I show you.

1.

Think about the question I ask.

Walk to the "warmer" or "cooler" card.



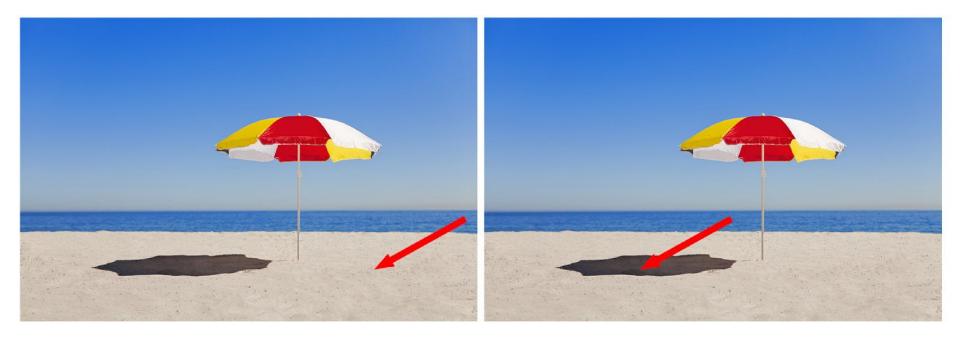
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(P)

The surface is b	ecause sunlight
is on it.	_
	hox warm cool very cold
	warmer not shining cool cool cooler unanted and the second an
	shining Bigging and the second

We are going to **explain** the **temperature** of a surface like scientists.

We will use the word **because** to help explain why a surface is warmer or cooler.



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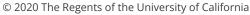
Activity 2 Reflecting on Sunlight Warming Earth's Surface



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Tailor instruction: If many students are not showing evidence of understanding that Earth's surface gets warmer when sunlight shines on it, we recommend offering additional instruction in Activity 3: Interpreting the Playground Temperature Data. After students have analyzed the playground temperature data, take some time to explicitly reexamine the Warming Model and discuss what is different between nighttime and daytime.



Formative assessment information

Locating assessment resources Sunlight and Weather Embedded Formative Assessments Teacher References Embedded Formative Assessments L Think and Walk Reflecting on Sunlight Interpreting the Playground Explaining Sunlight Warming Earth's Surface Temperature Data Warming Farth's Surface Reflecting on Sunlight Warming Earth's Surface The teacher poses questions to gauge students' understanding of the relationship between sunlight and the temperature of Earth's surface.(5 min) Activity 2 We are going to think about a few questions Activity 2 Reflecting on Sunlight about Earth's surface. Warming Earth's Surface You will think of the answer, and then point to the picture that matches We are going to think about a few questions bout Earth's surface the answer You will think of the answer, and then point to the picture that matches Is Earth's surface warmer in the daytime or in the nighttime? **Critical Juncture Assessment 1:** Students' Understanding of Earth's Surface Warming in Sunlight Assess understanding: Students' responses to the prompts in Activity 2 and side an annual mits for sort to appear their surday to adjust that Toutly Amplify.

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Full text of assessment

- Embedded Formative Assessments document
- Instructional guide
- Classroom Slides notes

Additional formative assessment information

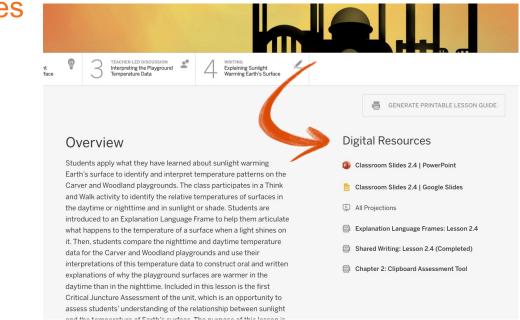
Locating assessment resources

Full text of assessment

- Embedded Formative Assessments
 document
- Instructional guide
- Classroom slides notes

Additional resources

Lesson Brief: Digital Resources

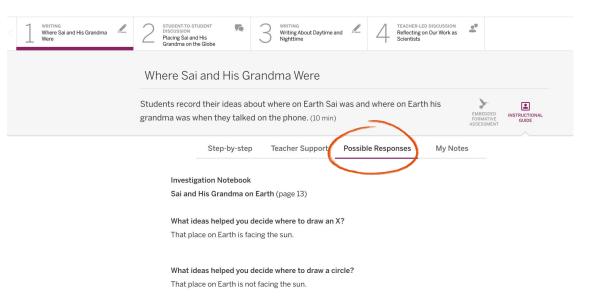


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Additional formative assessment information

Possible student responses

- Within assessments:
 - "Look fors" (OtF)
 - "Assess Understanding" (CJ)
- Possible responses within the Instructional Guide
- Digital resources
 - Assessment Guides
 - Teacher References



Independent planning On-the-Fly and Critical Juncture Assessments

- Use the Embedded Formative Assessments document to get familiar with On-the-Fly and Critical Juncture Assessments in your unit.
- 2. Download the classroom slides for a lesson with an On the Fly assessment or Critical Juncture.
- 3. Read through the teacher notes and make note of any possible student responses. (You can copy and paste them into your notes for that slide.)

Sunlight and Weather Embedded Formative Assessments

Embedded Formative Assessments

On-the-Fy Assessments and Critical Juncture Assessments (state below in lesson order) are embedded formative assessments forgenerative the most opportune moments for a gimps into students' developing conceptual understanding and their facility with the practices. Each assessment opportunity indicates the specific concepts and practices to look for or listen for as students engage with the learning experiences, followed by suggestions to the teacher of whist look 0, based on whitt was observed.

Lesson 1.2, Activity 2

On-the-Fly Assessment 1: Making Predictions

Look for: The focal comprehension strategy in this unit is making predictions by using prior knowledge and information gathered from the text in order to think shead. As students are sharing what they predict the temperature will be based on what was read on page 10, listen for and make note of individual students or partners who are referring to pictures and vords that were read aloud to support their prediction. For example, a student might asy something such as, "I think the temperature will be warm. The girl doesn't need to wear a coat but still needs a sweatshirt, so it's probably not hot."

Now what? As students share their predictions with the class, repeat one or two that were based on the pictures or text. Highlight the way that students took what could be even in the images and described in words to make their predictions. For example, you might say something such as, "noticed Rosa pointed out what the girl in the book was wearing as the shared her prediction with the pratner. She noticed the girl was not warring ao that start are der predictions a long-sleeve sweatshirt". Continue to support students in making predictions with the remainder of the book, and discuss examples as necessary.

NGSS connection: This formative assessment reveals student knowledge and use of Practice 8: Obtaining, Evaluating, and Communicating Information.

Additional 3-D Assessment Opportunities

To assess the crosscutting concept of Scale, Proportion, and Quantity as students make predictions, listen for the understanding that the four temperature words—ocii, coo, warm, hol—and exercising a relative scale. Students should indicate that each successive one is warmer or hotter than the previous (or conversely, that each previous one is colder or cooler).

Also listen for how students are incorporating temperature into their ideas of weather. This is an early opportunity to assess the idea that weather includes temperature (COE ISS2.D). Students should indicate an understanding of temperature is a property of the place the person is in. Look out for students who may be thinking only about temperature in terms of the person's temperature.

1

Lesson 2.1, Activity 4

On-The-Fly Assessment 2: Recording Data from the Warming Model

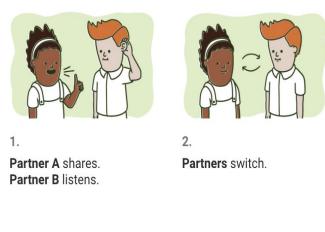
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Additional formative assessment information

Student Self-Assessments

- End of each chapter
- Grades K-1: Pair Share activity
- Grades 2-5: Independent
- Investigation Notebook activity

Self-Assessment: Share a new idea you learned.





3. Partner B shares. Partner A listens.



Data Collection Tool

			collection tool	Student Name	Look for 1	Look fo
Unit	Name:	Chapter:	Lesson:	 		
Direc	tions:			 		
1. 2.	Navigate to the lessor Select the embedded What?. Determine the Look for below: a. Look for 1: b. Look for 2: c. Look for 3: d. Look for 4:	formative assessment icc	n and read the Look for and Now mative assessment opportunity			
4.	the standard the	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ed on the Look for evidence			
5.	backslash (/) if stude		<u>g understanding</u> of the Look for, a t <u>derstanding</u> and a delta (Δ) if student .ook for.			
6.		n the embedded formativ eas on how to respond to	e assessment opportunity, refer to your students' needs			
				 	_	
				 		-
					1	

Look for Look for Look for

4

5

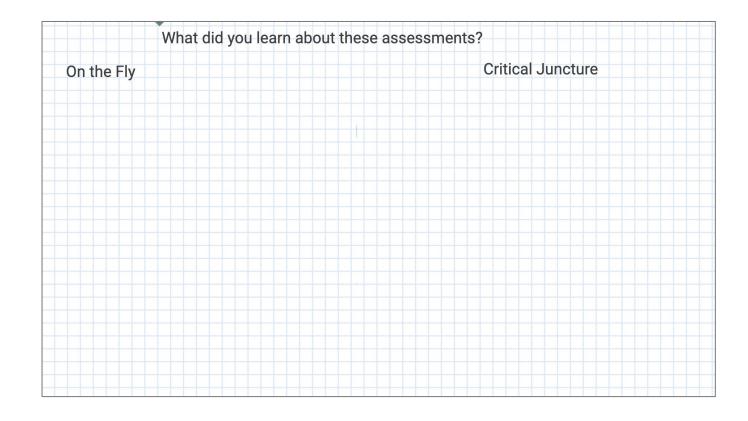
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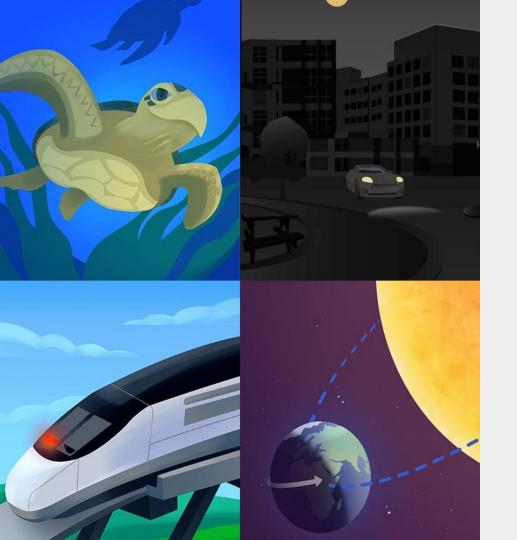
Notes

Share Out

Jamboard

Go to the link in the chat and share your thoughts.





Plan for the day: Part 1

- Introduction and Framing
- Unit Overivew
- Assessment System
- Closing

Overarching goals

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

- □ Internalize the unit
- Describe the overall structure of the Assessment System
- Describe the overall structure and purpose the Formative Assessments.

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Additional resources

Welcome, caregivers!

EDREPORTS A

Grades 6-8

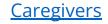




We hope you enjoy learning more about Amplify Science and what students are learning in science this year.

Para acceder a este sitio en español haga clic aquí.

Amplify welcomes you and your learner to the Science program for the new school vear. We are verv excited to



LAUSD Micrositehttps://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!

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

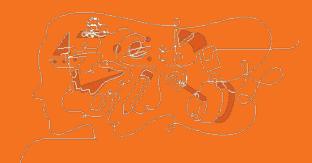




Amplify Chat



End of Part 1





Amplify Science

Unit 3: Sunlight and Weather (with an assessment focus)

Grade K, Part 2

School/District Name: LAUSD Date: Presented by:









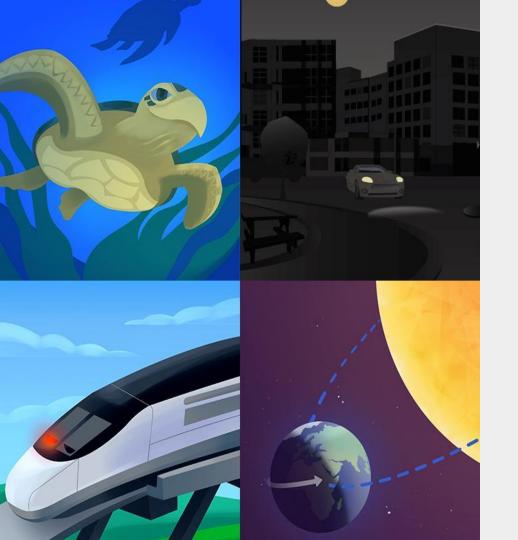
Overarching goals

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

- Understand the pre and post assessments in this unit.
- Understand how the formative assessments build to the summative assessment.

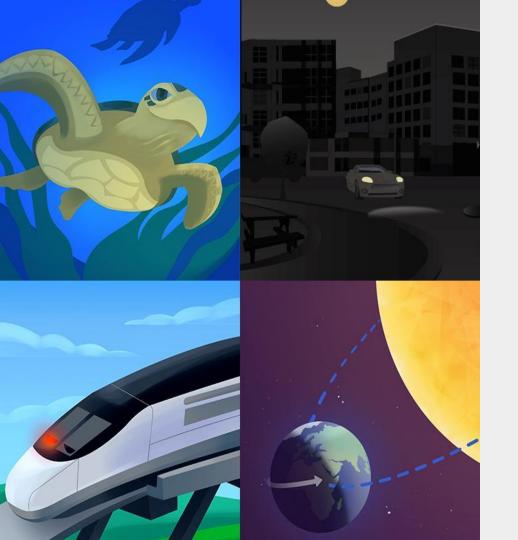






Plan for the day: Part 2

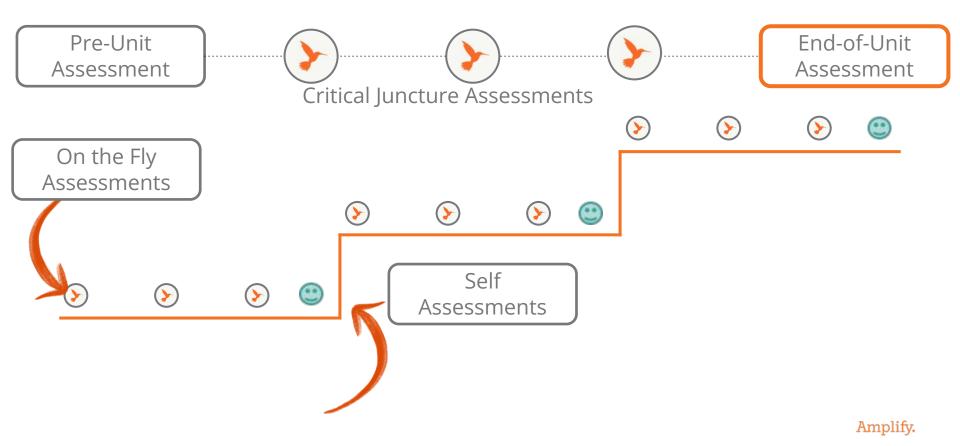
- Pre Unit Assessment
- Summative assessment
- Closing



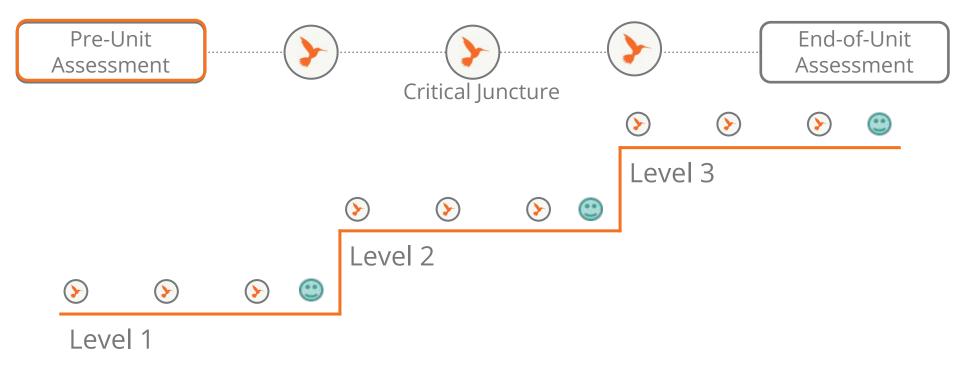
Plan for the day: Part 2

- Pre Unit Assessment
- Summative assessment
- Closing

K-5 Assessment System



K-5 Assessment System



Grade K | Sunlight and Weather

Lesson 1.3: Pre-Unit Assessment

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Activity 1 Observing Local Weather



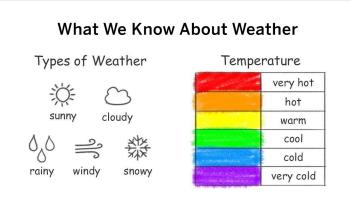
Investigation Question:

How do we describe weather?



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Activity 1





What have we learned about how to **describe** weather so far?

In the last lesson, we went outside to observe the weather.

Today, we will **go outside again** and use our new words to describe the temperature.

We can see if the weather today is the **same** or **different** from last time.

2

What are the different **words** we have learned to describe different types of **weather?**

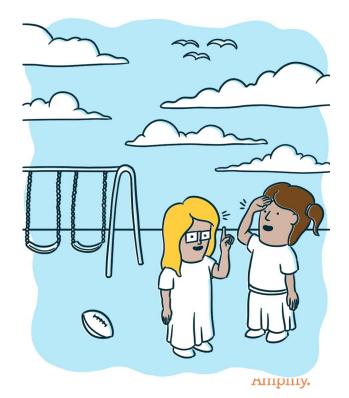
What are the different **words** we have learned that describe **temperature?**

Weather Observations

Step 1 Go outside.

Step 2 Look up at the sky. Discuss the weather with your partner.

Step 3 Tell your partner how hot or cold it is today.





Activity 2 Recording Local Weather



Scientists often need to remember what they observe.



What could we do to **make sure we remember** the weather that we observed today?



Sunlight and Weather:

Solving Playground Problems

Scientists **record** their observations.

They **draw** them or **write** them down.

Investigation Notebook



Lesson 1.3: Pre-Unit Assessment

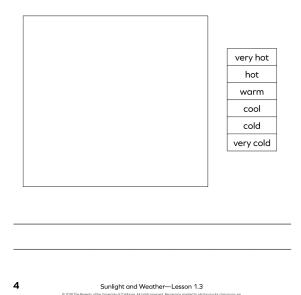
Name: _____ Date: _____

Observing and Recording Weather

Directions:

1. In the box below, draw the weather you observed outside today.

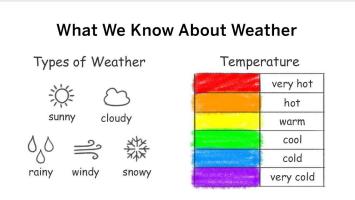
2. Color in the temperature you thought it was today.



Turn to page 4 in your notebooks.

Let's go over the directions.

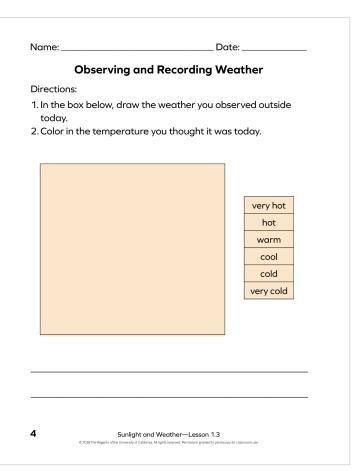
As weather scientists, we are going to record the weather we observed.



If you are **not sure** what to draw, you can **look at the pictures** on our What We Know About Weather chart.

We will also use the **temperature words**.

Lesson 1.3: Pre-Unit Assessment





Record the weather you observed outside.



Activity 2

Name: ______ Date: _____

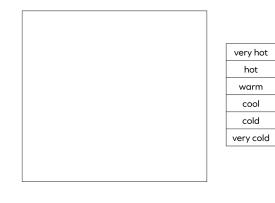
Observing and Recording Weather

Directions:

4

1. In the box below, draw the weather you observed outside today.

2. Color in the temperature you thought it was today.



Scientists call the observations they have recorded data.

Show the person next to you your weather data. **Explain** how it shows the weather that you observed today.



Activity 3 Introducing the What Scientists Do chart



As we learn to be **weather scientists**, we will be doing things that all scientists do to **learn about the world** around them.

We will use a **chart** to help us remember and think about the ways we are scientists.

What Scientists Do To answer questions, scientists...

Scientists **ask questions** about things they **want to understand**.

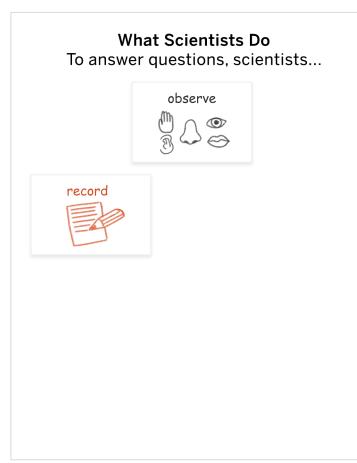
This helps scientists say what they wonder and want to find out more about.

What Scientists Do To answer questions, scientists...



Scientists **observe** the world around them. They **look**, **listen**, and **feel**.

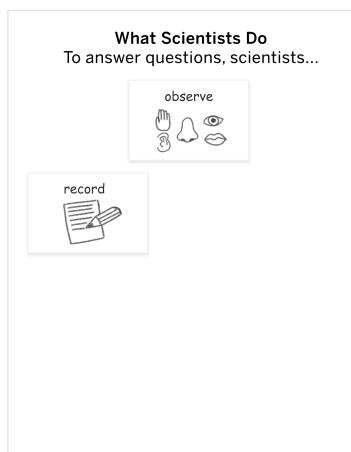
How have we **observed** the world around us?



Scientists record what they observe to remember it or show it to other people.

How did we **record** what we observed?

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Scientists do many things to answer their questions.

As we do new things as scientists, we will add them to this chart.



Antroducing and Discussing the Playground Problem

~ ^ 2 6 向

Dear students,

Hello from Carver and Woodland Elementary! We hear that you are learning to be weather scientists, and we have an interesting weather problem for you.

Our schools are in the same area, but our students feel very different temperatures when they go out to the playgrounds during morning and afternoon recess, and it is not always comfortable for them. As principals, we want our students to be happy and comfortable. Hopefully, you can figure out why the two playgrounds get warmer in different ways!

We look forward to hearing from you,

Ms. Hood and Mr. Jenkins

I will show you a picture of the two playgrounds.



Discuss what you notice with a partner.



Carver Playground



Woodland Playground



The principals sent us pictures to describe the temperatures on each playground.



Nighttime (

Morning - Ö



Carver Playground







Woodland Playground







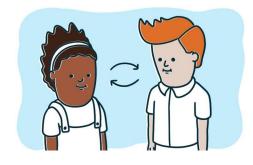
When scientists have a **new problem** to figure out, they think about what **ideas they already have**.

Let's share our ideas about **why** the playgrounds get warmer in different ways.

Shared Listening







1.

2.

3.

Partner A shares. Partner B listens. **Partner B** repeats. *I heard you say* . . .

Partners switch.

Activity 4





Woodland Playground



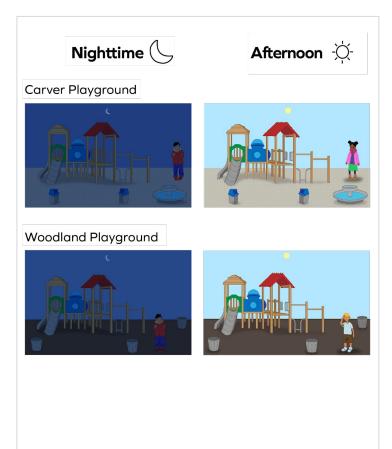
Shared Listening Question 1:



Why do you think the two playgrounds get **warmer but in different ways**?

You will share your ideas to some more questions with a **different partner**.

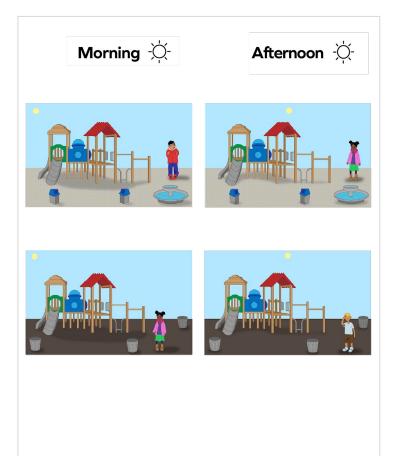




Shared Listening Question 2:



Why do you think both playgrounds were **cold at night**, and **warmer during the day**?



Shared Listening Question 3:



Why do you think both playgrounds were warmer in the afternoon than they were in the morning?

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Shared Listening Question 4:



Why do you think that Woodland is warmer than Carver during the day?

Scientists think about cause and effect.

Cause and effect is when one thing, the cause, makes another thing, the effect, happen.

Lesson 1.3: Pre-Unit Assessment

End of Lesson





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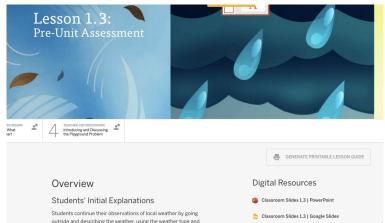
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Pre-Unit Assessment

Lesson 1.1

Locate the Assessment Guide in Lesson 1.3 of your unit and read it.



outside and describing the weather, using the weather type and temperature words they have learned. When they return to the classroom, they record their observations. The teacher introduces the What Scientists Do chart and reviews important practices scientists use to answer questions. Finally, students are introduced to the weather problem they will address throughout the unit; students from two different schools experience different temperatures on their playgrounds over the course of the day. Students share their ideas about what might cause these differences. The oral explanations students provide in this discussion serve as a pre-unit assessment for formative purposes and are designed to reveal students' initial understanding of some of the unit's core content-both unit-specific science concepts and the crosscutting concept of Cause and Effectprior to instruction. As such, these three-dimensional assessments offer a baseline from which to measure growth of understanding over the course of the unit. These explanations can also provide the teacher with insight into students' thinking as they begin the unit.

All Projections

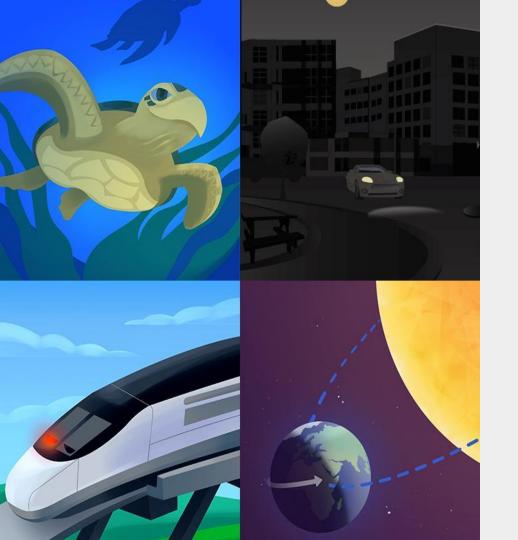
Assessment Guide: Interpreting Students' Pre-Unit Explanations About Why the Playgrounds Are Different Temperatures

Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences, and Cultural Backgrounds

What Scientists Do chart (Completed)

Sunlight and Weather Investigation Notebook, page 4

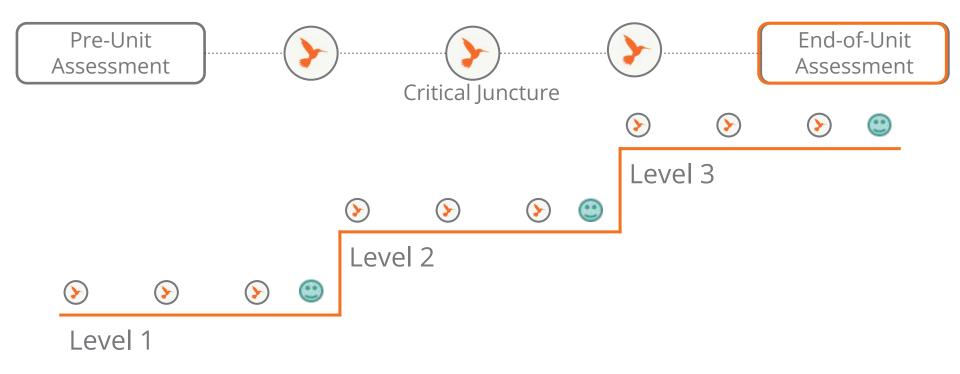




Plan for the day: Part 2

- Pre Unit Assessment
- Summative assessment
- Closing

K-5 Assessment System





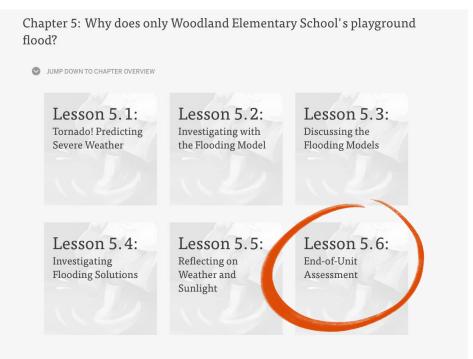
End-of-Unit Assessment

3-dimensional assessment opportunity

- Summative assessment of mastery of science concepts
- Formative assessment of Science and Engineering Practices



End of Unit Assessment for Sunlight and Weather Summative assessment.



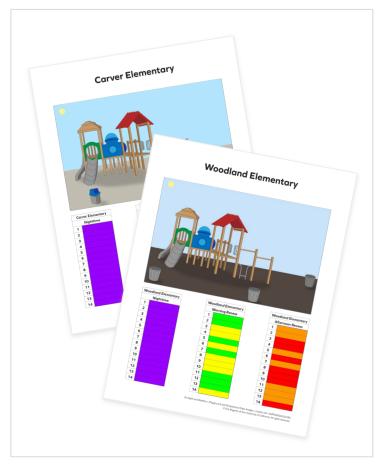
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Grade K | Sunlight and Weather Lesson 5.6: End-of-Unit Assessment

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Activity 1 Talking About the Playgrounds' Temperatures





These cards show the playgrounds and the temperature of their surfaces at different times.

I will ask you questions about these cards.

You can see here that the **surface** of the **Carver playground** is cold at night, cool in the morning, and warm in the afternoon.

The **surface** of the **Woodland playground** is cold at night, warm in the morning, and hot in the afternoon.

Imagine that you are **talking to students** from both schools who want to explain to their principals why the playgrounds are different.

Explain your ideas to me the way you would explain your ideas to the students.

2

Explain why the surfaces of both playgrounds get warmer, but the surface of the Woodland Playground gets even warmer than the surface of the Carver Playground.

As we have been learning about sunlight and temperature, we have been talking about **cause and effect** and **how we can investigate** to see if one thing causes another thing to happen.

2

If we wanted to find out whether sunlight shining on a surface like the playgrounds **causes** the surface to get warm, what could we do to **investigate** that?



We used materials like these to make models of the sun and Earth's surface.

How would you use these materials to make a **model** that is like **nighttime and daytime**?

We have learned that scientists think carefully about **how their models are like and not like the real thing** they want to learn about.

We used the Lamp Model to learn about the **sun** as well as **Earth's surfaces** like the playgrounds.

Activity 1

I will turn the lamp on.

How is our Lamp Model like the sun and like Earth's surface?

How is our Lamp Model **not like** the sun or Earth's surface?

Lesson 5.6: End-of-Unit Assessment

End of Lesson

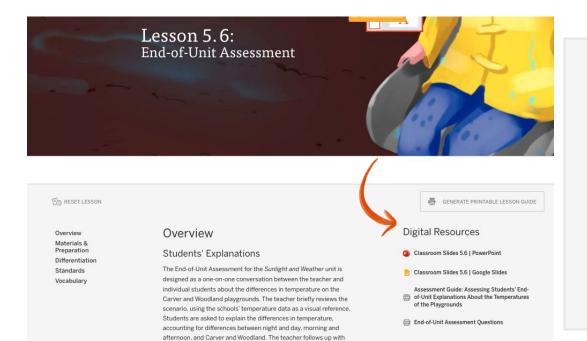




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Locate End of Unit Assessment



probing questions as necessary. Students are asked to describe how

Digital Resources

Classroom Slides 5.6 | PowerPoint

Classroom Slides 5.6 | Google Slides

- Assessment Guide: Assessing Students' Endof-Unit Explanations About the Temperatures of the Playgrounds
- End-of-Unit Assessment Questions

Open your End of Unit Assessment

End-of-Unit Assessment Questions

Science Content: Sunlight and Surface Temperature

Prompt the student to explain the temperatures as if to a student audience.

 Imagine that you are talking to students from both schools who want to explain to their principals why the playgrounds are different. Explain to me, like you would to them, why the surfaces of both playgrounds get warmer, but the surface of the Woodland Playground gets even warmer than the surface of the Carver Playground.

Ask follow-up questions to probe for ideas that students did not mention. If students do not mention ideas that were the focus of the unit, they may still have some understanding of those ideas, even if they did not independently use them in their explanations. You can ask the following questions to probe for ideas that students did not include.

If the student does not mention the change in temperature from nighttime to daytime, point to the nighttime and morning temperatures of the Woodland and Carver playgrounds.

Why are the surfaces of the playgrounds warmer during the daytime than during the nighttime?

If the student does not mention the change in temperature from morning to afternoon, point to the morning and afternoon temperatures of the Woodland and Carver playgrounds.

Why are the surfaces of the playgrounds warmer in the afternoon than in the morning?

If the student does not mention the temperature difference between the two playgrounds, point to the morning and afternoon temperatures of the Woodland Playground and then the Carver Playground.

 Why is the surface of the Woodland Playground warmer than the surface of the Carver Playground in the morning and in the afternoon?

Crosscutting Concept: Cause and Effect

Prompt the student to propose a way to investigate cause and effect. Remind the student that cause and effect means that when one thing happens, something else happens.

 If we wanted to find out whether sunlight shining on a surface like the playgrounds causes the surface to get warm, what could we do to investigate that?

and Engineering Practice: Designing Representative Models

e student to demonstrate how to model the investigation.

v would you use these materials to make a model that is like nighttime—when light from the is not shining on Earth's surface—and daytime—when light from the sun is shining on Earth's loce?

tudent has difficulty responding, ask the following questions:

v would you make a model that is like daytime, when light from the sun is shining on Earth's face?

v would you make a model that is like nighttime, when light from the sun is not shining on th's surface?

e student to describe how the model is similar to and different from the sun and

v is our Lamp Model like the sun and like Earth's surface? v is our Lamp Model not like the sun nor like Earth's surface?

student has difficulty responding, ask the following questions:

at part of our model is like the sun?

v is the lamp like the sun?

at part of our model is like Earth's surface?

v is the rubber like Earth's surface?

at is one way the lamp and rubber are not like the sun nor like Earth's surface?

Sunlight and Weather: Solving Playground Problems (Grade K) © The Regists of the University of California

2

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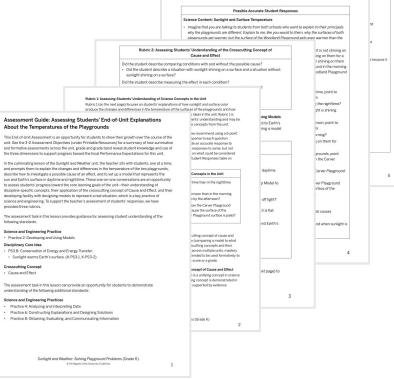
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1

End-of-Unit Assessment Guide Work time

Open and skim your End-of-Unit Assessment and Assessment Guide for lesson 5.6



Science and Engineering Practice: Designing Representative Models

on Earth's surface?

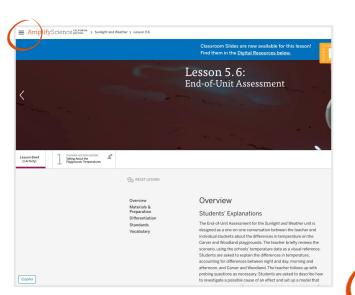
How would you use these materials to make a model that is like nighttime—when light from the sun is not shining on Earth's surface—and daytime—when light from the sun is shining

Put the rubber on the table, with the lamp pointing down at it. When the lamp is off, it is like nighttime, and when the lamp is on, it is like daytime.

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Program Hub

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



١	Velcome Science Educ	ators!		
	he Amplify Science Program Hub was creat nd advice for all stages of your implementa			
	Remote and hybrid learning resources Amplify Science®Home makes remote and hybrid lear easier.		I Learning Resources	
			A R ^D A	
	Additional Unit Materials Additional resources to complement the units you're teaching.			
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Amplify Science Program Hub

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Assessments

CA Science

rogram Guide

Additional Resources

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LAUNCH PROGRAMS 🚿 TEACHER LAMBERTSEN (2)

LAUSD Micrositehttps://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!

Additional resources

Welcome, caregivers!

EDREPORTS A

Grades 6-8

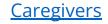




We hope you enjoy learning more about Amplify Science and what students are learning in science this year.

Para acceder a este sitio en español haga clic aquí.

Amplify welcomes you and your learner to the Science program for the new school vear. We are verv excited to



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





Amplify Chat



End of Part 2

