



Happy Teacher Appreciation Week!!!!

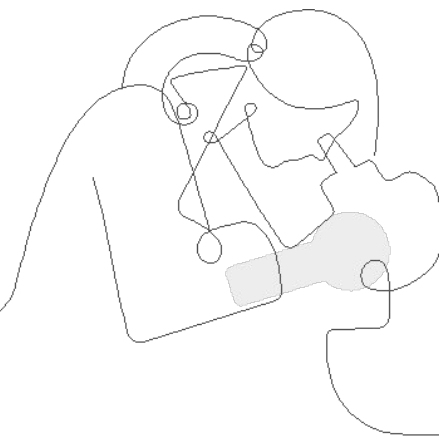
Amplify Science

K/1 Writing in Science Strengthening workshop

LAUSD

May 2022

Presented by Jolene Hori



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.

Why do scientists write?



Overarching goals

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

- ❑ Identify specific characteristics that support K/1 students in science writing.
- ❑ Be ready to teach specific writing activities in an Amplify Science unit.

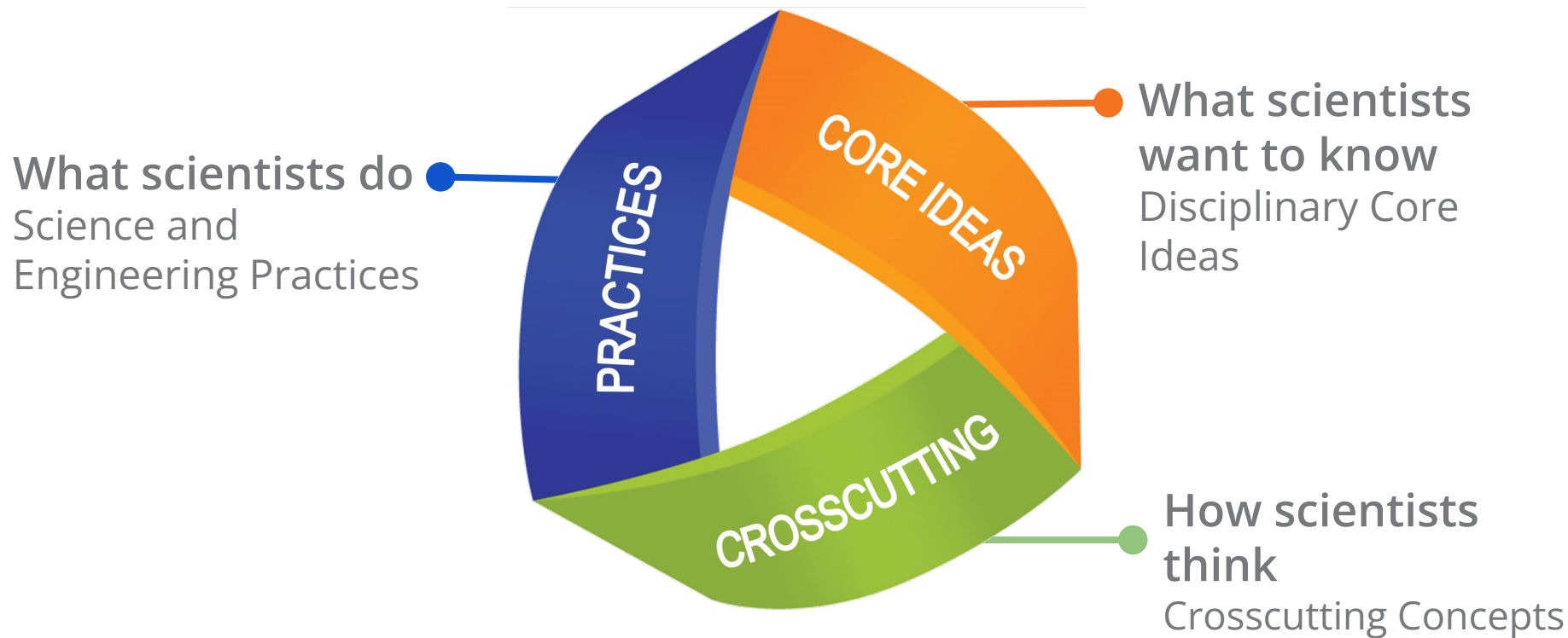


Plan for the day

- Introduction and framing
- Writing in Amplify Science
 - Writing as part of a multimodal experience
 - End of Chapter
 - End of Unit
 - Student Explanations
- Supporting students with writing
- Closing

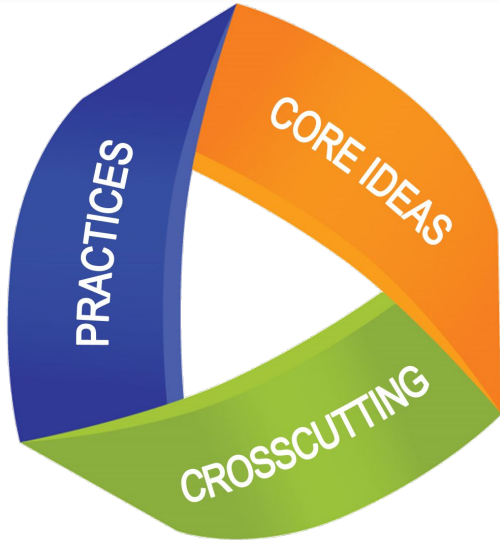
Figuring out phenomena

Using 3-D teaching and learning



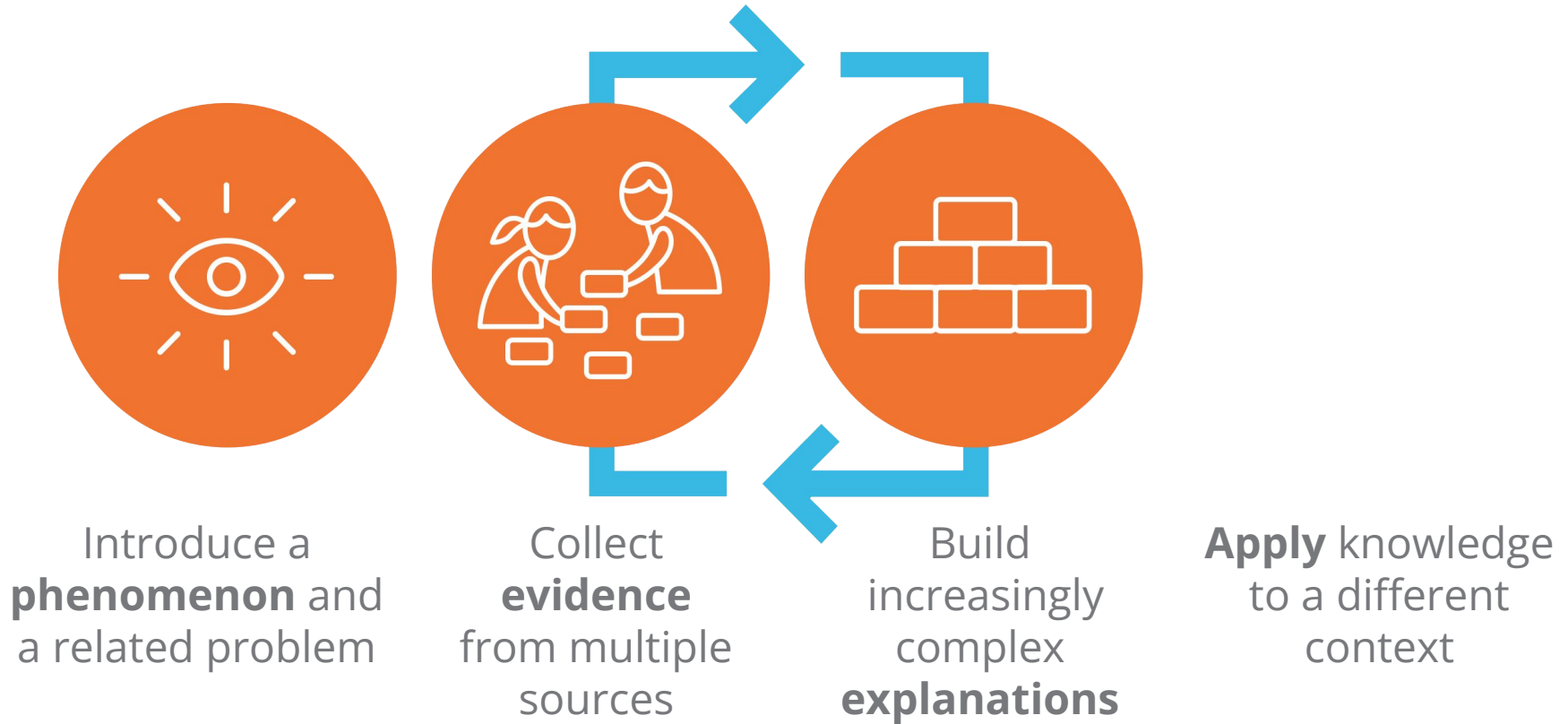
Next Generation Science Standards

Science and Engineering Practices



1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

Instructional approach



Phenomena-based Instruction

Inquire like a scientist.

Think like a scientist.

Quantify like a scientist.

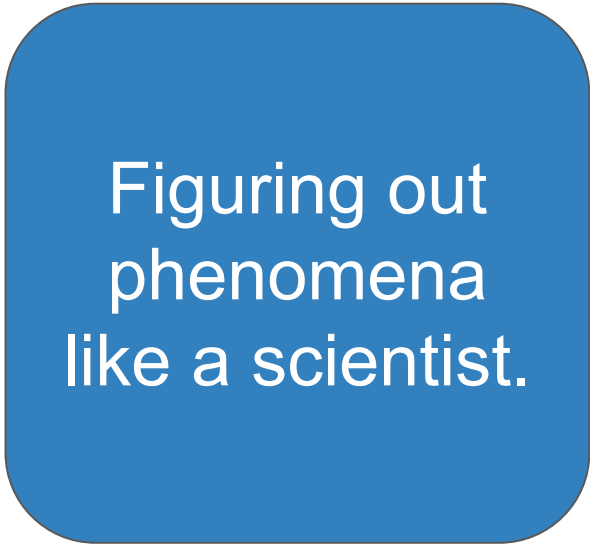
Read like a scientist.

Talk like a scientist.

✓ **Write** like a scientist.

Critique like a scientist.

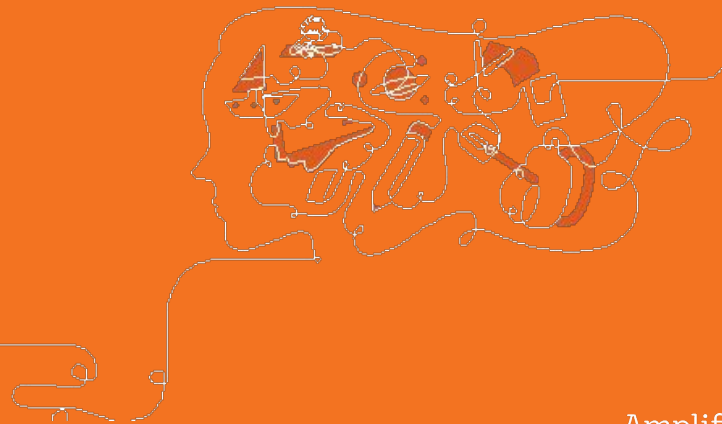
Argue like a scientist.



Figuring out
phenomena
like a scientist.

Writing in Amplify Science

Purposeful communicative writing is an integral part of the Amplify Science curriculum















Plan for the day


- Introduction and framing
- **Writing in Amplify Science**
 - Writing as part of a multimodal experience
 - End of Chapter
 - End of Unit
 - Student Explanations
- Supporting students with writing
- Closing

“Children’s speaking and listening lead the way for their reading and writing skills, and together these language skills are the primary tools of the mind for all future learning” (Roskos, Tabors, & Lenhart, 2009).



Standards and Goals

Planning for the Unit		Printable Resources	
Unit Overview	▼	 3-D Assessment Objectives	
Unit Map	▼	 Coherence Flowcharts	
Progress Build	▼	 Copymaster Compilation	
Getting Ready to Teach	▼	 Crosscutting Concept Tracker	
Materials and Preparation	▼	 Eliciting and Leveraging Student Prior Knowledge, Personal Experiences, and Cultural Backgrounds	
Science Background	▼		
Standards at a Glance	▼	 Investigation Notebook	
Teacher References		 Multi-Language Glossary	
Lesson Overview Compilation	▼	 NGSS Information for Parents and Guardians	
Standards and Goals	▼	 Print Materials (8.5" x 11")	
3-D Statements	▼	 Print Materials (11" x 17")	



The Unit Landing Page: Standards and Goals

K- Sunlight and Weather



Writing

- **CCSS.ELA-LITERACY.W.K.2:** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- **CCSS.ELA-LITERACY.W.K.7:** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
- **CCSS.ELA-LITERACY.W.K.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

1- Spinning Earth



Writing

- **CCSS.ELA-LITERACY.W.1.2:** Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
- **CCSS.ELA-LITERACY.W.1.5:** With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
- **CCSS.ELA-LITERACY.W.1.7:** Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).
- **CCSS.ELA-LITERACY.W.1.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Multimodal Learning: Do, **Talk**, Read, Write, Visualize

Sunlight and Weather

Spinning Earth

- **Do.** With increasing independence, students apply their ideas about cause and effect to plan investigations.
- **Talk.** Students engage in student-to-student talk when they gather evidence, either from firsthand investigations or from text. Many of the prompts focus on providing opportunities to discuss what has caused certain observed effects.

- **Do.** Students have multiple opportunities to explore observable patterns, such as what they observe during the daytime and nighttime, where places experiencing daytime and nighttime are located on a globe, and where the sun and Moon are located in the sky throughout the day. Students investigate by using models to explain why those patterns occur.
- **Talk.** To facilitate sense-making, explorations are followed by opportunities

- **Talk.** To facilitate sense-making, explorations are followed by opportunities for student-to-student talk through which students develop an understanding of the causes of the patterns they observe. For instance, we observe it change from daytime to nighttime because Earth spins; as Earth spins, we face different directions, so the sky looks different to us.

- **Write.** Students connect causes and effects in oral and written explanations with the support of explanation language frames—sentence structures that support linking specific causes and mechanisms to effects by using the words *so* or *because*.
- **Visualize.** Students use visualization as they think about how they might design investigations to find support for their ideas about causes for observed effects.

correlational pattern about animal behavior and Moon shape. Students reflect on how the scientist in the book identified a pattern and engaged in the same practice as them—organizing data in a new way—to analyze data.

- **Write.** Students connect patterns and their causes in oral and written explanations with the support of Explanation Language Frames—sentence structures that support explaining patterns by using causal language, such as the word *because*.
- **Visualize.** Through participating in kinesthetic models and constructing class charts, students work to visualize the daily pattern of the sun.

Multimodal Learning: Do, Talk, Read, **Write**, Visualize

Sunlight and Weather

Spinning Earth

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- **Do.** Students have multiple opportunities to explore observable patterns, such as what they observe during the daytime and nighttime, where places experiencing daytime and nighttime are located on a globe, and where the sun and Moon are located in the sky throughout the day. Students investigate by using models to explain why those patterns occur.

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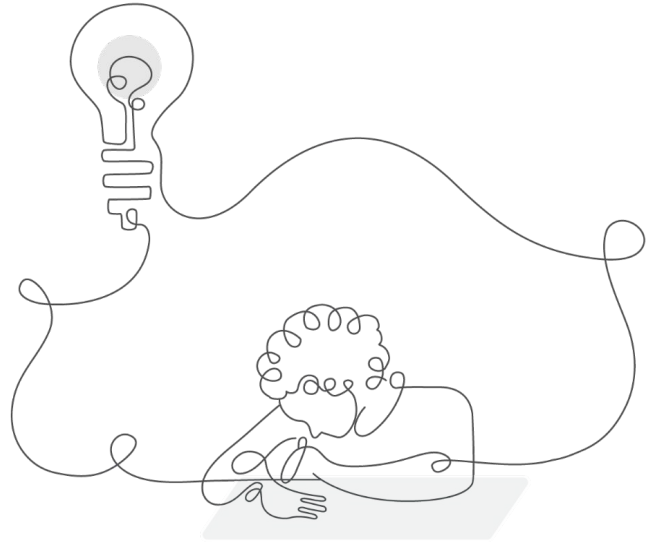
book shows how, for much of the day, sunlight causes surfaces to get warmer over time. In addition, the book shows that the sunlight causes dark surfaces to get hotter than pale surfaces.

- **Write.** Students connect causes and effects in oral and written explanations with the support of explanation language frames—sentence structures that support linking specific causes and mechanisms to effects by using the words *so* or *because*.
- **Visualize.** Students use visualization as they think about how they might design investigations to find support for their ideas about causes for observed effects.

- **Read.** In *Nighttime Investigation*, students read about a scientist who conducted an investigation and, after organizing her data, found a correlational pattern about animal behavior and Moon shape. Students reflect on how the scientist in the book identified a pattern and engaged in the same practice as them—organizing data in a new way—to analyze data.
- **Write.** Students connect patterns and their causes in oral and written explanations with the support of Explanation Language Frames—sentence structures that support explaining patterns by using causal language, such as the word *because*.
- **Visualize.** Through participating in kinesthetic models and constructing class charts, students work to visualize the daily pattern of the sun.

Why do students write in Amplify Science?

- To activate background knowledge
- To reflect on understanding
- To engage in sense-making
- To record data / observations
- To organize ideas
- To communicate ideas
 - To explain
 - To persuade



Sample instructional sequence

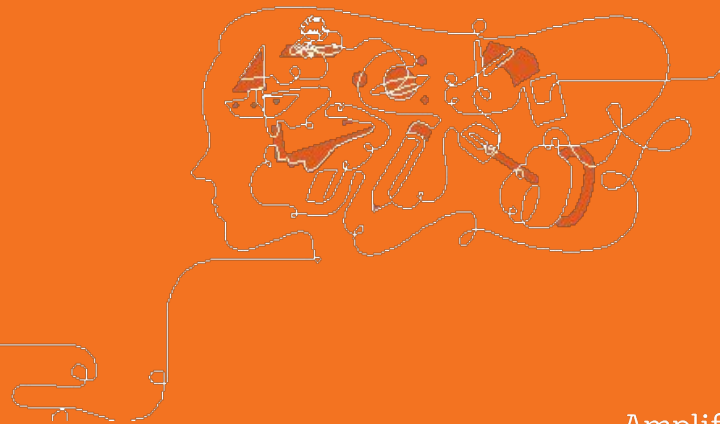
Grade K: Sunlight and Weather

Grade 1: Spinning Earth

During the sample sequence, we'll look at what students experience that supports their understanding of the science concepts that they will be talking and writing about.



Grade K Instructional Sequence



Sunlight and Weather

How do sunlight and different types of weather affect places?

Sunlight and Weather

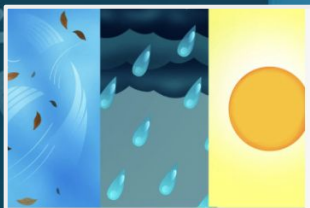
Problem: Why are the playgrounds at two schools different temperatures? Why does one playground flood?

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



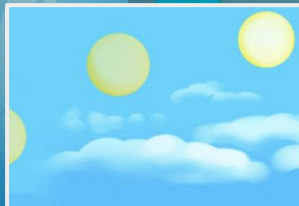
Chapter 1: What is the weather like on the playgrounds?

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



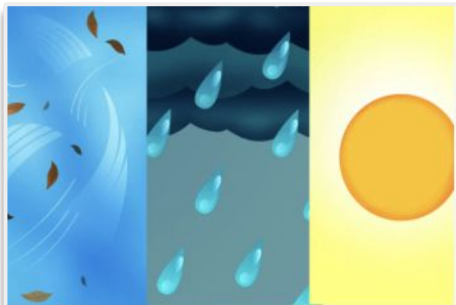
Chapter 5: Why does only Woodland Elementary School's playground flood?

6 Lessons

Unit Question: How do sunlight and different types of weather affect places?


AmplifyScience

Sunlight and Weather: Writing in Chapter 1



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

4 Lessons



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

✓ JUMP DOWN TO CHAPTER OVERVIEW

Lesson 1.1:
What Is the Weather Like Today?

Lesson 1.2:
Introducing Temperature

Lesson 1.3:
Pre-Unit Assessment

Lesson 1.4:
Weather and the Playgrounds

Lesson 1.4 Shared Write

What is the weather like on Carver's Playground?

What is the weather like on Woodlands playground?

What is the same or different about the weather on the playgrounds?

Shared Writing: Lesson 1.4 (Completed)

What is the weather like on Carver's playground?

Carver's playground has many sunny days and some cloudy, windy, and rainy days.

What is the weather like on Woodland's playground?

Woodland's playground has many sunny days and some cloudy, windy, and rainy days.

What is the same or different about the weather on the playgrounds?

The types of weather on each playground are the same.

The temperature on each playground is different.

Our audience: Ms. Hood and Ms. Jenkins- the principals



How is this unit unique?

Grade K | Sunlight and Weather

Lesson 1.1: What Is the Weather Like Today?

Activity 1

Introducing the Unit



We are beginning a new unit in science.

We will work as **weather scientists**. We will **investigate** weather.



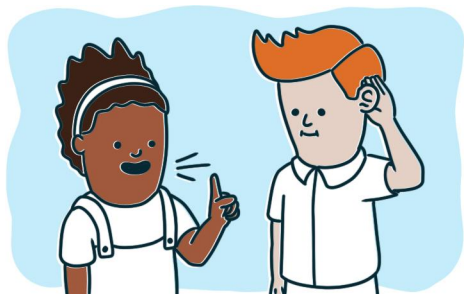
Unit Question

How do sunlight and different types of weather affect places?

Investigation Question:

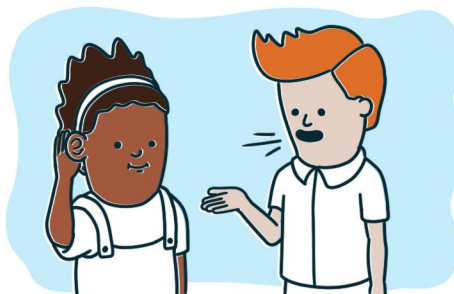
How do we describe weather?

Shared Listening



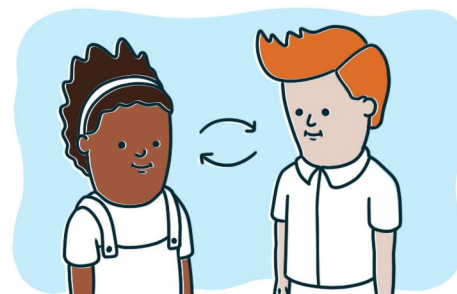
1.

Partner A shares.
Partner B listens.



2.

Partner B repeats.
I heard you say . . .



3.

Partners switch.

Shared Listening Question:

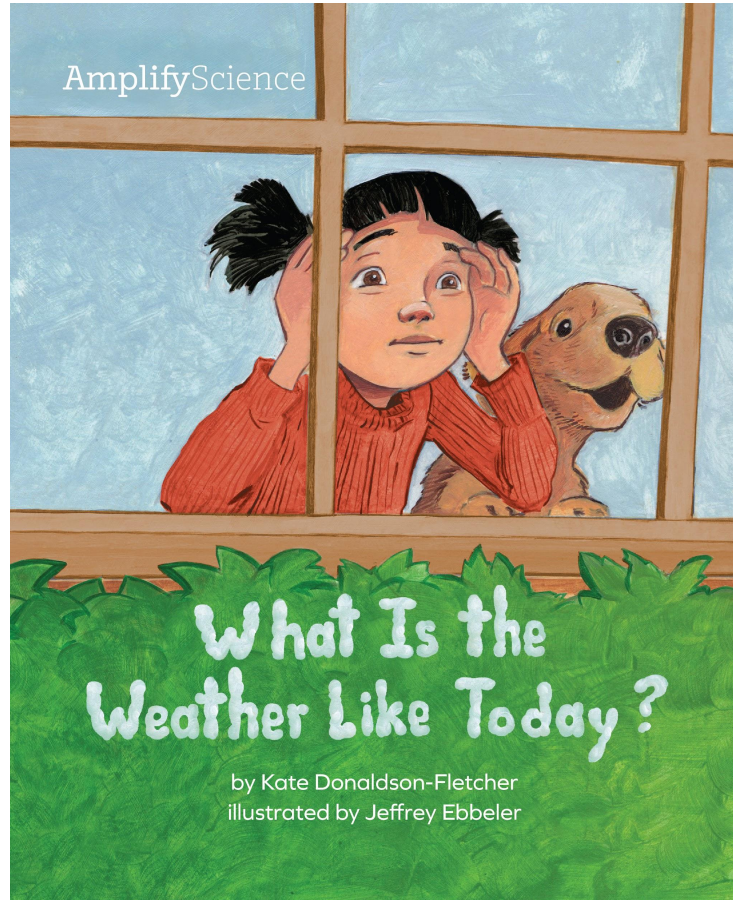


What ideas do you have about weather?

Activity 2

Reading: What Is the Weather Like Today?





There are **many types of weather**.

We will read about a girl who **observes** the weather.

Do you remember our word observe from the other science units we have worked with? To *observe* is to use any of the five senses (sight, hearing, smell, taste, touch) to learn more about something.



Every morning, I wake up with a question.

“What is the **weather** like today?”



To find out, I go to my window and look outside.

The weather today might be different than it was yesterday. Weather can be sunny, cloudy, windy, rainy, or snowy. There are other types of weather, too.



Some days I look outside and everything is wet. Drops of water are falling from the sky. I see puddles on the sidewalk.

What is the weather like today?



I can use **what I know** to **make a prediction** about what the weather is like today.

When everything is wet outside, it often means that it is raining. I predict that the weather is rainy.



The weather today is rainy.

Gray clouds cover the sky. Rain is falling from the clouds. Sometimes the rain falls lightly. Sometimes it rains so hard I can barely see the houses across the street! It is raining hard today. I will wear my rain boots and raincoat and bring my umbrella to school with me.

I can check my prediction.

We just read and gathered new information that the weather today is rainy. I predicted that the weather today would be rainy. My prediction matches what I decided before I read to gather new information.



The weather today is rainy.

Gray clouds cover the sky. Rain is falling from the clouds. Sometimes the rain falls lightly. Sometimes it rains so hard I can barely see the houses across the street! It is raining hard today. I will wear my rain boots and raincoat and bring my umbrella to school with me.



Some days when I look outside, the sky is blue and everything looks bright. Leaves are flying through the air. The grass is bending over and the bushes are swaying. The branches of the trees are moving back and forth.

What is the weather like today?

Now I can use what I know to make a new prediction about what the weather is like today. By reading and looking at the pictures, I know that the leaves, grass, flowers, and branches outside are all moving around. When things outside are swaying or flying through the air, it often means that the wind is blowing. **I predict that the weather is windy.**



The weather today is sunny and windy.

There are no clouds, and the sun is high in the sky. **Sunlight** is shining on houses, trees, people, and everything else. The wind is blowing. It blows leaves through the air and makes branches sway. The sunlight is very bright today, so I'm going to wear my sunglasses. I'll keep my hair tied back to keep the wind from blowing it around.



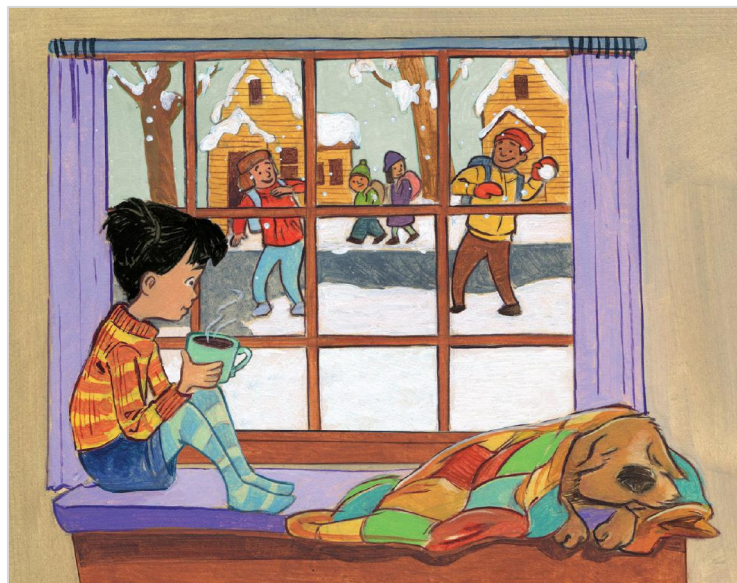
Some days I look outside and see ice crystals on my window. Outside, everything looks white and still. White flakes are falling to the ground. I can see the footprints of animals that have passed by in the night.

What is the weather like today?

We just read and gathered new information that the weather today is sunny *and* windy. I predicted that the weather today would be windy but I did not include sunny weather in my prediction. The windy weather matches what I predicted before I read this page but the sunny weather was not part of my prediction.



What do you **predict** the weather will be like today?



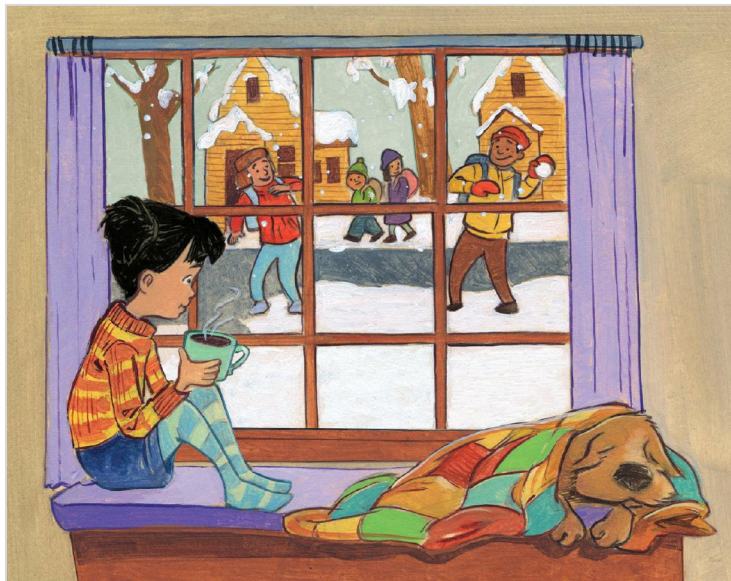
The weather today is snowy.

When clouds get very cold, snowflakes form in the clouds. Then the snowflakes start falling to the ground. If enough snowflakes fall, they can form piles of snow. I am going to wear warm boots, a coat, and a scarf today.

Let's keep reading to check our predictions.



What new information did we get from the **reading** and looking at the **pictures**? Did your prediction match?



The weather today is snowy.

When clouds get very cold, snowflakes form in the clouds. Then the snowflakes start falling to the ground. If enough snowflakes fall, they can form piles of snow. I am going to wear warm boots, a coat, and a scarf today.



Some days I look outside and the sky is gray. It's daytime, but it's not very bright outside. I don't see the sun in the sky.

What is the weather like today?



The weather today is cloudy.

When there are thick clouds in the sky above us, we can't see the sun. The sky looks gray and it is not bright outside. Even though we can't see the sun, it's still there behind the clouds.



There are many types of weather. On different days, the weather can be sunny, cloudy, windy, rainy, or snowy. There can even be more than one type of weather at a time.

I want to be ready for whatever the weather brings. I might need sunglasses to **prepare** for sunny weather. To prepare for rain, I might need a raincoat. I want to know what the weather will be like each day so I can always be prepared.

Vocabulary



predict

We are going to practice saying the word.

- Say the word after me: *predict*.
- Now say the word together: *predict*.
- Now whisper the word *predict* to your partner.

To predict is to use what you already know to decide what you think might happen.

Stop & Reflect



Kindergarten

What did students learn in lesson 1.1 that will help them in participating in the Shared Writing in lesson 1.4?

Shared Listening: What ideas do you have about weather?

Read the book- *What is the Weather Like Today?*

- Predict
- Weather words
- Describing weather

Lesson 1.4 Shared Write

What is the weather like on Carver's Playground?

What is the weather like on Woodlands playground?

What is the same or different about the weather on the playgrounds?

Activity 3

Introducing Think and Walk



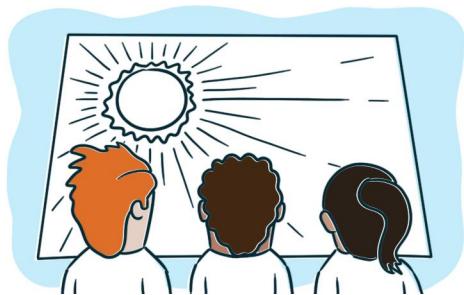
We are going to do a **Think and Walk** activity.

We will do activities like this one many times throughout the unit as we learn about weather.



There are **cards** showing five different **types of weather** around the room.

Think and Walk



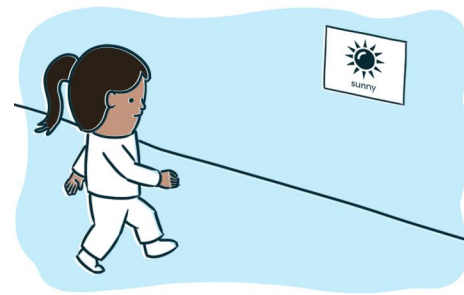
1.

Look at the picture I show you.



2.

Think about what kind of weather it is.



3.

Walk to the card that shows that type of weather.





















We have just looked at pictures of different types of weather.

Now we will look at ways to **act out** different types of weather.

Then we can **use our bodies** to show these different types of weather.

Weather Types Movement Routine

1. Sunny

Circle your arms over your head. Wiggle your fingers.

2. Cloudy

Make circles with your hands by your shoulders.

3. Windy

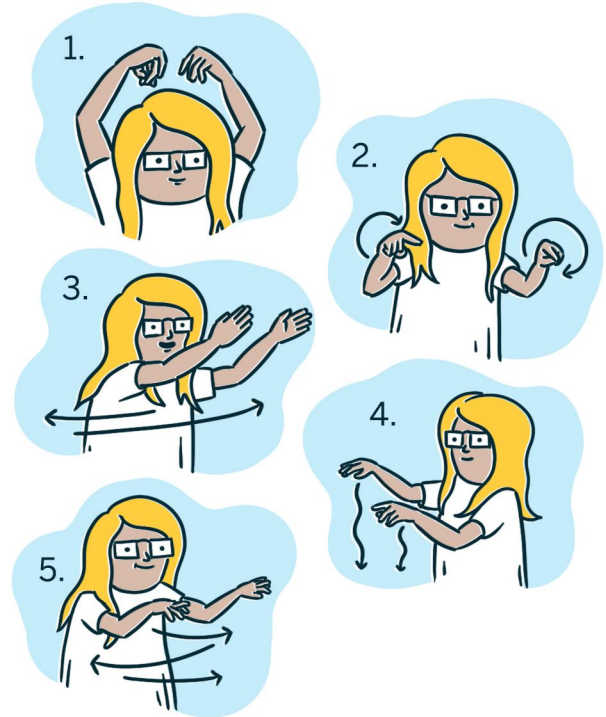
Move your arms back and forth carefully.

4. Rainy

Wiggle your fingers and move your hands down.

5. Snowy

Wiggle your fingers and wave your hands down.



Activity 4

Recording New Ideas



What We Know About Weather

We will use this chart to keep track of what we know about **weather**.

What We Know About Weather

Types of Weather

We have learned there are **many types of weather**.

We have **words** we can use to talk about different types of weather.

What We Know About Weather

Types of Weather



sunny



cloudy



rainy



windy



snowy

Now our chart shows what we have learned about **different types of weather.**

Key Concept

Weather can be sunny, cloudy, windy, rainy,
or snowy.

End of Lesson

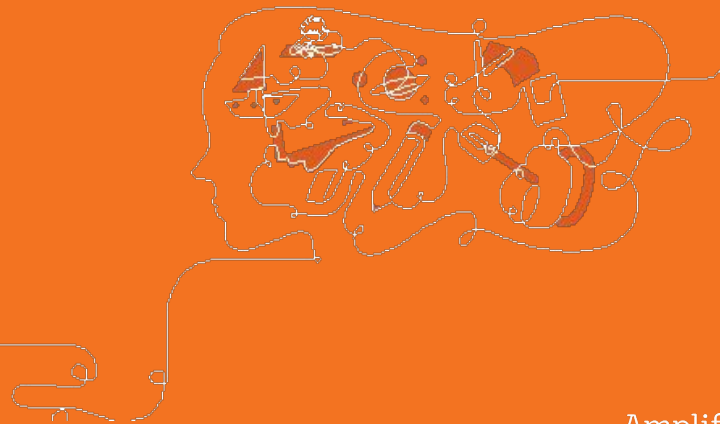


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Amplify.

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Grade 1 Instructional Sequence



Spinning Earth

Why doesn't the sky always look the same?



Spinning Earth

The background of the slide features a stylized illustration. A large, bright white circle, representing the sun or moon, is positioned in the upper right quadrant against a yellowish-orange sky. Below it, the dark silhouette of a house with a chimney and several rectangular windows is visible. The bottom of the slide shows dark, rolling hills.

Problem::

The sky looks different to Sai than to his grandma when they talk on the phone. Why doesn't the sky always look the same?

Role: Sky Scientists

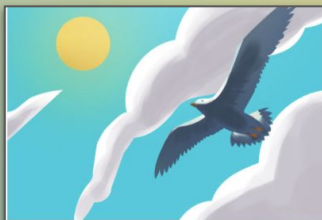
Students explore what the sky looks like during the daytime and the nighttime. They examine Earth as a round, ball-shaped planet and develop an understanding of the orientation of Earth and sun in space, allowing them to figure out that daytime and nighttime are the result of Earth facing or not facing the sun.

Spinning Earth

Coherent Storylines

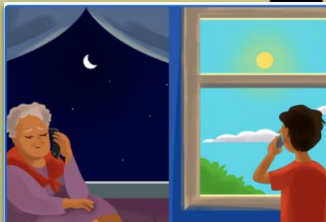
Unit Question:

The sky looks different to Sai than to his grandma when they talk on the phone. Why doesn't the sky always look the same?



Chapter 1: Why did the sky look different to Sai than to his grandma?

5 Lessons



Chapter 2: Why was it daytime for Sai when it was nighttime for his...

4 Lessons



Chapter 3: Why did daytime change to nighttime while Sai talked on the phone?

6 Lessons



Chapter 4: What will Sai see in the sky when he calls his grandma tomorrow?

4 Lessons



Chapter 5: Why was it nighttime for Sai when he called his grandma during th...

3 Lessons

Spinning Earth: Writing in Chapter 1



Chapter 1: Why did the sky look different to Sai than to his grandma?

5 Lessons

Chapter 1: Why did the sky look different to Sai than to his grandma?

▼ JUMP DOWN TO CHAPTER OVERVIEW

Lesson 1.1:
Pre-Unit Assessment

Lesson 1.2:
After Sunset

Lesson 1.3:
The Pattern of
Daytime and
Nighttime

Lesson 1.4:
The Sky from
Different Places

Lesson 1.5:
Explaining the Sky
in Different Places



Shared Writing

Why did the sky look different to Sai than to his grandma?



First, let's write about what Sai observed.



What did Sai see in the sky in the place where he lives? What time of day was it for Sai?

What did Sai's grandma see in the sky in the place where she lives? What time of day was it for Sai's grandma?

Do you think Sai and his grandma live in the same place on Earth, or in different places on Earth?

Shared Writing

Why did the sky look different to Sai than to his grandma?

We just finished writing our explanation to Sai.

Now, let's **read** the whole **explanation** again.

Our audience: Sai



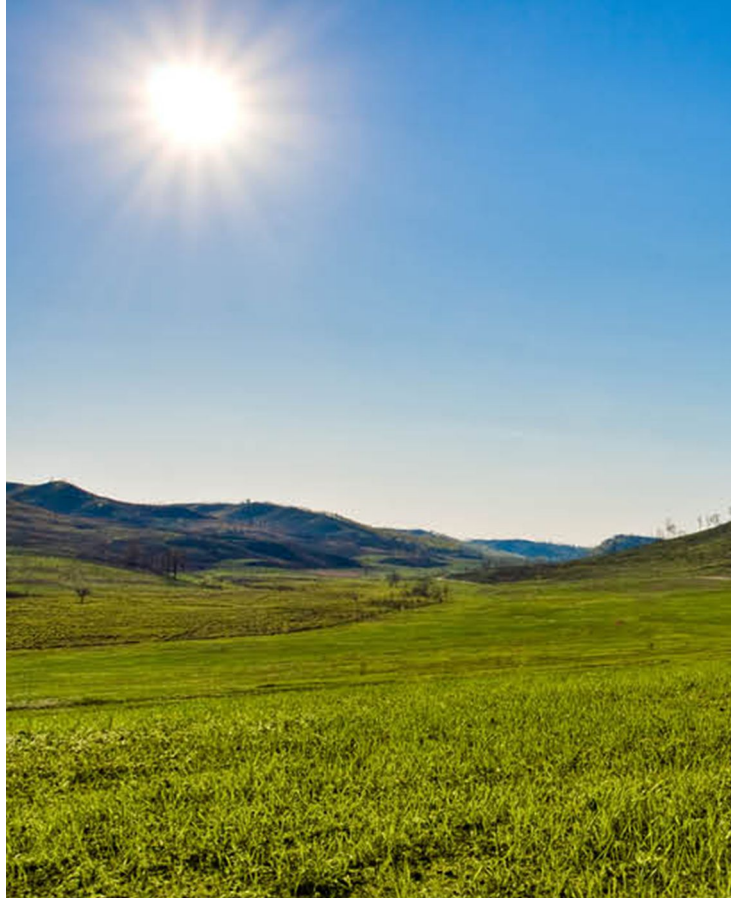
Grade 1 | Spinning Earth

Lesson 1.1: Pre-Unit Assessment

Activity 1

Leading the Pre-Unit Assessment Conversation





Today, we are going to begin investigating what we see in the **sky**.

These are photos of the **sky** above a place.
They were taken at **different times** on one day.



morning



afternoon



night



What do you notice in these pictures?



morning



afternoon



night



Why does the sky look different **at different times?**



morning



afternoon



night



These pictures show the sky in the morning and at night.



How is the sky **different** at these two times?





Why does the sky look different at these two times—in the **morning** and at **night**?



These pictures show the sky in the morning and in the afternoon.



How is the sky **different** at these two times?



Why does the sky look different at these two times—in the **morning** and in the **afternoon**?

These pictures show the sky in the **morning**, the **afternoon**, and the middle of the **night**.



morning



afternoon



night



Imagine that we took another picture of the sky, the next morning.



morning



afternoon



night



What would the sky look like the **next morning**? Why would it look like that?



morning



afternoon



night



Unit Question

Why does the sky look different at different times?

Activity 2

Introducing Sai and His Grandma





This is a picture of a boy named **Sai and his grandma**. Sai lives in a place near us.

Sai needs our help to figure out a problem.



Sai called his grandma
on the phone at the time
he usually calls her—just
before his bedtime.



This picture shows what Sai saw in the sky when he called his grandma.



What do you notice in this picture?



This picture shows what the sky looked like for Sai's grandma when Sai called.



What do you notice in this picture?



Think about what the sky looked like to Sai and to his grandma.



Did the sky look the **same** or **different** to Sai and to his grandma? How did it look the same or different?



Sai wants to know why the sky looks different to him than to his grandma.

In order to help Sai, we are going to work as **sky scientists**.

Scientists are people who study and learn about what happens in the world around them.

Scientists ask a lot of **questions** to learn more about the world. We are going to ask a lot of questions as we help Sai.



Chapter 1 Question

Why did the sky look different to Sai than to his grandma?

Activity 3

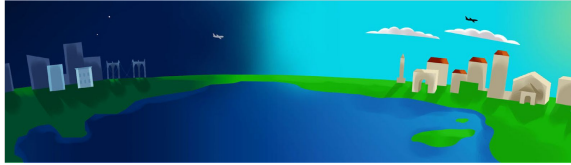
Making Sky Observations



Investigation Question:

What can we see in the sky at different times?

AmplifyScience



Spinning Earth:

Investigating Patterns in the Sky

Investigation Notebook

We will draw and write in **notebooks** when we work as sky scientists.

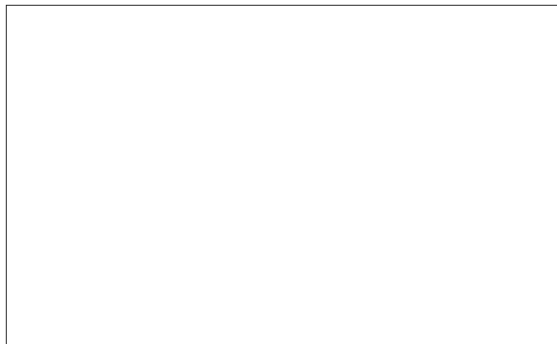
This will help us remember things we figure out about the sky.

Name: _____ Date: _____

Sky Observations 1

Directions:

1. Observe the sky.
2. Draw what you observe in the sky.
3. Label your drawing.



We will go outside and
draw pictures of the **sky**
on this notebook page.

Let's go over the
directions together.

Name: _____ Date: _____

Sky Observations 1

Directions:

1. Observe the sky.
2. Draw what you observe in the sky.
3. Label your drawing.

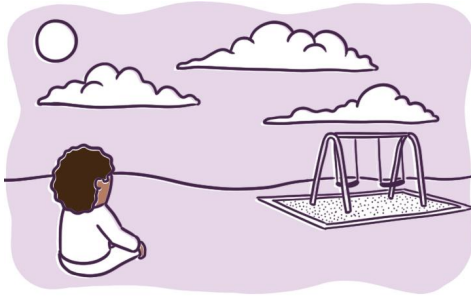
A large rectangular box for drawing observations of the sky.

Scientists **observe** to learn and answer questions. I will show you how we can observe closely and draw to record our observations.

We will go outside to make **observations** of the sky. You may see many things. You can record one thing or more than one thing that you observe.

When observing the sky, it is very important never to look directly at the sun.

Going Outside to Make Sky Observations 1



1.
Go outside and observe the sky. Make sure NOT to look directly at the sun.



2.
Draw what you observe in the box on page 4 of your notebook.



3.
Label your drawing.



Activity 4

Discussing Sky Observations

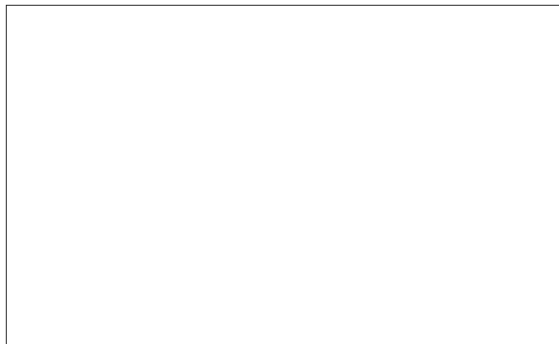


Name: _____ Date: _____

Sky Observations 1

Directions:

1. Observe the sky.
2. Draw what you observe in the sky.
3. Label your drawing.





What did you see when
you **observed** the sky?
How did you **draw** what
you observed?

Investigation Question:

What can we see in the sky at different times?

What Scientists Do

To answer questions, scientists...

We are scientists.

This chart will remind us
of the important things
that **scientists** like us do
when we work.

What Scientists Do

To answer questions, scientists...



When scientists wonder about something in the world around them, they ask a **question**.

What Scientists Do

To answer questions, scientists...



Scientists **observe** the world around them— they look, listen, and feel to find out what the world is like.

Let's add "**observe**" to our chart.

What Scientists Do

To answer questions, scientists...



How did we **observe** the world around us?

End of Lesson



THE LAWRENCE
HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

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Stop & Reflect



Grade 1

What did students learn in lesson 1.1 that will help them in participating in the Shared Writing in lesson 1.5?

Draw connections to student experiences. Why does the sky look different at different times? Students observe photographs.

Students met Sai and his grandma. We find out about the problem we need to solve.

Shared Writing

Why did the sky look different to Sai than to his grandma?

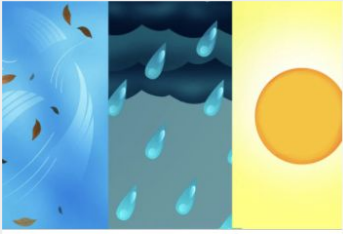


What did Sai see in the sky in the place where he lives? What time of day was it for Sai?

What did Sai's grandma see in the sky in the place where she lives? What time of day was it for Sai's grandma?

Do you think Sai and his grandma live in the same place on Earth, or in different places on Earth?

Work Time Part 1



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

4 Lessons



Chapter 1: Why did the sky look different to Sai than to his grandma?

5 Lessons

1. Continue scrolling through lesson 1.1
 - Kindergarten: Start at Activity 3
 - First Grade: Start at Activity 3
2. On a piece of paper, write down the parts of the lesson (activities) that you think will support your students in participating in the Shared Write at the end of the chapter.
3. Be ready to share your answers.



What did students learn in lesson 1.1 that will help them in participating in the Shared Writing in lesson 1.4?

Shared Listening: What ideas do you have about weather?

Read the book- *What is the Weather Like Today?*

- Predict
- Weather words
- Describing weather

Think and Walk Activity: What type of weather does this picture show?

- Talk to a partner and talk about why you chose that illustration.

Weather type Movement Routines: Say the words as you move.

We have **words** we can use to talk about different types of weather. **Chart: What We Know About Weather**

This all led to the first Key concept.

Kindergarten

Lesson 1.4 Shared Write

What is the weather like on Carver's Playground?

What is the weather like on Woodlands playground?

What is the same or different about the weather on the playgrounds?

What did students learn in lesson 1.1 that will help them in participating in the Shared Writing in lesson 1.5?

Draw connections to student experiences. Why does the sky look different at different times? Students observe photographs.

Students met Sai and his grandma. We find out about the problem we need to solve.

Make sky observations. Students write about their observations.

Students share their observations with a partner, and then share out to the class.

The teacher creates a chart called “What Scientists Do”. Scientists record their observations so they can remember them later.

Grade 1

Shared Writing

Why did the sky look different to Sai than to his grandma?

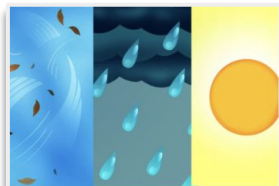


What did Sai see in the sky in the place where he lives? What time of day was it for Sai?

What did Sai's grandma see in the sky in the place where she lives? What time of day was it for Sai's grandma?

Do you think Sai and his grandma live in the same place on Earth, or in different places on Earth?

Work Time Part 2



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

4 Lessons

Lesson 1.4 Shared Write

What is the weather like on Carver's Playground?

What is the weather like on Woodlands playground?

What is the same or different about the weather on the playgrounds?

Kindergarten:

1. Look at slide decks: **1.2, 1.3, and 1.4**
2. Jamboard: Write down activities that support the writing for Chapter 1.



Chapter 1: Why did the sky look different to Sai than to his grandma?

5 Lessons

Lesson 1.5 Shared Write

Why did the sky look different to Sai than to his grandma?

What did Sai see in the sky in the place where he lives?
What time of day was it for Sai?

What did Sai's grandma see in the sky in the place where she lives? What time of day was it for Sai's grandma?

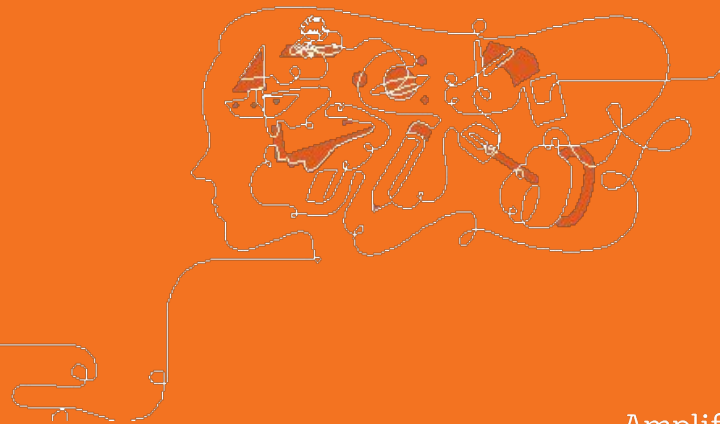
Do you think Sai and his grandma live in the same place on Earth, or in different places on Earth?

First Grade:

1. Look at slide decks: **1.2, 1.3, 1.4, & 1.5**
2. Jamboard: Write down the activities that support the writing for Chapter 1.

Kindergarten

What did we find out?



Reflecting on preparing for the Chapter 1 Shared Writing Opportunity

Lesson 1.1

Building Background and vocabulary is preparing for the chapter writing opportunity.

predict





Lesson 1.1: What is the Weather Like Today?


Activity 4


What We Know About Weather


Types of Weather


sunny

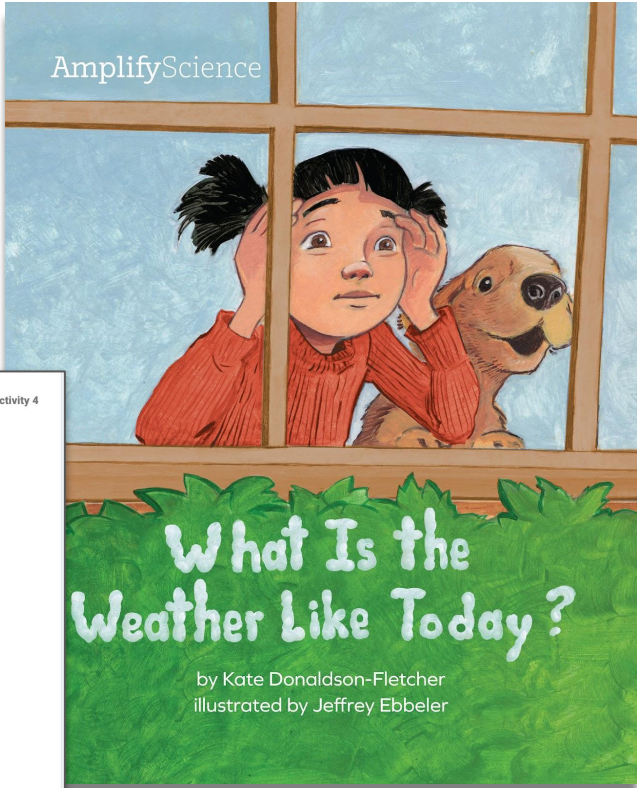

cloudy


rainy


windy

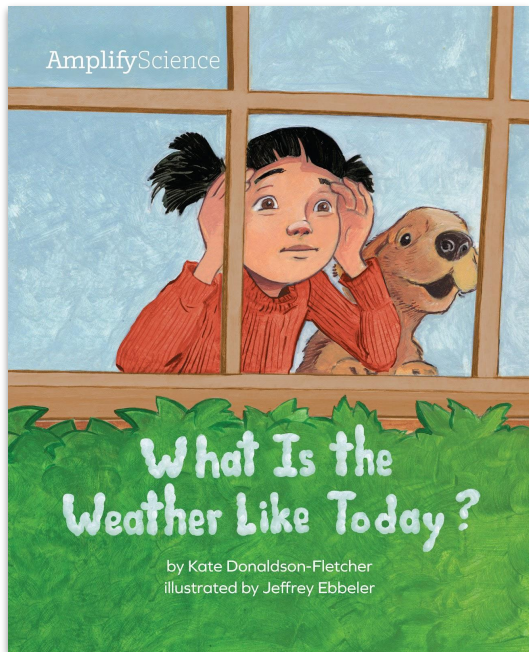

snowy

Now our chart shows what we have learned about **different types of weather.**



Preparing for the Chapter 1 Question




Lesson 1.2



temperature

Lesson 1.2: Introducing Temperature Activity 3

What Is the Temperature?



1. Make a prediction.
2. Measure the temperature.
3. Record the temperature.

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Lesson 1.2: Introducing Temperature Activity 4

What We Know About Weather

Types of Weather

sunny cloudy rainy windy snowy

Temperature	
very hot	hot
warm	cool
cold	very cold

Now we know that **temperature** is another part of describing weather.

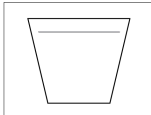
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Name: _____ Date: _____


What Is the Temperature?

Directions:

1. Make a prediction.
2. Use the thermometer to measure the temperature of each cup.
3. Next to each cup, color in the temperature that you measured.



very hot
hot
warm
cool
cold
very cold



very hot
hot
warm
cool
cold
very cold

Sunlight and Weather—Lesson 1.2
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3

Preparing for the Chapter 1 Question

Lesson 1.3

Lesson 1.3: Pre-Unit Assessment

Activity 1

Weather Observations

Step 1

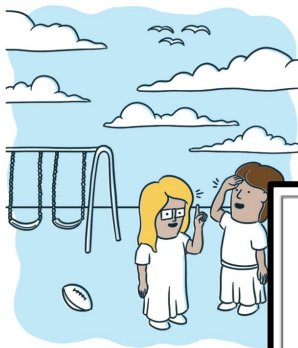
Go outside.

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.



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What Scientists Do

To answer questions, scientists...

observe



record



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.



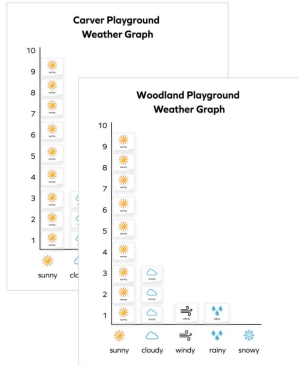
very hot
hot
warm
cool
cold
very cold

Preparing for the Chapter 1 Question

Lesson 1.4

Lesson 1.4: Weather and Playgrounds

Activity 2



The data in the graphs is evidence that different weather is **not** what is causing the differences in temperature.

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Lesson 1.4: Weather and Playgrounds

Activity 2

What Scientists Do
To answer questions, scientists...

observe



record



compare

A	B

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Scientists organize their data to make sense of it.

We organized the playground weather data on graphs. That helped us **compare** the data.

Carver Playground



Woodland Playground



Chapter 1 Writing

Lesson 1.4: Weather and Playgrounds

Activity 3

Shared Writing

What is the weather like on Carver's playground?



What is the weather like on Woodland's playground?

What is the same or different about the weather on the playgrounds?

Let's talk about our ideas together.
Then, I'll write down our ideas.

Lesson 1.4: Weather and Playgrounds

Activity 3

What Scientists Do
To answer questions, scientists...

observe



record



compare

A	B

communicate

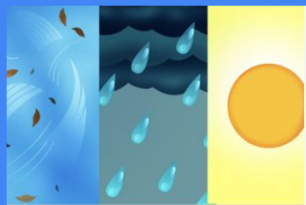


Scientists **communicate**, or share, what they learn with others.

Today we **wrote to communicate** what the weather is like on the playgrounds.

Sample Shared Write: End of chapter explanation

The weather at Carver Elementary and Woodland Elementary is similar. Both schools have many sunny days and some cloudy, windy, or rainy days. The type of weather at each school must not be causing the difference in their playgrounds' temperatures.



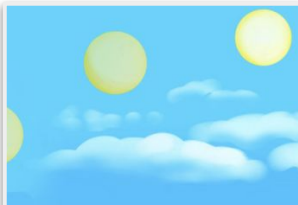
Chapter 1: What is the weather like on the playgrounds?

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

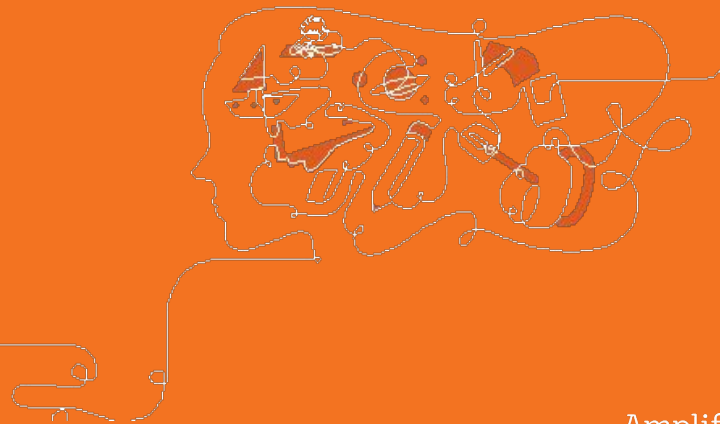


Chapter 5: Why does only Woodland Elementary School's playground flood?

6 Lessons

First Grade

What did we find out?



Spinning Earth: Writing Opportunity, 1.1

Lesson 1.1: Pre-Unit Assessment

Activity 1

These pictures show the sky in the **morning**, the **afternoon**, and the middle of the **night**.



morning



afternoon



night

Lesson 1.1: Pre-Unit Assessment

Activity 2



This picture shows what Sai saw in the sky when he called his grandma.



What do you notice in this picture?

What Scientists Do
To answer questions, scientists...

observe



Lesson 1.1: Pre-Unit Assessment

Activity 3

Going Outside to Make Sky Observations 1



1.
Go outside and observe the sky. Make sure NOT to look directly at the sun.



2.
Draw what you observe in the box on page 4 of your notebook.



3.
Label your drawing.

Name: _____ Date: _____

Sky Observations 1

Directions:


1. Observe the sky.
2. Draw what you observe in the sky.
3. Label your drawing.

Spinning Earth: Writing Opportunity, 1.2


Lesson 1.2: After Sunset

Activity 2


Going Outside to Make Sky Observations 2



1.
Observe the sky.
Make sure NOT to look directly at the sun.



2.
Draw what you observe in the box on page 5 of your notebook.



3.
Label your drawing.

Name: _____ Date: _____

Sky Observations 2

Directions:

1. Observe the sky.
2. Draw what you observe in the sky.
3. Label your drawing.

Spinning Earth—Lesson 1.2

5


Sky Observations




What Scientists Do

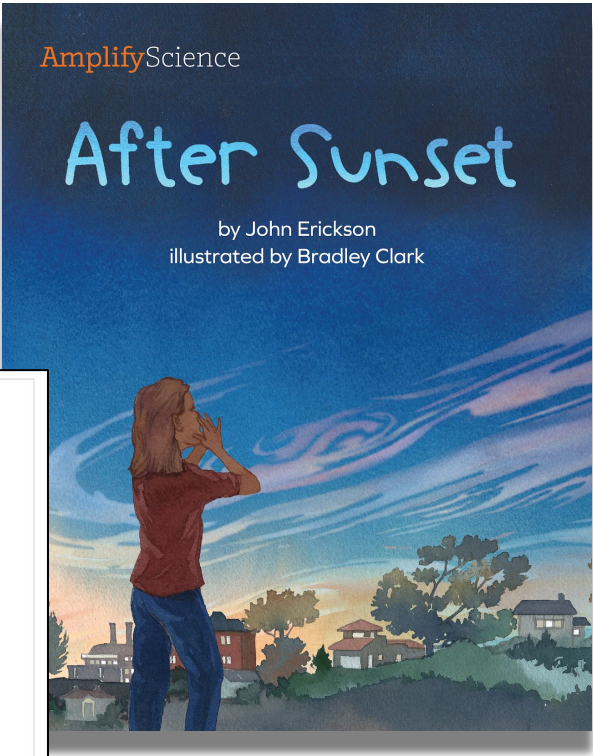
To answer questions, scientists...

observe



read






Building Background Knowledge: Lesson 1.3

Lesson 1.3: The Pattern of Daytime and Nighttime

Activity 1

Daytime and Nighttime Data



What can we see in the sky only during **daytime**?

What can we see in the sky only during **nighttime**?


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Lesson 1.3: The Pattern of Daytime and Nighttime


Activity 4

What We Know About Daytime and Nighttime

daytime



nighttime



To show what we know about nighttime, we can **add the stars** to our chart.

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Lesson 1.3: The Pattern of Daytime and Nighttime

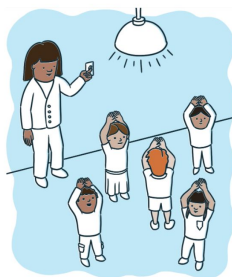
Activity 2

Sky Investigations Role-Play

Classroom Lights
We will use the **classroom lights** to represent **daytime** and **nighttime**.

Daytime
When the lights are on, use your bodies to show what you see in the sky only during the **daytime**.

Nighttime
When the lights are off, use your bodies to show what you see in the sky only during the **nighttime**.



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Lesson 1.3: The Pattern of Daytime and Nighttime

Activity 4

Key Concept

We can see the sun in the sky during the
daytime and the stars in the sky during
the nighttime.

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Spinning Earth: Writing Opportunity, 1.4

Lesson 1.4: The Sky from Different Places

Activity 1

Name _____ Date _____

Observing the Sky from Different Places

Directions:

1. Observe the sky from each place.
2. In the boxes on this page and the next page, draw what you observe in the sky from each place.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Turn to pages 6–7 in your notebooks.

We will use webcams to **observe** the **sky** in six different places. There are six boxes, so you can **draw** what you see in each place.

Lesson 1.4: The Sky from Different Places

Name _____ Date _____

Observing the Sky from Different Places

Directions:

1. Observe the sky from each place.
2. In the boxes on this page and the next page, draw what you observe in the sky from each place.

1. _____

2. _____


3. _____

4. _____

5. _____

6. _____

I will show you what the sky looks like right now in five other places.

 For each place, **observe** what the sky looks like. Then **draw** what you observe in the box for that place.

Place	Daytime or Nighttime?
1.	daytime
2.	
3.	
4.	
5.	
6.	


Lesson 1.4: The Sky from Different Places

Activity 3

In _____, I observed _____.

so it was _____.

Let's complete the sentence to describe what we saw in the place near our school.



dark sky
blue
clouds
stars
moon

bright sky
sun
clouds
stars
lights

daytime
nighttime

Lesson 1.4: The Sky from Different Places

Activity 4

What Scientists Do
To answer questions, scientists...

observe
read
record
organize data

One of the most important things that scientists do is to organize data to answer their questions.

Let's add **"organize data"** to our chart.

Shared Writing

Why did the sky look different to Sai than to his grandma?



First, let's write about what Sai observed.



What did Sai see in the sky in the place where he lives? What time of day was it for Sai?

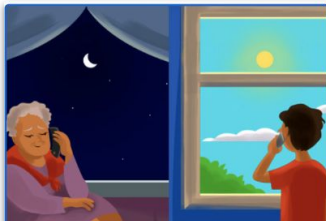
Sample Shared Write: End of chapter explanation

Sai and his grandma saw different things at the same time because they live in different places. When it is daytime for Sai, it is nighttime for his grandma. When Sai sees the sun, Sai's grandma sees the stars.



Chapter 1: Why did the sky look different to Sai than to his grandma?

5 Lessons



Chapter 2: Why was it daytime for Sai when it was nighttime for his...

4 Lessons



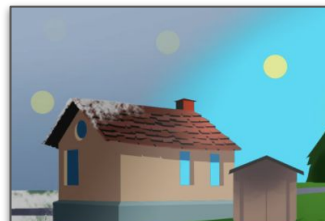
Chapter 3: Why did daytime change to nighttime while Sai talked on the phone?

6 Lessons



Chapter 4: What will Sai see in the sky when he calls his grandma tomorrow?

4 Lessons



Chapter 5: Why was it nighttime for Sai when he called his grandma during th...

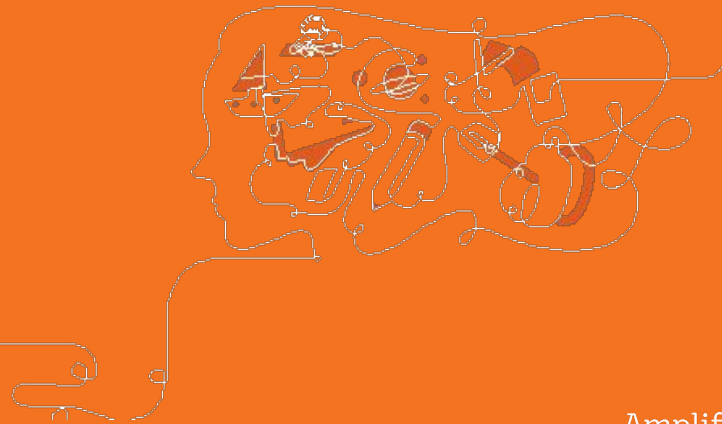
3 Lessons



Plan for the day

- Introduction and framing
- **Writing in Amplify Science**
 - Writing as part of a multimodal experience
 - End of Chapter Writing
 - **End of Unit**
 - **Student Explanations**
- Supporting students with writing
- Closing

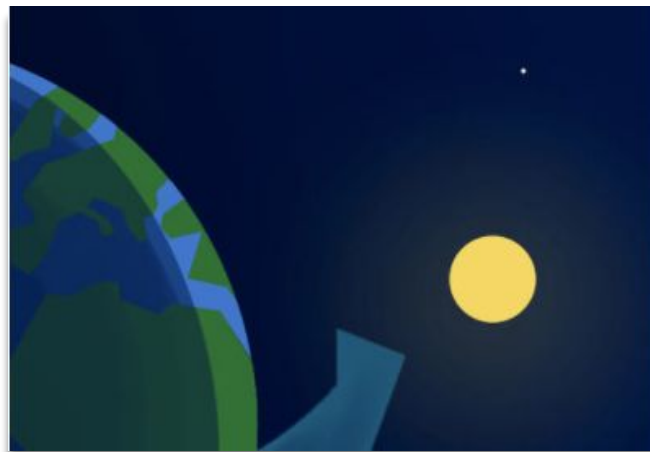
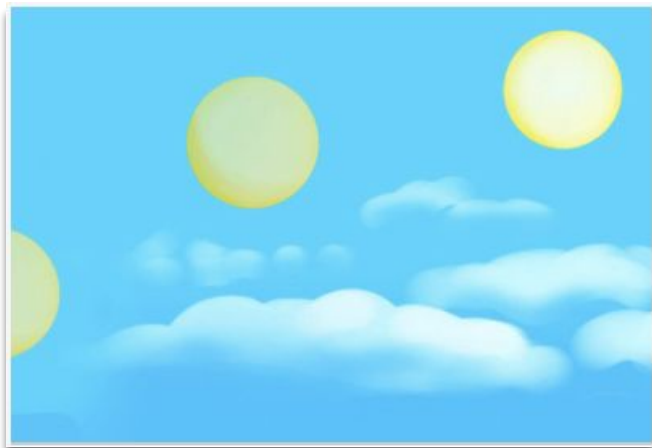
End-of-Unit Assessment: Student Explanations



Preparing for the End of Unit Assessment

Trainer Walkthrough:

Grade K	Sunlight and Weather	Lesson 5.5	Activity 4
Grade 1	Spinning Earth	Lesson 5.2	Activity 4



End of Unit Assessment

Work Time: Part 1

1. Open the Lesson Brief.
2. Open and read the Assessment Guide.
3. Open and read the Assessment Questions.

Grade K	Sunlight & Weather	Lesson 5.6
Grade 1	Spinning Earth	Lesson 5.3

Work Time: Part 2

- Open the slide deck and browse.

Grade K	Sunlight & Weather	Lesson 5.6
Grade 1	Spinning Earth	Lesson 5.3

Rubrics for Assessing Students' Final Written Arguments

Three-dimensional

- Rubric 1: Assessing Students' Understanding of **science concepts (DCIs)**] summative
- Rubric 2: Assessing Students' Understanding of a **Crosscutting Concept**] formative (K-1)
summative (2-5)
- Rubric 3: Assessing Students' Performance of the a **Practice**] formative

What will the rest of the class be doing while you are giving this one-on-one assessment?

Screen 5



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

6 Lessons



Chapter 5: Why was it nighttime for Sai when he called his grandma during th...

3 Lessons



Plan for the day

- Introduction and framing
- Writing in Amplify Science
 - Writing as part of a multimodal experience
 - Writing a culminating explanation or argument
- **Supporting students with writing**
- Closing

Key takeaway

In addition to the embedded supports for student writing, there are resources throughout the curriculum you can use to provide additional support.



Embedded writing supports

- Smaller pieces of writing build to larger pieces of writing
- Informal talk opportunities: partners and small groups
- Explanation Language Frames
- Classroom wall and other environmental print
- Word banks
- Discourse routines
- Multimodal instruction
- Gradual release of responsibility

Additional supports

- Teacher support notes
- Possible Responses
- Differentiation notes
- Embedded Formative Assessments



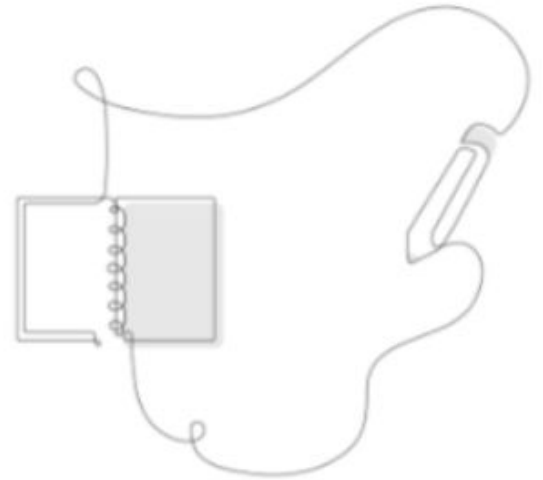
Differentiation Supports



Specific Differentiation Strategies for Students Who Need More Challenge

Independent writing. If you have a few students who are more fluent writers, you can extend the Shared Writing by having these students use the Interpretation Language Frames to write their own sentences. Students can record their sentences in their notebooks or on a piece of paper while you record sentences on chart paper with the rest of the class.

What specific strategies
are embedded into the
curriculum to support
students to write like
scientists?





Plan for the day

- Introduction and framing
- Writing in Amplify Science
 - Writing as part of a multimodal experience
 - Writing a culminating explanation or argument
- Supporting students with writing
- Closing

Overarching goals

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

- ☑ Identify specific characteristics that support K/1 students in science writing.
- ☑ Be ready to teach specific writing activities in an Amplify Science unit.

Closing reflection

Based on our work today, share:

Head: something you'll keep in mind

Heart: something you're feeling

Feet: something you're planning to do

Additional resources and ongoing support

Amplify Help

Find lots of advice and answers from the Amplify team.

Customer Care

For questions about Amplify Science, available weekdays 7AM-10PM EST and weekends 10AM-6PM EST.



help@amplify.com



800-823-1969



Amplify Chat



Please provide feedback!

Presenter name:

Jolene Hori

Workshop title:

K/1 Writing in Science

Modality:

Remote