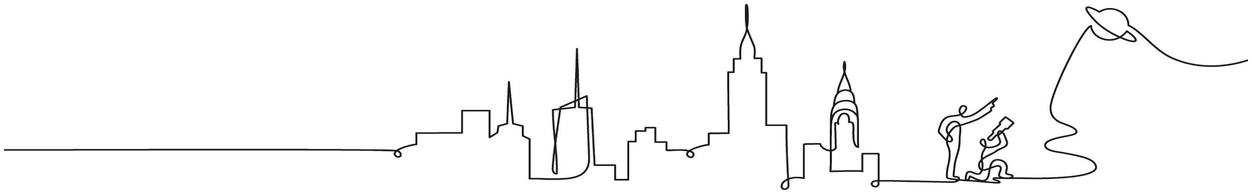
Welcome to Amplify Science!

Follow the directions below as we wait to begin.

1. Please log in to your Amplify Account.

2. Sign in using link dropped in chat.

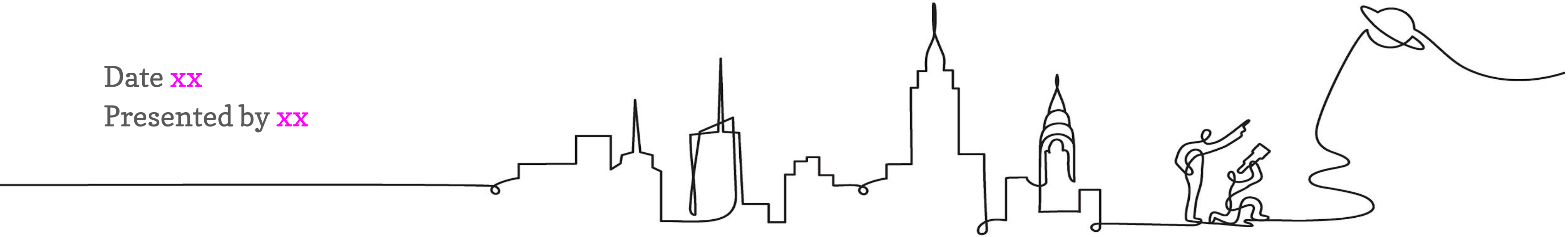
3. In the chat, share your school, your current instructional context (remote/hybrid/in-person), & how long you've been teaching Amplify Science.



Amplify Science
New York City

Accessing Complex Texts
Grade 7

Date xx
Presented by xx



Anticipatory Activity

On the Jamboard, please post your responses to:

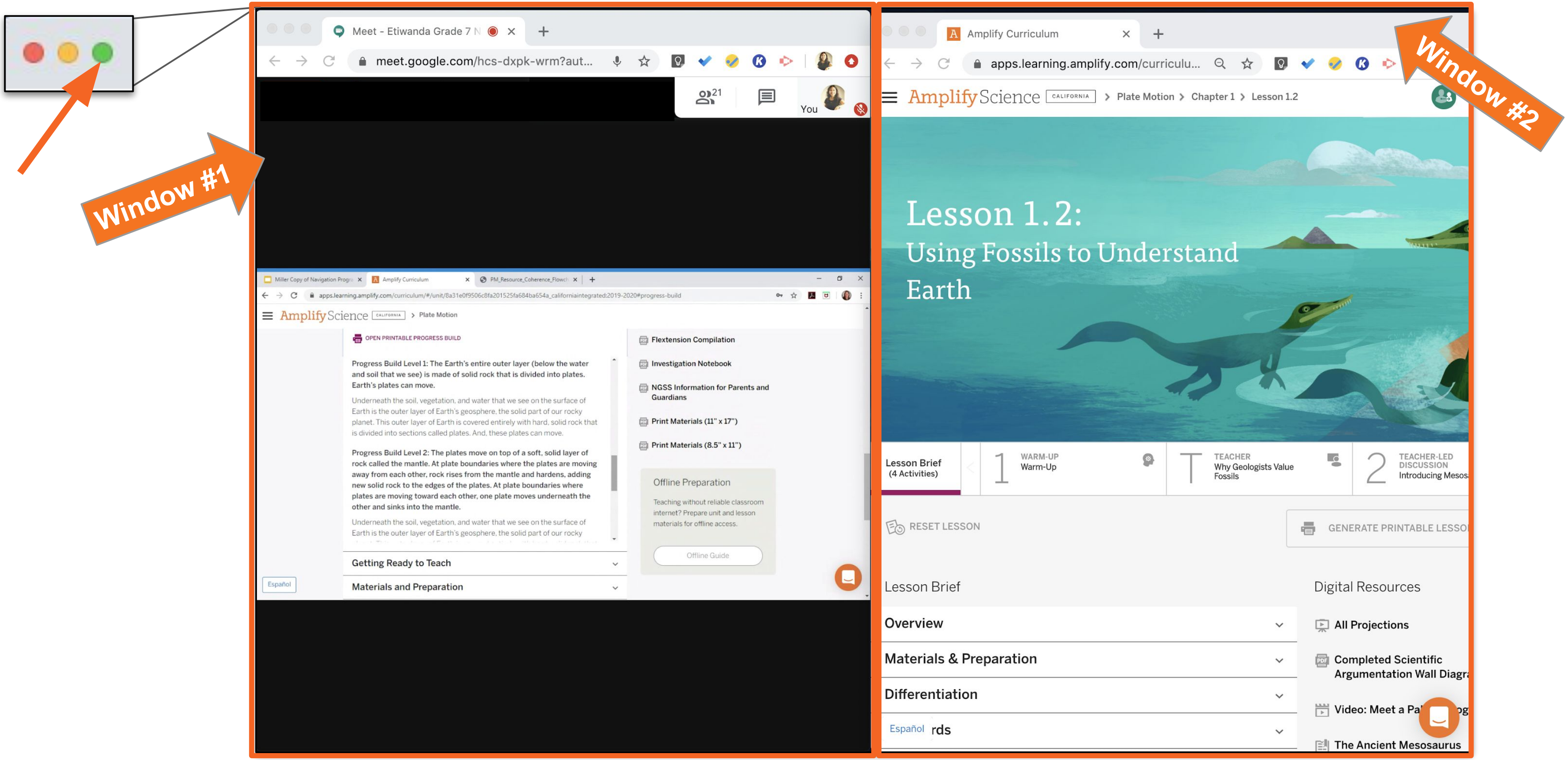
- **Question 1:** How do scientists use text ?
- **Question 2:** How do students use text in your science classroom?

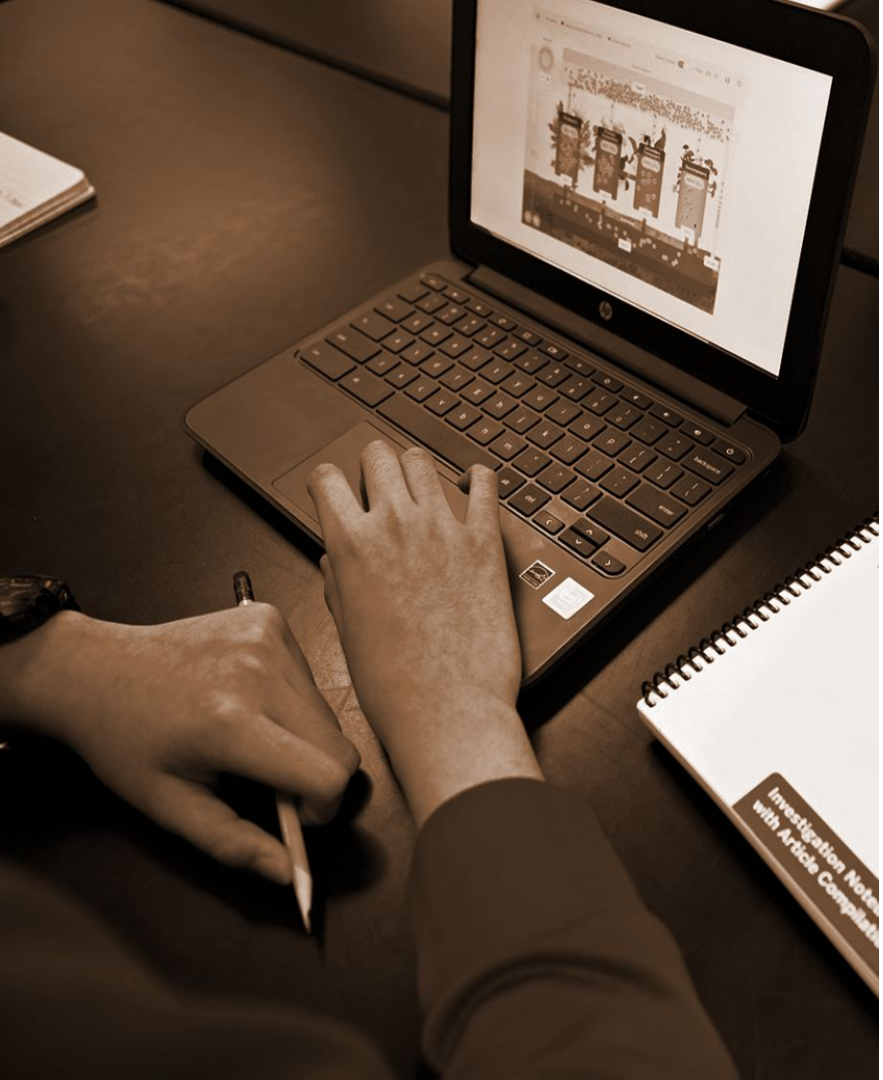
Overarching goals

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

- Identify the different roles that text can play in figuring out science concepts.
- Describe how the Amplify Science approach to reading supports students in making sense of science ideas.
- Be ready to teach specific reading strategies for diverse learners.

Use two windows for today's webinar



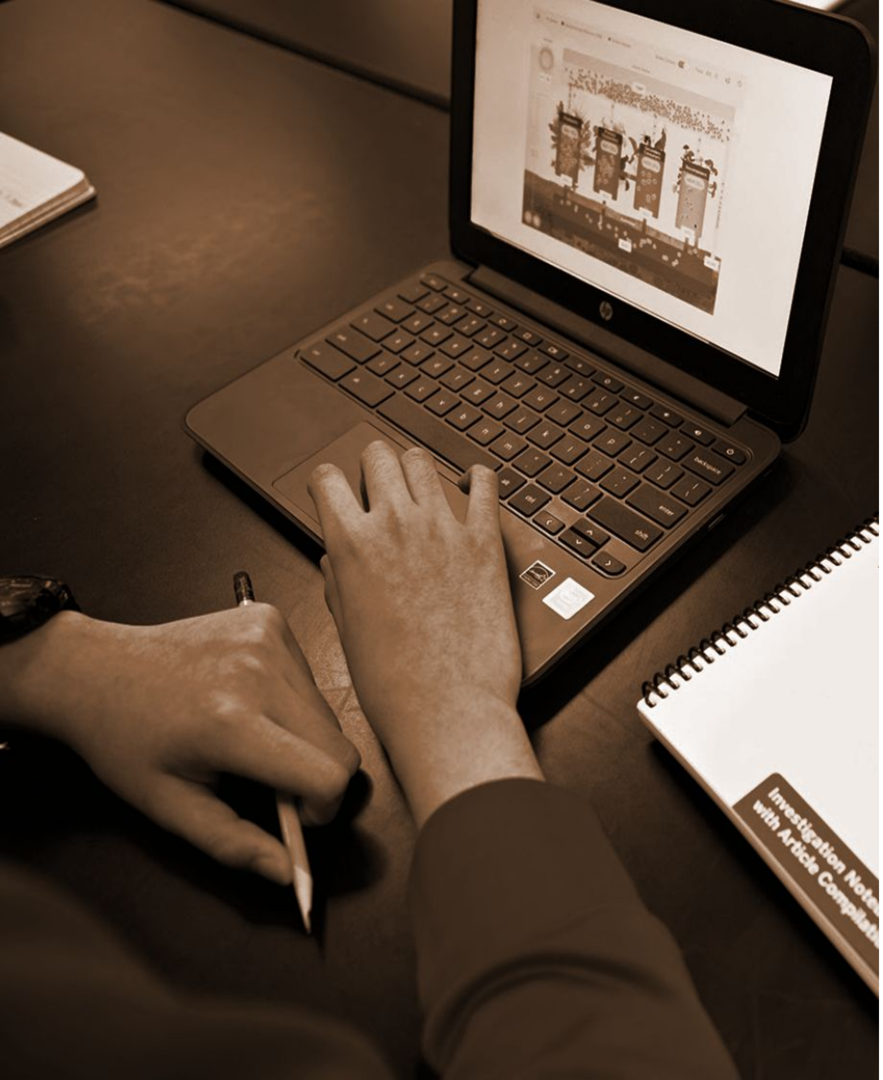


Plan for the day

- Introduction and overview of approach
- Embedded supports in an instructional sequence
- Differentiation for reading
- Closing

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.



Plan for the day

- Introduction and overview of approach
- Embedded supports in an instructional sequence
- Differentiation for reading
- Closing

What is text complexity?

Pg. 1

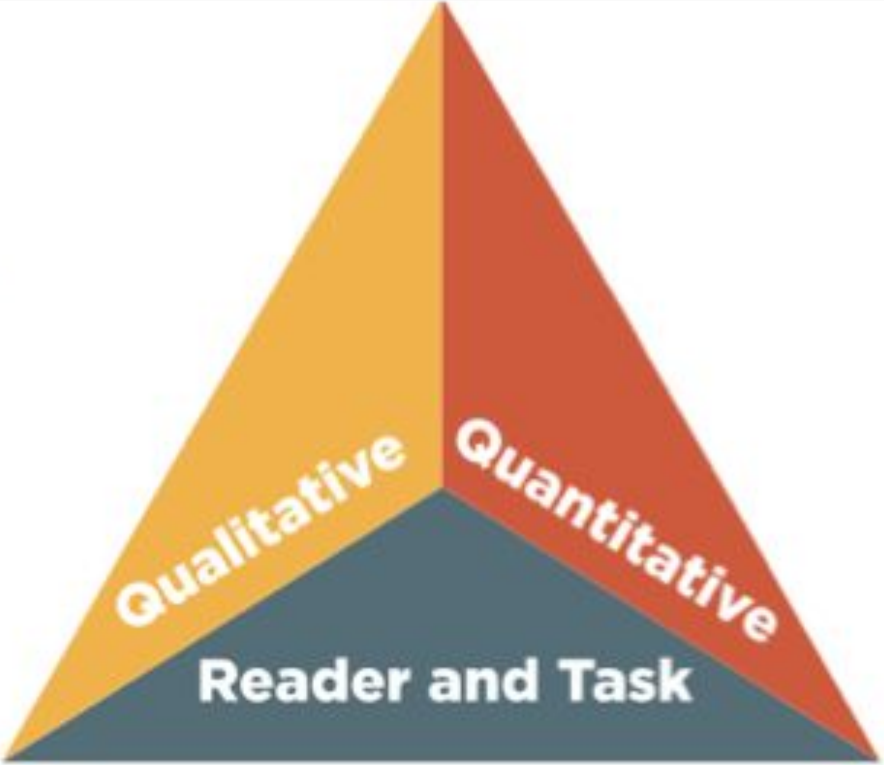


Figure 1: The Standards' Model of Text Complexity

Qualitative Measures

- Knowledge demands
- Text structure (including visual representations)

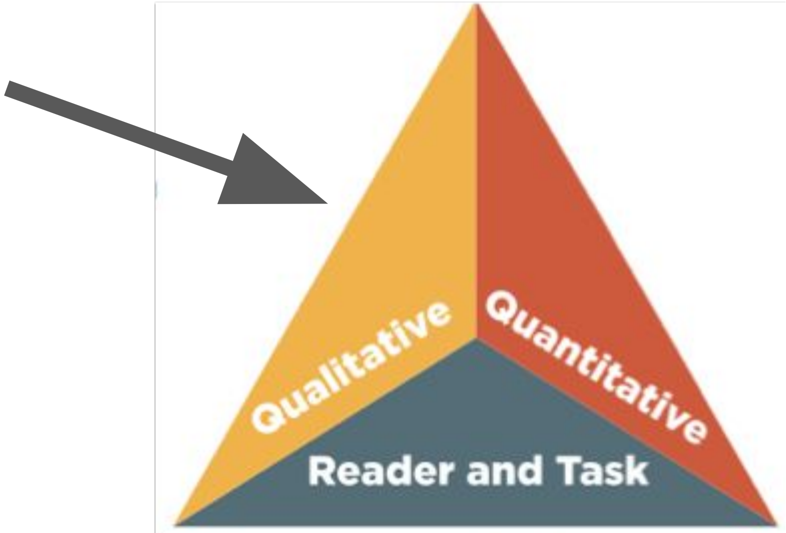


Figure 1: The Standards' Model of Text Complexity

Amplify.

Qualitative Measures

Knowledge demands

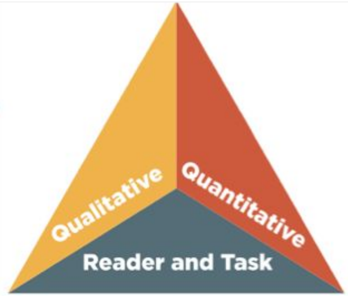


Figure 1: The Standards' Model of Text Complexity

Lipase-Catalyzed Production of Biodiesel[1]

Lloyd A. Nelson, Thomas A. Foglia*, and William N. Marmer

USDA, ARS, ERRC, Wyndmoor, Pennsylvania 19038

ABSTRACT: Lipases were screened for their ability to transesterify triglycerides with short-chain alcohols to alkyl esters. The lipase from *Mucor miehei* was most efficient for converting triglycerides to their alkyl esters with primary alcohols, whereas the lipase from *Candida antarctica* was most efficient for transesterifying triglycerides with secondary alcohols to give branched alkyl esters. Conditions were established for converting tallow to short-chain alkyl esters at more than 90% conversion. These same conditions also proved effective for transesterifying vegetable oils and high fatty acid-containing feedstocks to their respective alkyl ester derivatives.
JAOCS 73, 1191–1195 (1996).

KEY WORDS: Alcoholysis, alkyl esters, biodiesel, grease, lipase, rapeseed, soy oil, tallow.

There have been a considerable number of studies that report transesterification and interesterification reactions by using lipases with and without organic solvents (1–6). Recently, research has centered on the use of lipases to transesterify higher-molecular weight fatty acids to alkyl esters. Lipase-catalyzed alcoholyses of sunflower oil (7), rapeseed oil (8), soybean oil, and beef tallow (9) have been reported. The alcoholysis reactions generally involve primary alcohols with a few scattered reports on transesterifications with secondary alcohol-ture properties. Another way of improving cold-temperature properties of tallow esters would be to substitute methanol with branched higher-molecular weight alcohols.

Though efficient in terms of reaction yield and time, the chemical approach to synthesizing alkyl esters (18–20) from triglycerides has drawbacks, such as difficulties in the recovery of glycerol, the need for removal of salt residue, and the energy-intensive nature of the process. On the other hand, biocatalysts allow for synthesis of specific alkyl esters, easy recovery of glycerol, and transesterification of glycerides with high free fatty acid (FFA) content. This technology could be extended to transesterification of greases, which are even less expensive than soybean oil and tallow. This process can further be used to synthesize other value-added products, including biodegradable lubricants and additives for fuel and lubricants. Lipase can also be used to introduce other functionalities into alkyl esters that may further improve the cold-temperature properties of the resulting biodiesel. In this paper, we report the lipase-catalyzed synthesis of normal and branched-chain alkyl esters of agriculturally derived triglycerides (TG): vegetable oils, tallow, and restaurant grease.

MATERIALS AND METHODS

Materials. Tallow was obtained from Chemol Corp. (Greens-

Qualitative Measures

Text structure (including visual representations)

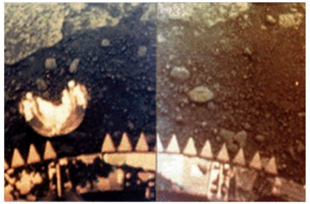
Investigating Landforms on Venus

Imagine traveling in a spaceship toward the surface of the planet Venus. At first, everything is hidden by thick clouds, but as you get closer, you can see the rocky surface below. As you fly over the surface, you notice strange landforms scattered around. They are raised domes with cracks reaching outward in all directions. These are called novae (NO-vay).

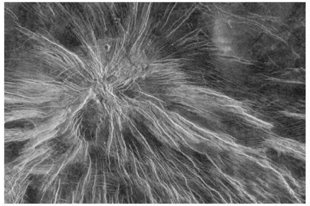
Why do we see novae on Venus but not on Earth? Planetary geologist Taras Gerya (TAR-as GARE-ya) wondered whether two important differences between the two planets might help answer that question. First, Venus's atmosphere is much thicker than Earth's. Its thick atmosphere traps heat from the sun, making Venus much hotter than Earth. The average surface temperature of Earth is a comfortable 14°C (57°F), while the average surface temperature of Venus is a scorching 462°C (864°F)! Second, Gerya thought that possible differences between the geospheres of Earth and Venus might affect how novae are formed. He didn't know for sure, but he thought that the top rock layer on Venus might ... the top layer of Earth's crust. ... might allow melted rock called ... e toward the surface more easily, ... face upward to form the novae.

... o test his ideas about how novae ... But how? Venus is millions of ... Earth, and the novae there ... llions of years ago. To test his ... ade a computer model of Venus.

... o scientists like Gerya get evidence about things that are difficult or



This photo, taken by a spacecraft called *Venera*, shows the rocky surface of Venus. The triangles in the photo are part of the spacecraft.



Novae are dome-shaped landforms on Venus. They are easy to see from above because they have cracks reaching out from their centers in all directions. The word novae is the plur... the word *nova*.

Geologist Taras Gerya built a comput... to test whether the high temperature... surface and the planet's thin crust ma... possible for novae to form there.

Pictures or diagrams that correspond with the text

Sections for different information. Does not need to be read from start to finish.

Paragraphs with informational text

Amplify.

Quantitative Measures

- Sentence length
- Vocabulary load

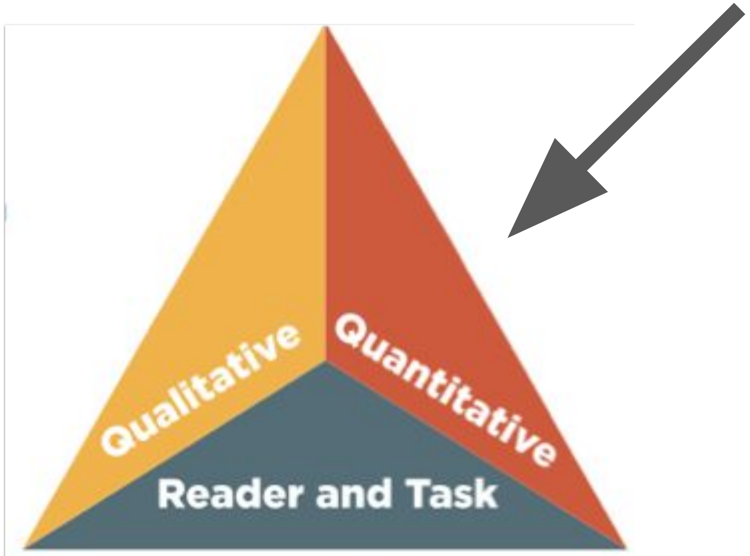


Figure 1: The Standards' Model of Text Complexity

Amplify.

Quantitative Measures

- Sentence length
- Vocabulary load

Pg. 3

Figure 1: The Standards' Model of Text Complexity

A warming climate is resulting in a dramatic loss of habitat for many arctic organisms, but possibly none are affected quite as much as the polar bear. The shrinking ice in many regions of the Arctic Sea causes a contraction in the productive hunting territory for these carnivores, who subsist mainly on prey such as seals and fish that are found found here.

It's easy to see how a warming climate trend would cause polar bears to lose their habitat. Warmer temperatures cause more ice to melt. Ice is an essential part of the polar bear habitat: the bears walk out onto ice that covers the Arctic Ocean in winter in order to reach the seals that they kill and eat. Less ice means less habitat for polar bears.

A warming climate is resulting in a dramatic loss of habitat for many arctic organisms, but possibly none are affected quite as much as the polar bear. The shrinking ice in many regions of the Arctic Sea causes a contraction in the productive hunting territory for these carnivores, who subsist mainly on prey such as seals and fish that are found found here.

It's easy to see how a warming climate trend would cause polar bears to lose their habitat. Warmer temperatures cause more ice to melt. Ice is an essential part of the polar bear habitat: the bears walk out onto ice that covers the Arctic Ocean in winter in order to reach the seals that they kill and eat. Less ice means less habitat for polar bears.

Sentence lengths: 27, 36

Hard words and phrases: 11

A warming climate is resulting in a dramatic loss of habitat for many arctic organisms, but possibly none are affected quite as much as the polar bear. The shrinking ice in many regions of the Arctic Sea causes a contraction in the productive hunting territory for these carnivores, who subsist mainly on prey such as seals and fish that are found found here.

Sentence lengths: 17, 7, 34, and 8

Hard words and phrases: 5

It's easy to see how a warming climate trend would cause polar bears to lose their habitat. Warmer temperatures cause more ice to melt. Ice is an essential part of the polar bear habitat: the bears walk out onto ice that covers the Arctic Ocean in winter in order to reach the seals that they kill and eat. Less ice means less habitat for polar bears.

Questions?

Key Takeaway

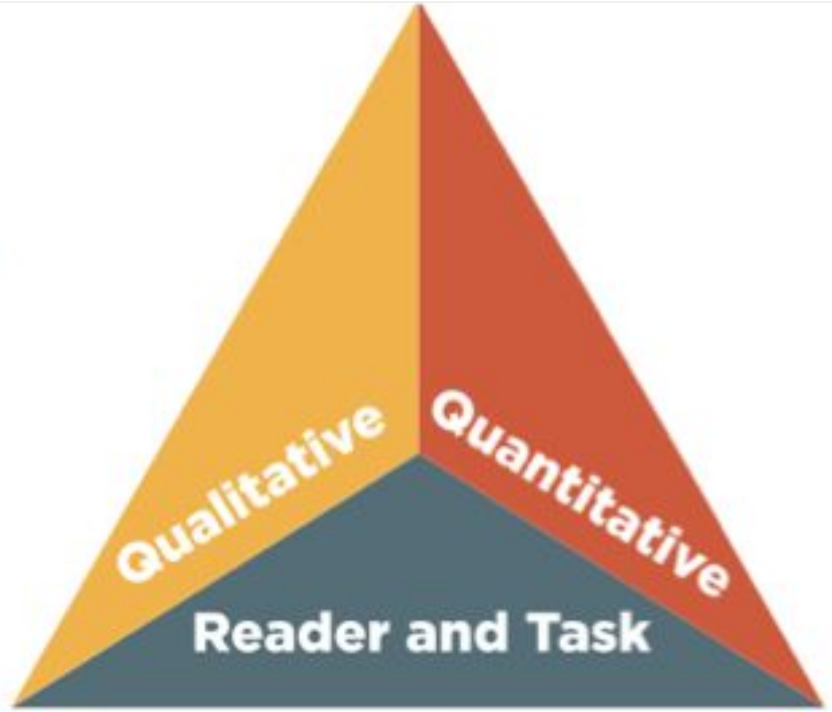
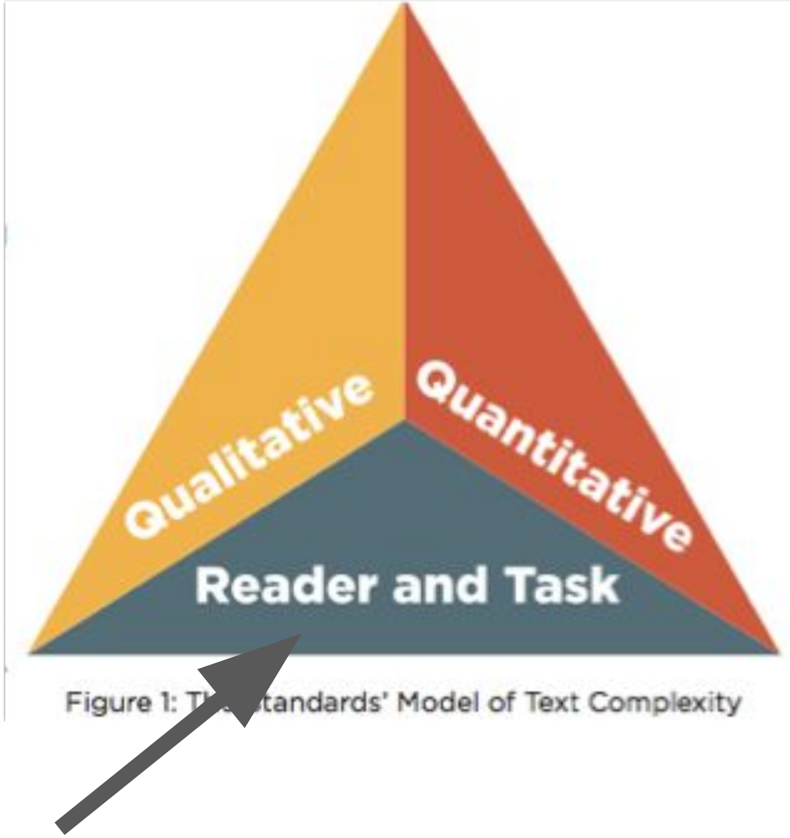


Figure 1: The Standards' Model of Text Complexity

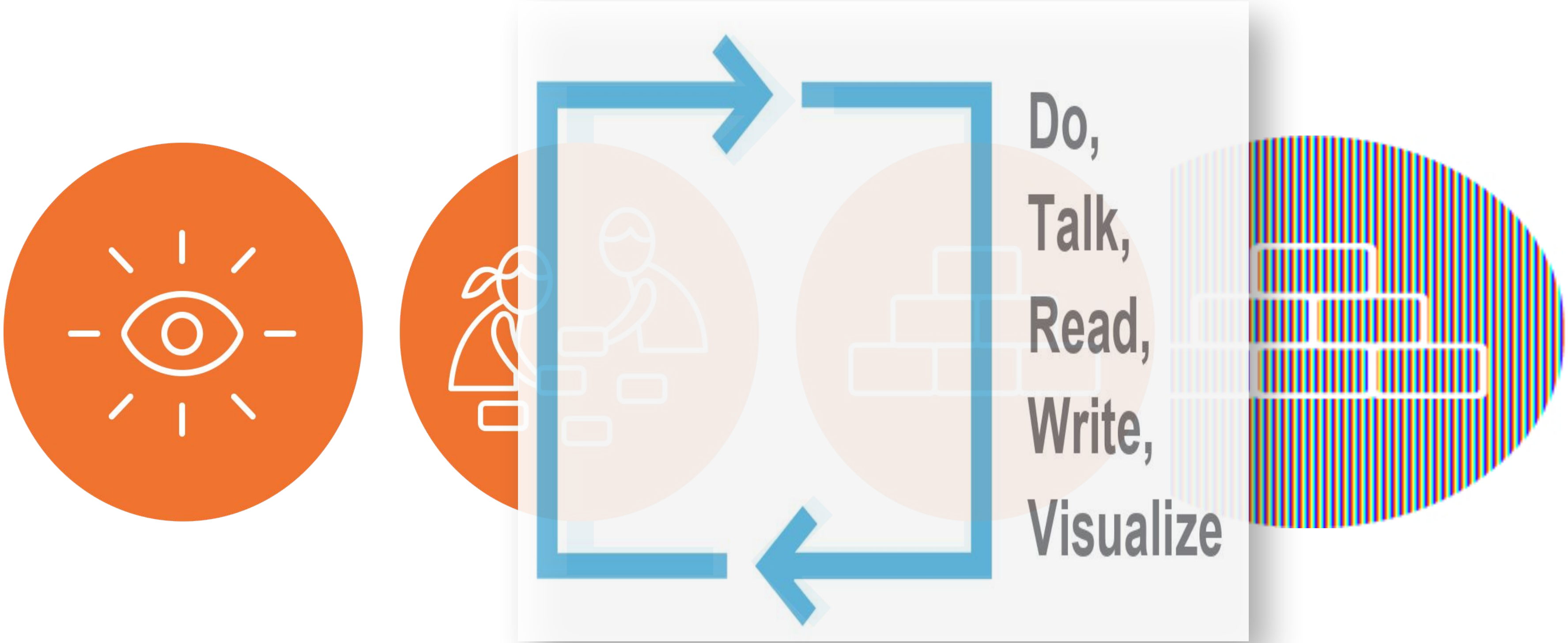
Amplify.

Reader and Task Measures

- Background, experience
- Purpose, assignment
- Motivation



Amplify.



Introduce a **phenomenon** and a related problem

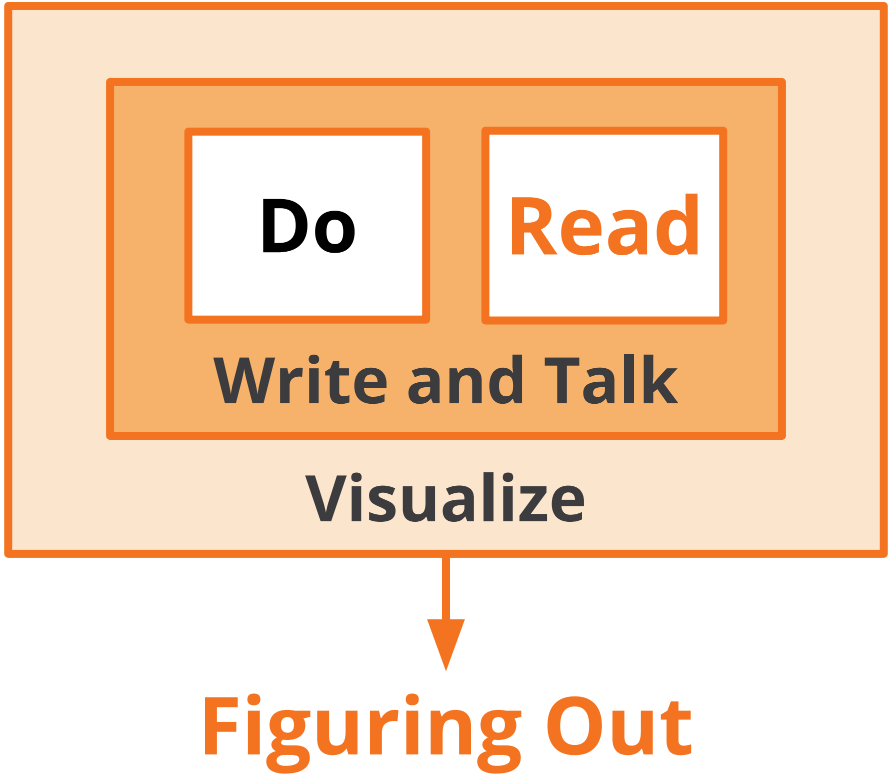
Collect **evidence** from multiple sources

Build increasingly complex **explanations**

Apply knowledge to a different context

Amplify.

Multimodal Instruction



Amplify.

Reading across Amplify Science units

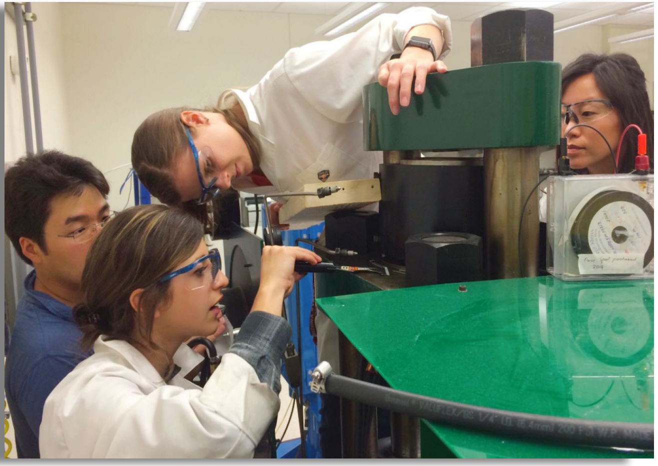
Students encounter between 1-10 different complex texts in each unit.





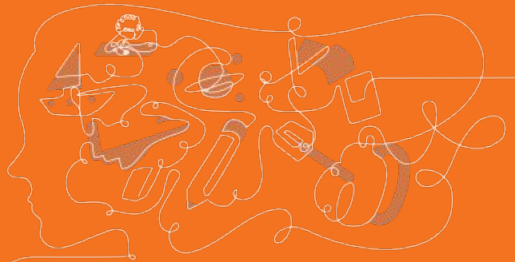


In a course: average 5 texts x 9 units = minimum 40 opportunities to engage with complex texts in one school year



Reading in Amplify Science

Students are apprenticed into reading like scientists—that is, reading actively, curiously, and critically, with a focus on making meaning and using the text as a source of evidence.



Science texts and data are often complex and research shows that annotation is an important way for a reader to stop and think carefully about what they are reading.

Let’s see how this is done in Amplify Science…

Sample annotation

Surprising things sometimes wash up on shore, and this can happen all over the world. During a powerful storm In 1990, containers packed with 61,000 shoes fell off a cargo ship travelling across the Pacific Ocean and eventually washed up on beaches in Oregon, Hawaii, and Japan. These locations are hundreds or thousands of miles away from the place where the shoes were spilled. How did the shoes make their way to these locations?

> How did the shoes wash up at these different locations?

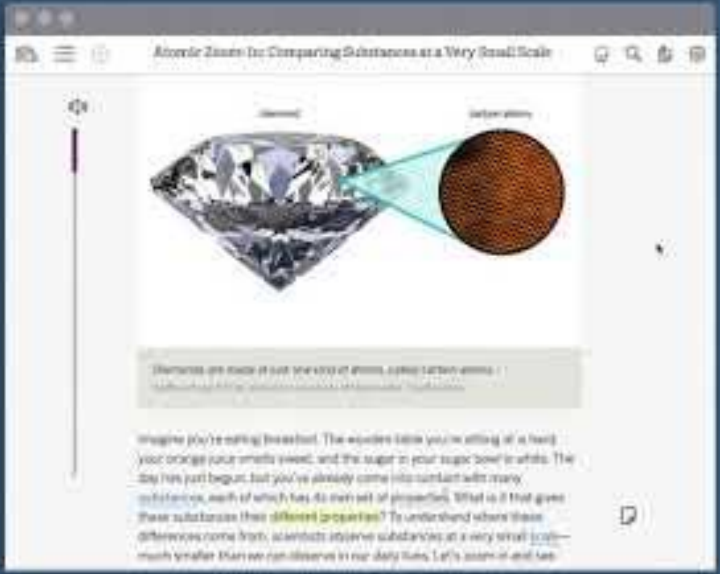
If you look at a photograph of Earth, most of what you see is the big, blue ocean—after all, the ocean covers 71% of our planet. In a photograph or on a map, it may not look like the ocean moves very much, but the opposite is actually true. The water in the ocean is always moving from place to place, carrying objects and organisms wherever it goes. Ocean water doesn't move randomly; it flows in consistent patterns. Scientists call ocean water flowing in

ocean water flowing in a continuous path [corriente oceánica: agua del océano que fluye en una ruta continua]

a continuous path an ocean current. Currents carry all kinds of objects and organisms all over the world. The shoes made their way across the ocean with the help of ocean currents.

> Currents must have carried the shoes!

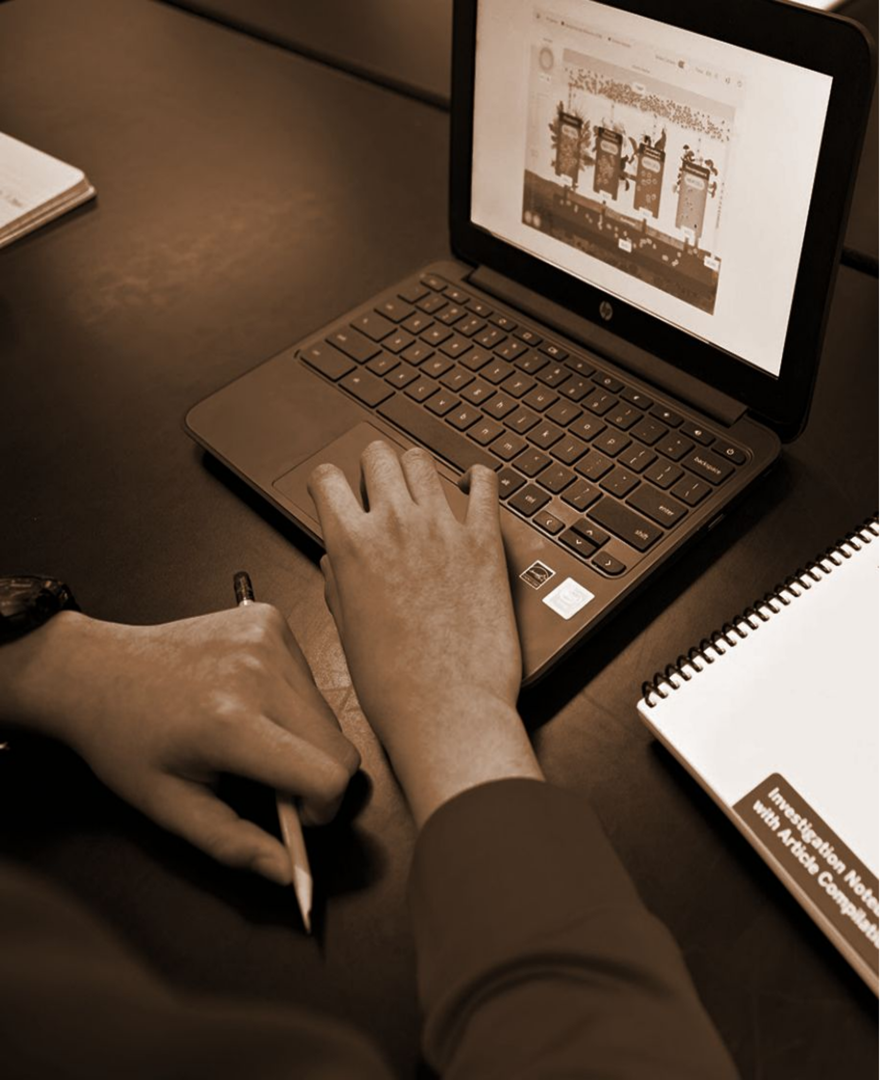
You can also **add an annotation** to an **image** by **pressing anywhere** on the image. You will then be prompted to **add a note**.



tinyurl.com/AMPHHE-03

Questions?

Amplify.



Plan for the day

- Introduction and overview of approach
- Embedded supports in an instructional sequence
- Differentiation for reading
- Closing

Thinking about the role of texts in your class

Reflect-Type-Chat

- Reflect on the purpose for reading and how reading helped your students develop understanding.

- Consider the surrounding activities/lessons that complemented the reading, and how.

Exemplar instructional sequence

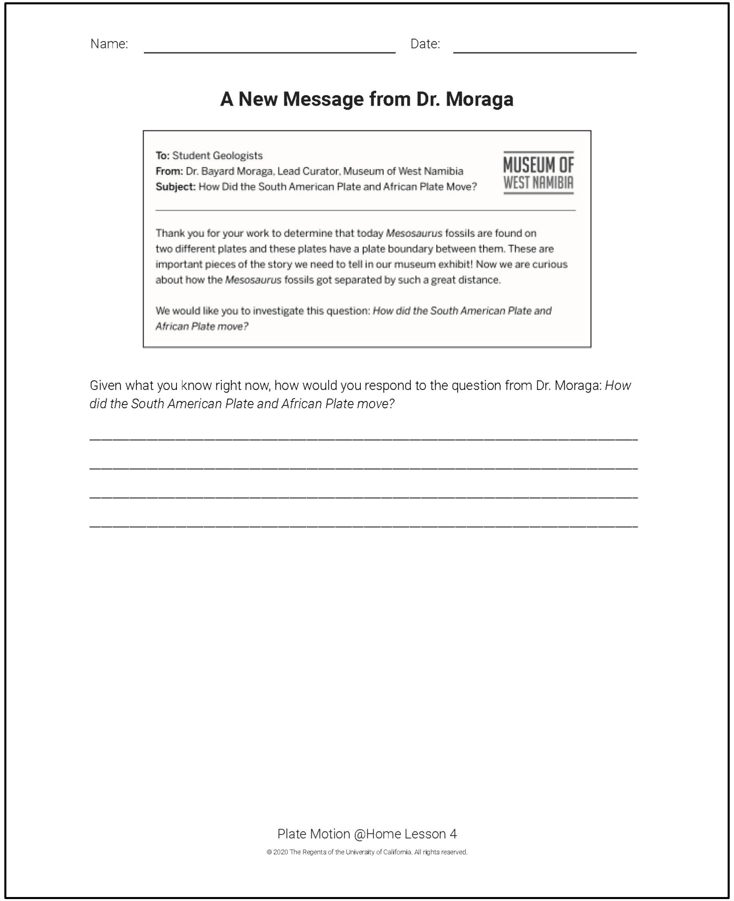
Why are fossils of *Mesosaurus* separated by thousands of kilometers of ocean when the species once lived all together?

Students play the role of geologists working for the fictional Museum of West Namibia to investigate *Mesosaurus* fossils found both in southern Africa and in South America. They learn that the surface of the Earth has changed dramatically over the Earth's history, with continents and ocean basins changing shape and arrangement due to the motion of tectonic plates. As the Earth's surface changes, fossils that formed together may be split apart.

Plate Motion

@Home Lesson 4

AmplifyScience



Name: ______________________ Date: ________________

A New Message from Dr. Moraga

To: Student Geologists
From: Dr. Bayard Moraga, Lead Curator, Museum of West Namibia
Subject: How Did the South American Plate and African Plate Move?

MUSEUM OF WEST NAMIBIA

Thank you for your work to determine that today *Mesosaurus* fossils are found on two different plates and these plates have a plate boundary between them. These are important pieces of the story we need to tell in our museum exhibit! Now we are curious about how the *Mesosaurus* fossils got separated by such a great distance.

We would like you to investigate this question: *How did the South American Plate and African Plate move?*

Given what you know right now, how would you respond to the question from Dr. Moraga: *How did the South American Plate and African Plate move?*

____

____

____

____

Go to the **A New Message from Dr. Moraga** activity.

Begin today's lesson by reading and writing to complete the **A New Message from Dr. Moraga** activity.

A New Message from Dr. Moraga page or Lesson 2.1, Activity 1

Dr. Moraga's question is also our Chapter 2 Question:

Chapter 2 Question

How did the South American Plate and African Plate move?

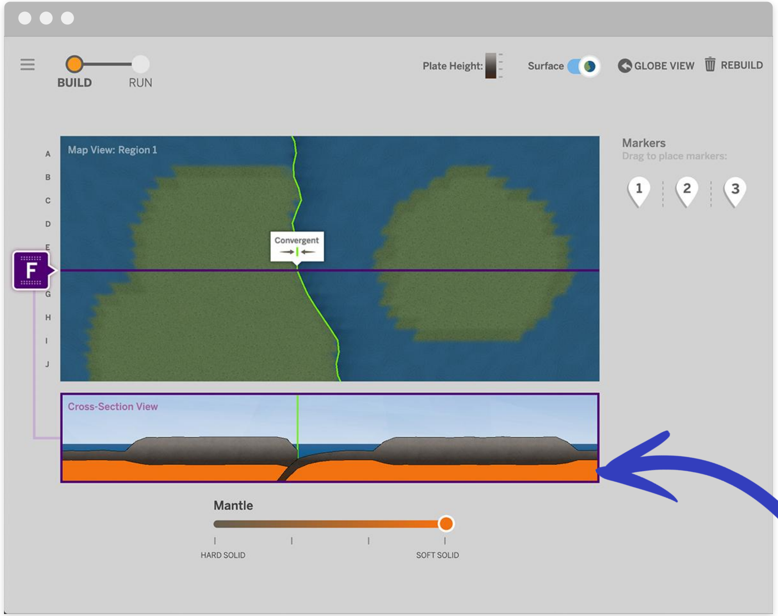
We know Earth’s plates move because we can see a **pattern of earthquakes** along plate boundaries. Earthquakes provide evidence of plate motion.

But we don’t yet know **how** plates move.

Today, we will investigate this question:

Investigation Question:
How do Earth's plates move?

Today we will **gather evidence** that can tell us what **conditions** on Earth **allow plates to move**.

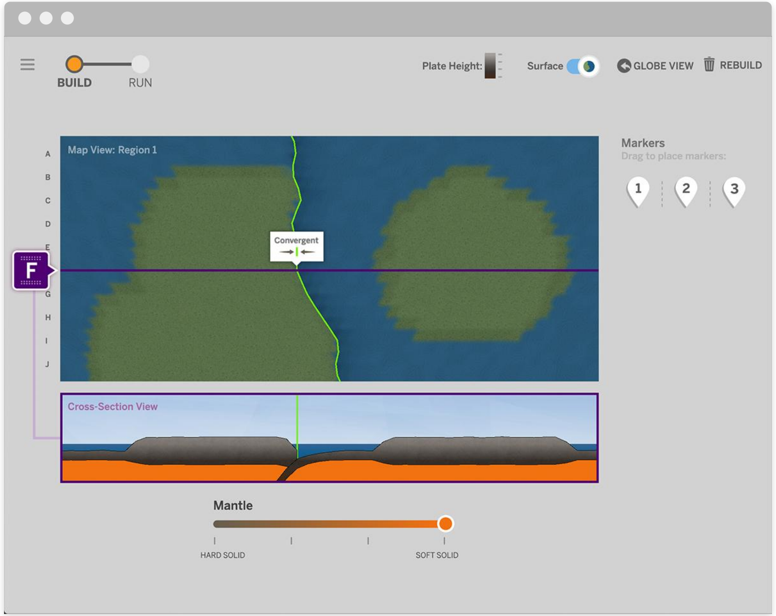


To figure out how plates move, we will need to learn more about the **layer just below** the plates.

This layer is called the **mantle**.

The layer called the **mantle starts somewhere between 65 and 100 kilometers below Earth's surface.**

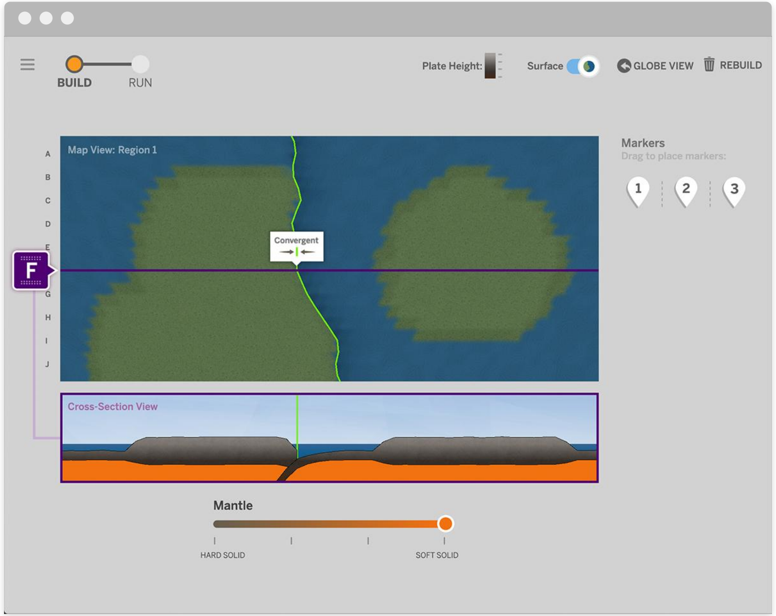
Like the plates, the mantle is made of solid rock. You will use the **Sim** today to find out **more about the mantle**.



Solid substances can have different hardnesses.

What are some examples of **hard solids**?

What are some examples of **soft solids**?



Next you will work in the Sim to gather evidence about the mantle. You will make the mantle **softer** or **harder**, and observe **how the plates move** after you make the change.

Name: ______________________ Date: ________________

Considering the Mantle

We know that Earth's outer layer is made of hard, solid rock divided into plates, and we know those plates move. But how? Below the outer layer is the mantle. In this activity, you will use the Sim to investigate how the composition of the mantle might allow the plates to move.

1. Open the Sim.
2. Select Region 1 from the Globe View.
3. Adjust the mantle setting to Hard Solid. Press RUN and observe the motion of the plates. Record your observations in the data table below.
4. Once the run has ended, press BUILD. Adjust the mantle setting to Soft Solid. Press RUN and observe the motion of the plates. Record your observations in the data table below.
5. After you complete the table, answer the question below.

Mantle setting	Observations of plate motion
Hard Solid	
Soft Solid	

Based on your results, what do you think the rock in Earth's mantle is like? Is the mantle made of hard, solid rock or soft, solid rock? Explain your ideas.

____

____

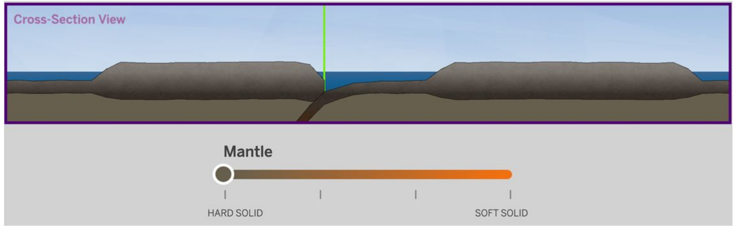
____

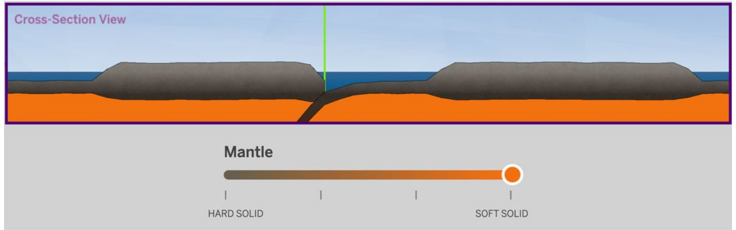
____

Go to the Considering the Mantle activity.

Follow the directions and complete the Considering the Mantle Sim activity.

Considering the Mantle page or Lesson 2.1, Activity 2





What did you **observe** when the mantle was set as **hard, solid rock?**

What about when it was set as **soft, solid rock?**

Name: ______________________ Date: ________________

Considering the Mantle

We know that Earth's outer layer is made of hard, solid rock divided into plates, and we know those plates move. But how? Below the outer layer is the mantle. In this activity, you will use the Sim to investigate how the composition of the mantle might allow the plates to move.

1. Open the Sim.
2. Select Region 1 from the Globe View.
3. Adjust the mantle setting to Hard Solid. Press RUN and observe the motion of the plates. Record your observations in the data table below.
4. Once the run has ended, press BUILD. Adjust the mantle setting to Soft Solid. Press RUN and observe the motion of the plates. Record your observations in the data table below.
5. After you complete the table, answer the question below.

Mantle setting	Observations of plate motion
Hard Solid	
Soft Solid	

Based on your results, what do you think the rock in Earth's mantle is like? Is the mantle made of hard, solid rock or soft, solid rock? Explain your ideas.

____

____

____

____

How did changing the hardness of the mantle affect the **motion of the plates** in the Sim?

What can you **conclude about the mantle** from this?

The **Considering the Mantle** Sim activity provides evidence that a soft, solid mantle allows the plates to move.

This model shows us that the **mantle must be a soft solid**, not a hard, rigid solid.

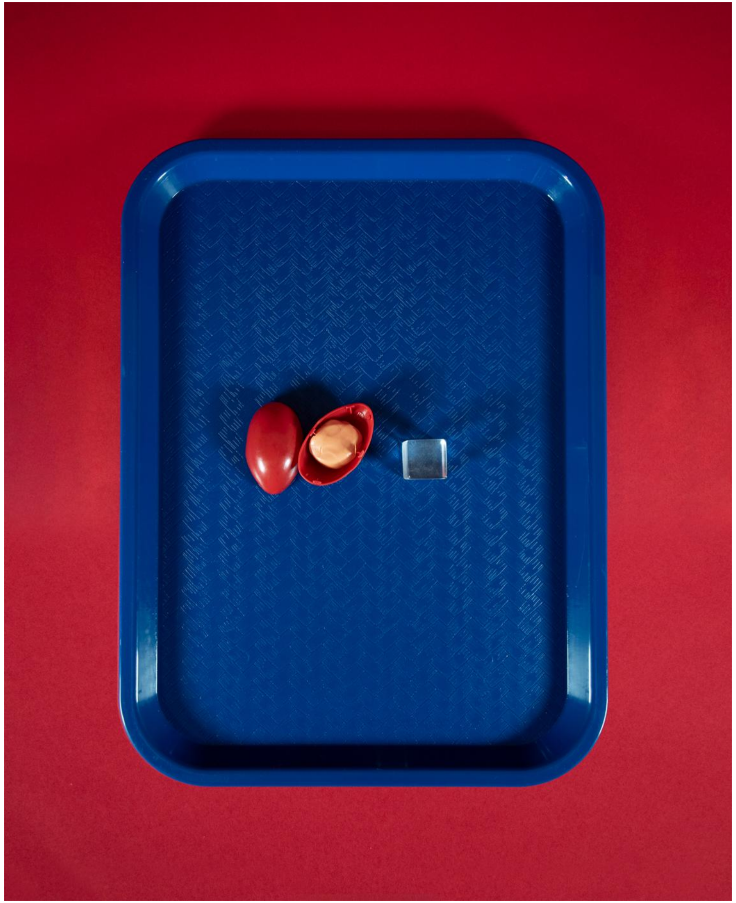
Here is a scientific definition of the word mantle:

mantle

the layer of soft, solid rock underneath Earth’s plates

What does it mean to be **soft, solid rock**? How is that **different from hard, solid rock**?

In this activity, you will watch a video of an exploration of **two physical materials**, one soft solid and one hard solid, to help you better understand how the characteristics of the mantle and the plates are different.



These are the materials you will see in the video demonstration:

a soft solid (Silly Putty), and

a hard solid (a plastic cube)

You'll observe how these materials behave differently.

Name: ______________________ Date: ________________

Exploring Characteristics of the Mantle

How is a soft, solid material different from a hard, solid material?

Watch this video of someone investigating the Sim (Note: you can watch the video on a smartphone or any other connected device): tinyurl.com/AMPPM-07

Make observations during the video and **record your observations in the data table below.**

Think about these questions:

- What observations can you make about the soft, solid material that is represented by Silly Putty?
- What observations can you make about the hard solid material?
- What can the soft, solid material do that the hard, solid material can't? What happens when someone p[illegible]

Material	Observations
Soft, solid material: Silly Putty	
Hard, solid material: plastic cube	

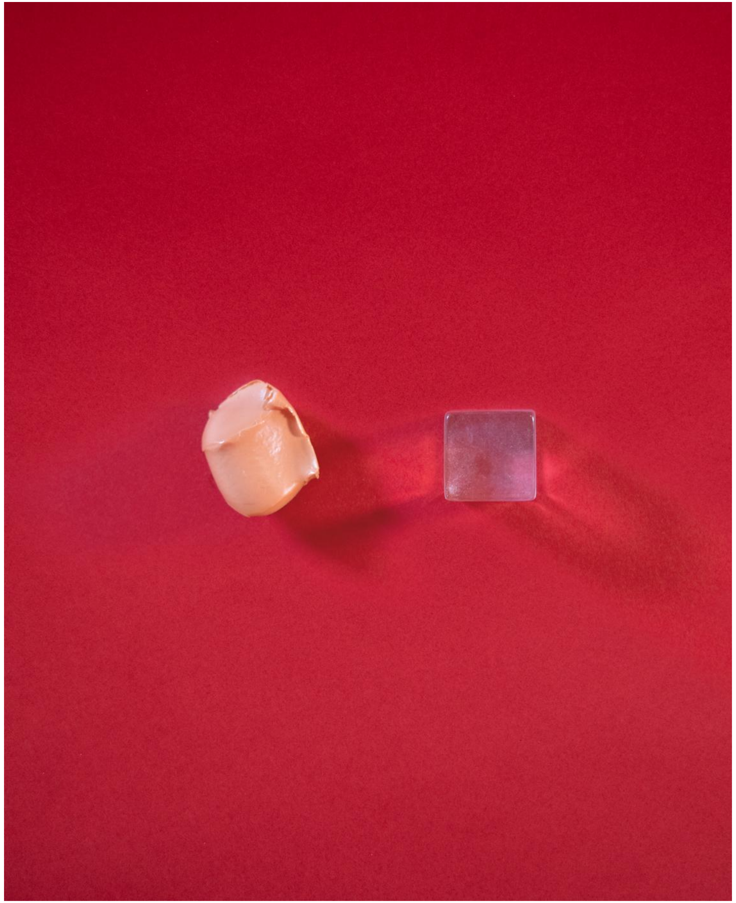
Go to the Exploring Characteristics of the Mantle activity.

As you watch the video, record your observations. You may need to watch the video a few times to make your observations.

tinyurl.com/AMPPM-07

Now, you'll talk about what **you observed.**
You'll need a **partner** for this activity.

Remember, your partner could be a classmate on the phone or someone at home with you.



Using the notes you took during the video, discuss this question with your partner:

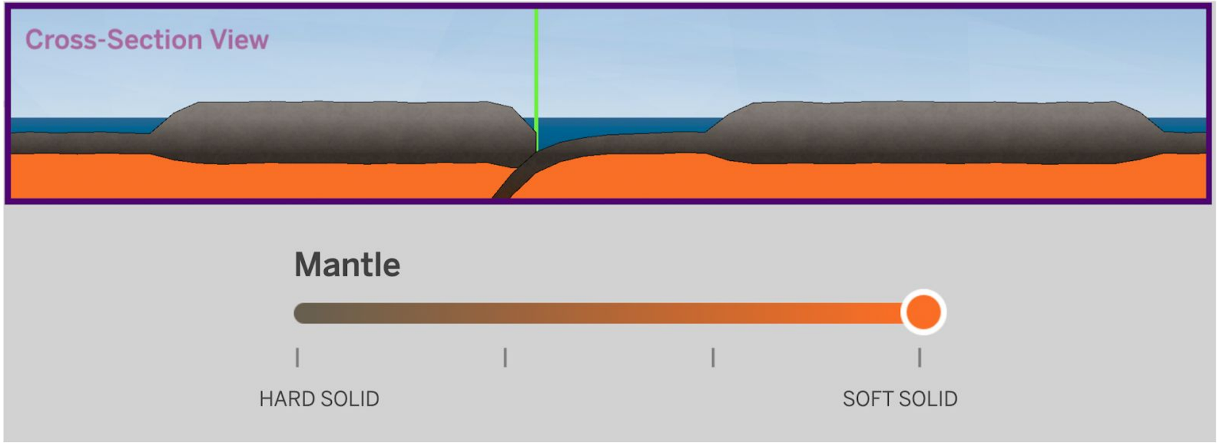
How is a **soft, solid material** different from a **hard, solid material?**

Your partner could be a classmate on the phone or someone at home with you.

Silly Putty is a unique material. Scientists use it to model the characteristics of the soft, solid rock that makes up Earth's mantle.

Based on your observation of the Silly Putty, how would you describe the **soft, solid rock** that makes up the mantle?

How do you think the soft, solid mantle **allows the plates above it to move**?



Next, you will use a routine called **Word Relationships** to help you to reflect on the work you did in the Sim and the observations you made of the Silly Putty and the plastic cube, using scientific language.

You will use **these words** to create **sentences** that answer questions about **how these parts of Earth work together**, in order to explain this to visitors at the Museum of West Namibia.

The purpose of the Word Relationships routine is to help you **use scientific language** to explain what you have been learning.

You will again need a **partner** for this activity.

Your partner could be a classmate on the phone or someone at home with you.

Word Relationships Routine

You will follow these steps to complete the Word Relationships Routine:

Make Sentences

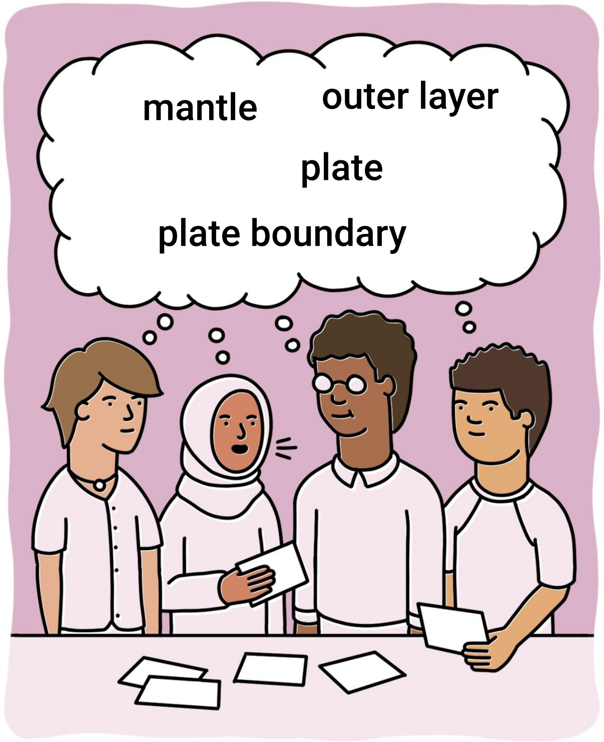
Use at least **two** of the words in the Word Bank to create **sentences that answer both questions and explain how these parts of Earth work together**. You do not have to use all the words, and can use words more than once.

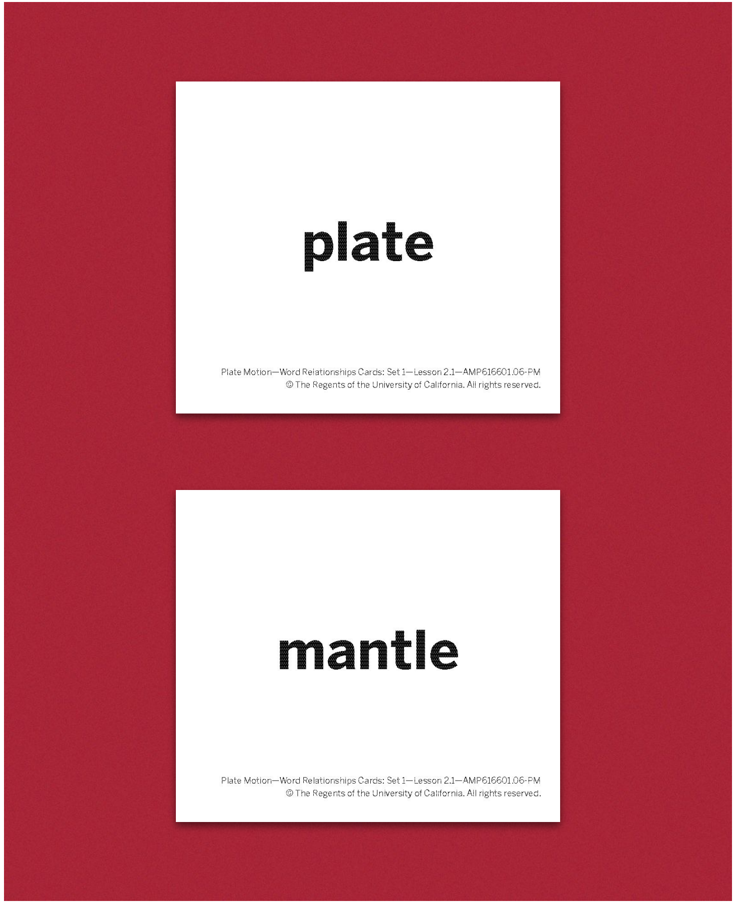
Take Turns

With your partner take turns as both the speaker and listener.

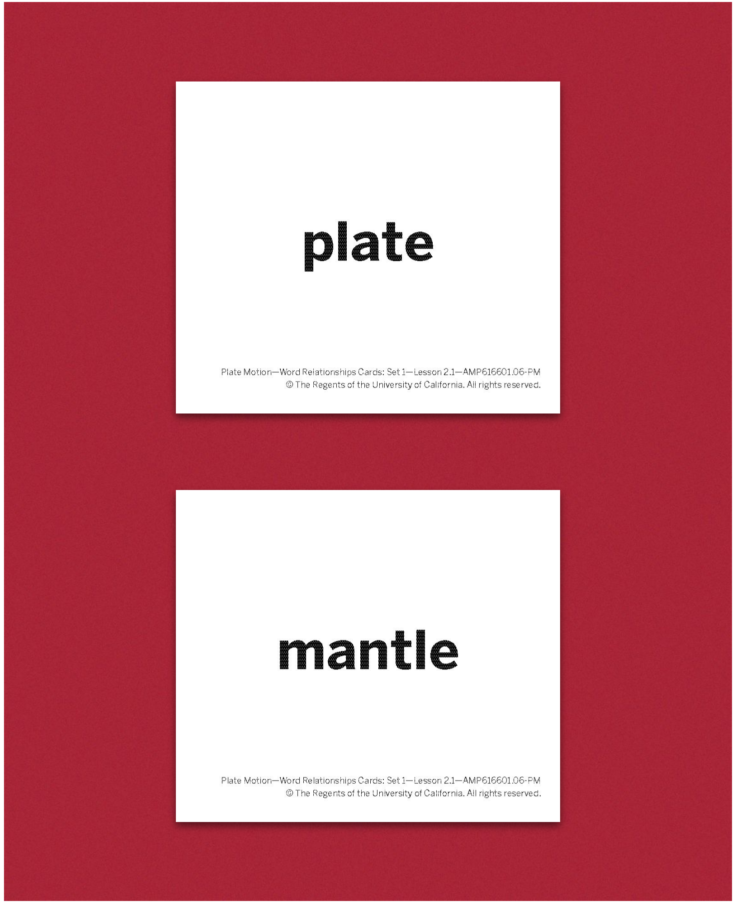
Create More Than One Sentence

There are many ways to answer the questions, and you will need to create more than one sentence.





You’ll use **at least two words** to create each sentence.



For example, you might use these two words to say, “The **plates** on Earth sit on top of the soft solid material of the **mantle.**”

Name: ______________________ Date: ________________

Word Relationships

Some visitors at the Museum of West Namibia have never learned anything about Earth's plates, plate boundaries, or mantle. Use the Word Relationships Cards to create sentences that help explain to these visitors how these parts of Earth work together. Create sentences that answer both of these questions:

1. How can Silly Putty and a hard, plastic cube be used to model different layers of Earth?
2. How are Earth's plates able to move?
   - Use at least two different Word Relationships Words in each sentence you create with your partner.
   - You and your partner may use the same word more than once. You do not need to use all the vocabulary words.
   - There are many different ways to answer these questions, and you will need to create more than one sentence in order to express your ideas completely.

Word Bank

mantle	**outer layer**	**plate**	**plate boundary**

Plate Motion @Home Lesson 4

Go to the **Word Relationships** activity.

Complete the Word Relationships Routine to create sentences that help explain how Earth's plates, plate boundaries, and mantle work together.

Word Relationships page or [Lesson 2.1, Activity 4]

Remember, we are investigating this question.

How do Earth’s plates move?

This **key concept** is something we learned with the two investigations we did today. It helps us to answer the Investigation Question.

5. Earth's plates move on top of a soft, solid layer of rock called the mantle.

We will learn more about **how plates move** and how **scientists study** different kinds of **plate movement** in the next lessons.

End of @Home Lesson

THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

Published and Distributed by Amplify. www.amplify.com

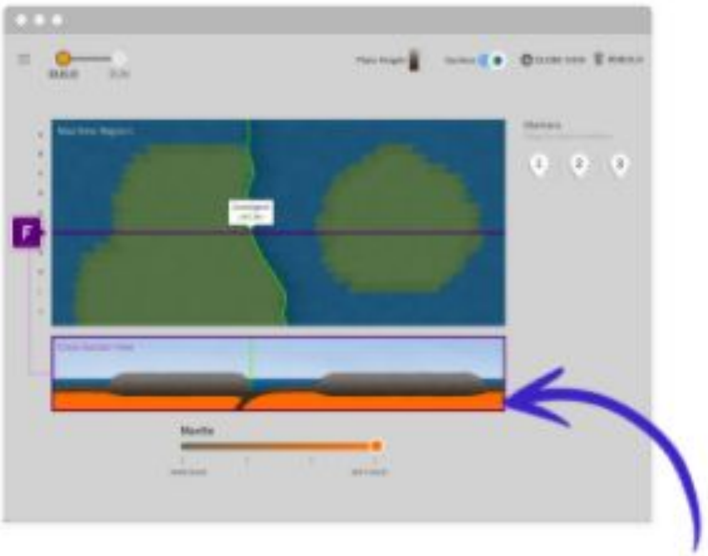
Plate Motion

@Home Lesson 5

AmplifyScience

Today, we will investigate this question:

Investigation Question:
What happens to the plates and the mantle at plate boundaries?



In previous lessons, we learned that the **plates can move** because they are on top of the **soft, solid mantle.**

Investigation Question:
What happens to the plates and the mantle at plate boundaries?

This Investigation Question is still about **plates and the mantle,** but we are going to focus more specifically on what **happens to the mantle and the plates** at **plate boundaries**.

Once you have a better understanding of this, it will bring you closer to assisting the **Museum of West Namibia** in determining **what type of plate movement** got the *Mesosaurus* fossils where they are today.

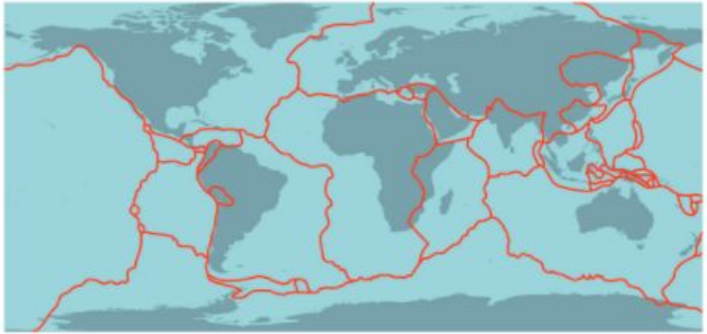
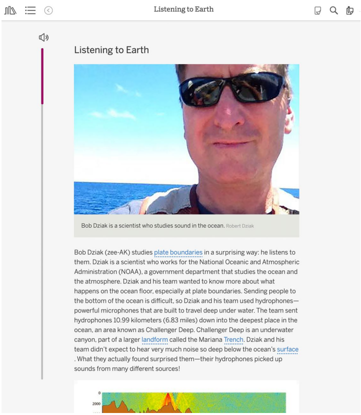


plate boundaries on Earth

Dr. Moraga from the Museum of West Namibia sent us an article that will help us understand what happens to the plates and mantle **at plate boundaries.**

For the next activity you will complete written work, either on paper or online. Check with your teacher about how you will complete and submit work in this @Home Unit.

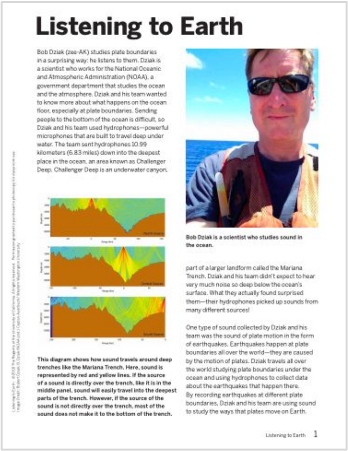


Listening to Earth

Listening to Earth

Bob Dziak is a scientist who studies sound in the ocean. Robert Dziak

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface . What they actually found surprised them—their hydrophones picked up sounds from many different sources!



Listening to Earth

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface. What they actually found surprised them—their hydrophones picked up sounds from many different sources!

One type of sound collected by Dziak and his team was the sound of plate motion in the form of earthquakes. Earthquakes happen at plate boundaries all over the world—they are caused by the motion of plates. Dziak travels all over the world studying plate boundaries under the ocean and using hydrophones to collect data about the earthquakes that happen there. By recording earthquakes at different plate boundaries, Dziak and his team are using sound to study the ways that plates move on Earth.

Bob Dziak is a scientist who studies sound in the ocean.

This diagram shows how sound travels around deep trenches like the Mariana Trench. Here, sound is represented by red and yellow lines. If the source of a sound is directly over the trench, like it is in the middle panel, sound will easily travel into the deepest parts of the trench. However, if the source of the sound is not directly over the trench, most of the sound does not make it to the bottom of the trench.

Listening to Earth 1

Remember, in this class we use an **Active Reading** approach when we read. You will use this approach today when you read the article Dr. Moraga sent.

Science reading can be especially complex. It is important to read science texts **actively**, so you really understand what you read. Active Reading helps you to pay attention and learn when you read.

The following slides show how a 7th grade student named **Zora made annotations** on a digital version of the "Listening to Earth" article.

You will see **what Zora was thinking** about when she was reading. You will also see each **annotation** that she made. Making annotations is part of the Active Reading approach to reading science texts.

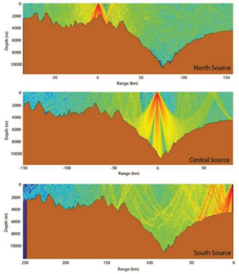
By looking at Zora's annotations you will learn more about:

- how to **annotate** to show your thinking.
- some strategies you can use, such as asking questions and making connections and identifying challenging words.

Listening to Earth

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface. What they actually found surprised them—their hydrophones picked up sounds from many different sources!

Bob Dziak is a scientist who studies sound in the ocean.



This diagram shows how sound travels around deep trenches like the Mariana Trench. Here, sound is represented by red and yellow lines. If the source of a sound is directly over the trench, like it is in the middle panel, sound will easily travel into the deepest parts of the trench. However, if the source of the sound is not directly over the trench, most of the sound does not make it to the bottom of the trench.

One type of sound collected by Dziak and his team was the sound of plate motion in the form of earthquakes. Earthquakes happen at plate boundaries all over the world—they are caused by the motion of plates. Dziak travels all over the world studying plate boundaries under the ocean and using hydrophones to collect data about the earthquakes that happen there. By recording earthquakes at different plate boundaries, Dziak and his team are using sound to study the ways that plates move on Earth.

You can **follow along** in your article as you see what Zora did with her annotations on the next slides. You can also add your own annotations.

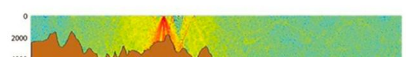
"Listening to Earth" article or Lesson 2.2, Activity 2

Listening to Earth

Listening to Earth

Bob Dziak is a scientist who studies sound in the ocean. Robert Dziak

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface . What they actually found surprised them—their hydrophones picked up sounds from many different sources!

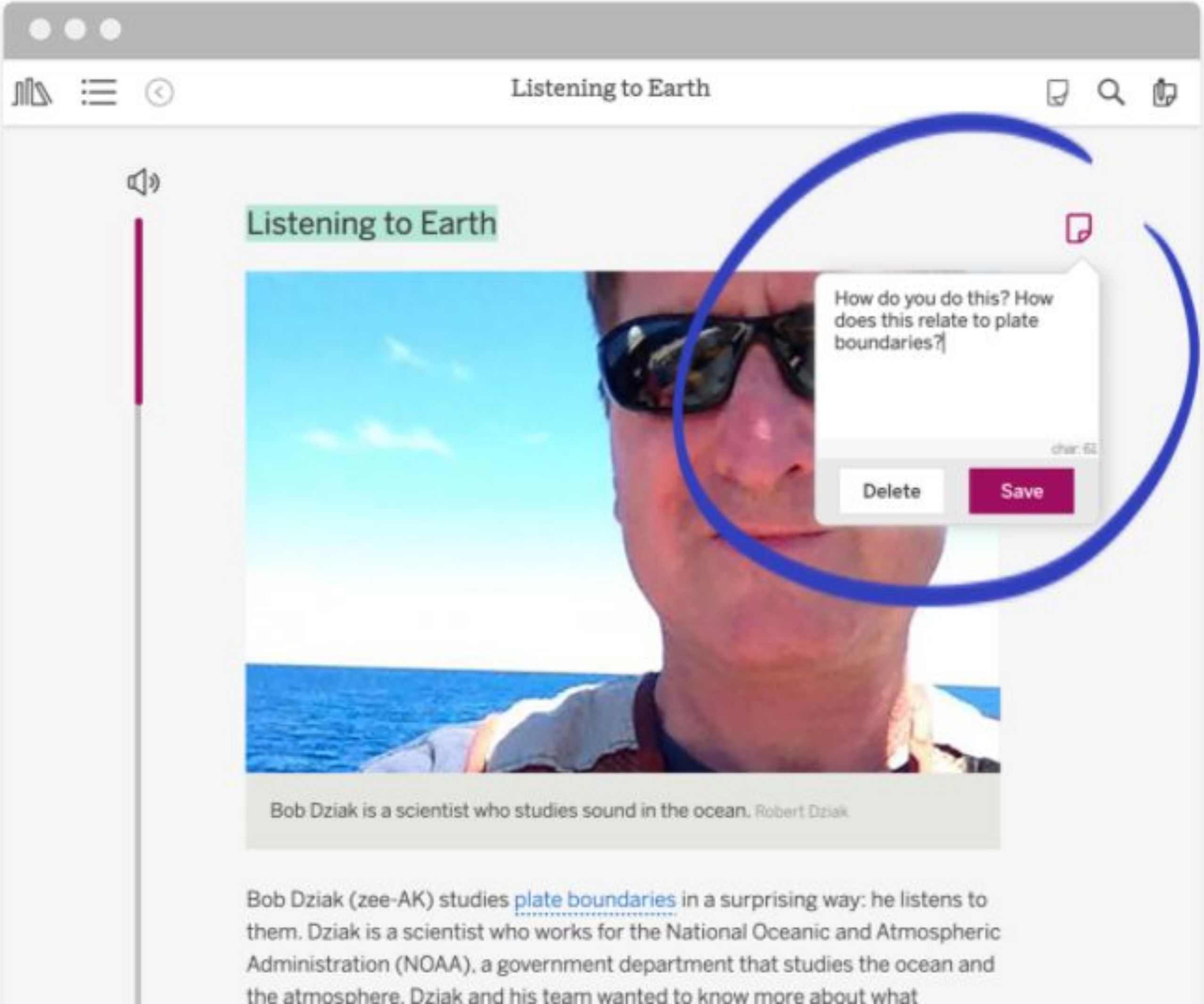


Zora began by reading the **title** of the article.

After reading the title Zora thought:

“That is a strange idea -- ‘Listening to Earth’ ...especially when you think about how listening to Earth might be related to plate boundaries! I’m going to ask some questions about that right away.”

The next slide shows the annotations she made.


Listening to Earth
Listening to Earth
How do you do this? How does this relate to plate boundaries?
Delete
Save
Bob Dziak is a scientist who studies sound in the ocean. Robert Dziak
Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what

After adding her questions about the title in an annotation, Zora **kept reading**.

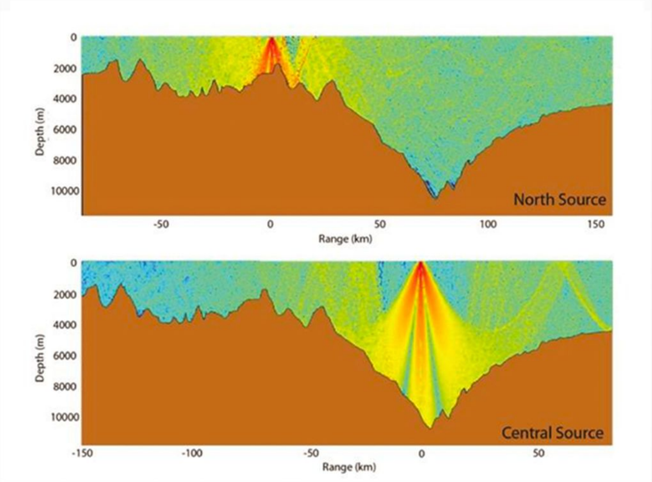
Zora read the entire first paragraph of the article before stopping. When she was reading she realized that the word **‘hydrophones’** was an **unfamiliar word.**

Zora thought: "Since the word *hydrophones* is **unfamiliar,** I am going to read the sentence again, to see if it can help me understand what this word means"

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the

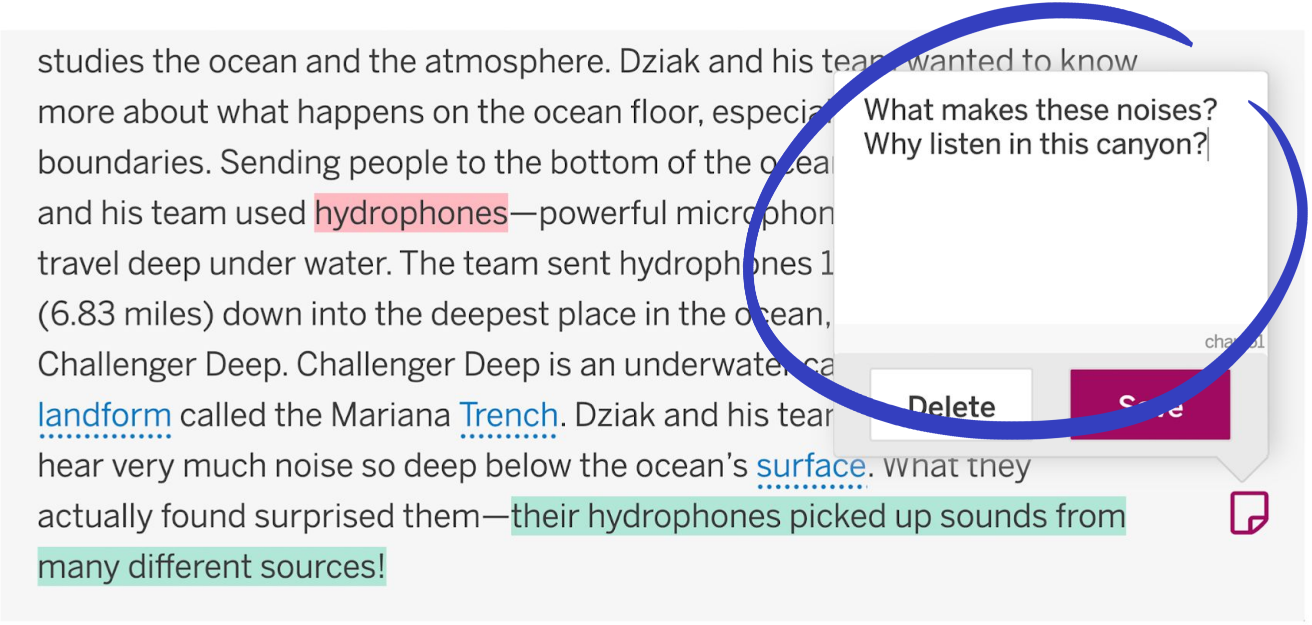
After rereading, Zora saw that the sentence explained that a **hydrophone is a microphone** that can **travel underwater.**

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the happens on the ocean floor, especially at plate boundaries. Sending people the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface . What they actually found surprised them—their hydrophones picked up sounds from many different sources!



Zora decided that she should **highlight** this **challenging word.** She knew that doing this would help her remember to come back to it later, so she could learn even more about it.

Zora knew that she still had **questions** about the first paragraph. She decided to make an annotation to record them.



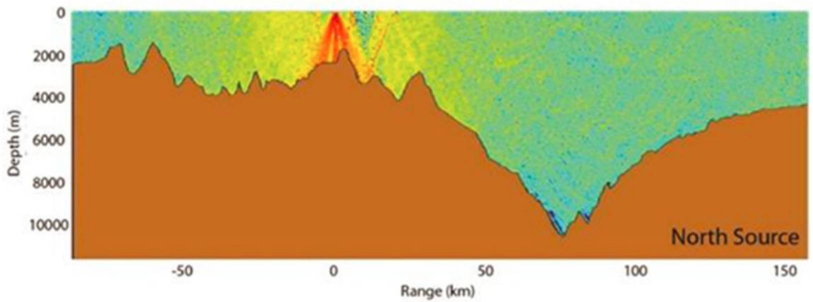
Zora also decided she had a **connection** she wanted to record. She read that Dr. Dziak **wanted to learn more about plate boundaries -- and she did too**! Zora added an annotation with this connection.

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface. What they actually found surprised them—their hydrophones picked up sounds from many different sources!

I want to learn more about plate boundaries, too!

Delete

Save

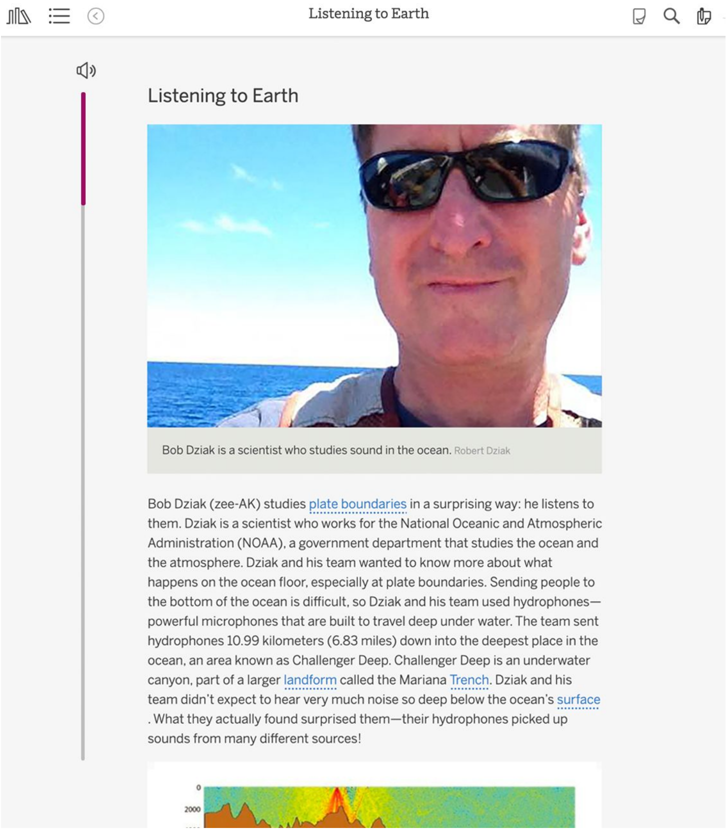


Active Reading Guidelines

1. Think carefully about what you read. Pay attention to your own understanding.
2. As you read, annotate the text to make a record of your thinking. Highlight challenging words and add notes to record questions and make connections to your own experience.
3. Examine all visual representations carefully. Consider how they go together with the text.
4. After you read, discuss what you have read with others to help you better understand the text.

Next, you will read and annotate "Listening to Earth" yourself. The Active Reading Guidelines can help you read actively.

How will you use these guidelines when you read today?


Listening to Earth

Listening to Earth

Bob Dziak is a scientist who studies sound in the ocean. Robert Dziak

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface. What they actually found surprised them—their hydrophones picked up sounds from many different sources!

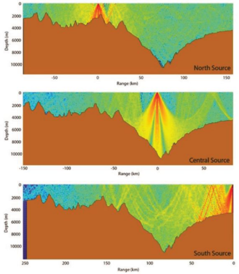
Read and annotate "Listening to Earth."

"Listening to Earth" article or Lesson 2.2, Activity 2

Listening to Earth

Bob Dziak (zee-AK) studies plate boundaries in a surprising way: he listens to them. Dziak is a scientist who works for the National Oceanic and Atmospheric Administration (NOAA), a government department that studies the ocean and the atmosphere. Dziak and his team wanted to know more about what happens on the ocean floor, especially at plate boundaries. Sending people to the bottom of the ocean is difficult, so Dziak and his team used hydrophones—powerful microphones that are built to travel deep under water. The team sent hydrophones 10.99 kilometers (6.83 miles) down into the deepest place in the ocean, an area known as Challenger Deep. Challenger Deep is an underwater canyon, part of a larger landform called the Mariana Trench. Dziak and his team didn't expect to hear very much noise so deep below the ocean's surface. What they actually found surprised them—their hydrophones picked up sounds from many different sources!

Bob Dziak is a scientist who studies sound in the ocean.



This diagram shows how sound travels around deep trenches like the Mariana Trench. Here, sound is represented by red and yellow lines. If the source of a sound is directly over the trench, like it is in the middle panel, sound will easily travel into the deepest parts of the trench. However, if the source of the sound is not directly over the trench, most of the sound does not make it to the bottom of the trench.

One type of sound collected by Dziak and his team was the sound of plate motion in the form of earthquakes. Earthquakes happen at plate boundaries all over the world—they are caused by the motion of plates. Dziak travels all over the world studying plate boundaries under the ocean and using hydrophones to collect data about the earthquakes that happen there. By recording earthquakes at different plate boundaries, Dziak and his team are using sound to study the ways that plates move on Earth.

Annotations help you **keep track of**, and **remember,** your thinking.

The next step in Active Reading is **discussing** your annotations. You'll need a partner for this activity.

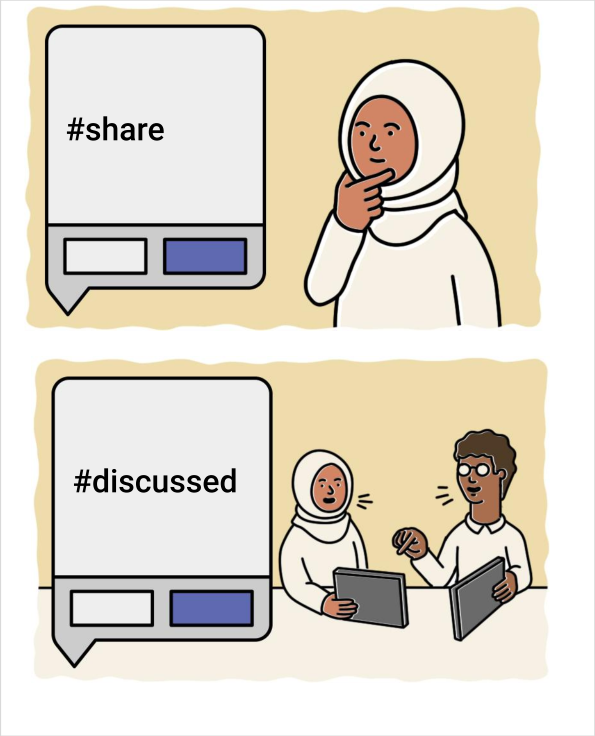
Your partner could be a classmate on the phone or someone at home with you.

Before you discuss your annotations, review the instructions on the next slide, which explain how to discuss with your partner. Then, begin your discussion.

Discussing Annotations

1. **Choose** several interesting questions, connections or ideas to share with a partner. Tag each one with **#share.**

2. **Talk about** your chosen annotations with a partner. Tag each annotation with **#discussed** if you were able to resolve your questions, or if you discussed a connection or idea.



What **interesting** or **unanswered questions** do you still have about the article after talking about your annotations with a partner?

The habit of annotating does not develop overnight. It takes time. Sophisticated readers are always **practicing reading actively.**

We just read about a scientist who is **studying two types** of plate boundaries: **convergent boundaries and divergent boundaries.**

The next two slides provide definitions for these important words.

convergent

moving toward the same place

divergent

moving apart in different directions

To **converge** means to **come together.** Convergent plate boundaries are the boundaries where **two plates are moving toward each other.**

To **diverge** means to **move apart**. Divergent plate boundaries are the boundaries where **two plates are moving away from each other.**

Remember, we are investigating this question:

Investigation Question:
What happens to the plates and the mantle at plate boundaries?

What did you learn from the article about what happens to the plates and the mantle at **plate boundaries**?

End of @Home Lesson

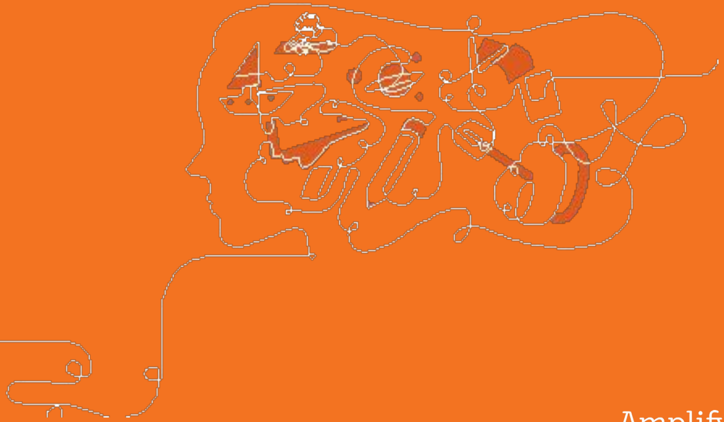
THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

Published and Distributed by Amplify. www.amplify.com

BREAK (15 minutes)

Reflecting on exemplar lesson



Amplify.

Think-Type-Chat:

- What was complex about the text that was utilized during the instructional sequence?
- How were students supported in accessing the text?

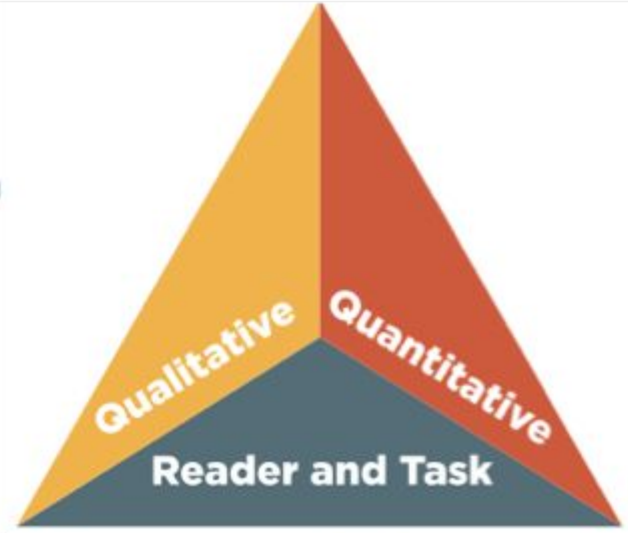


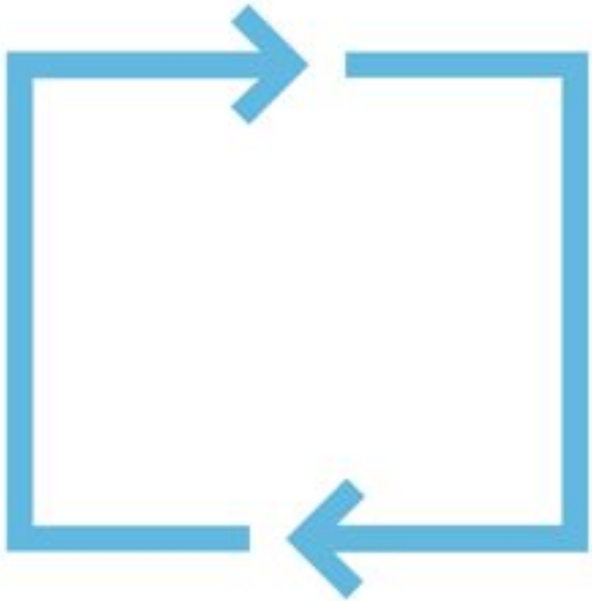
Figure 1: The Standards' Model of Text Complexity

Multimodal learning as an embedded support

Amplify.

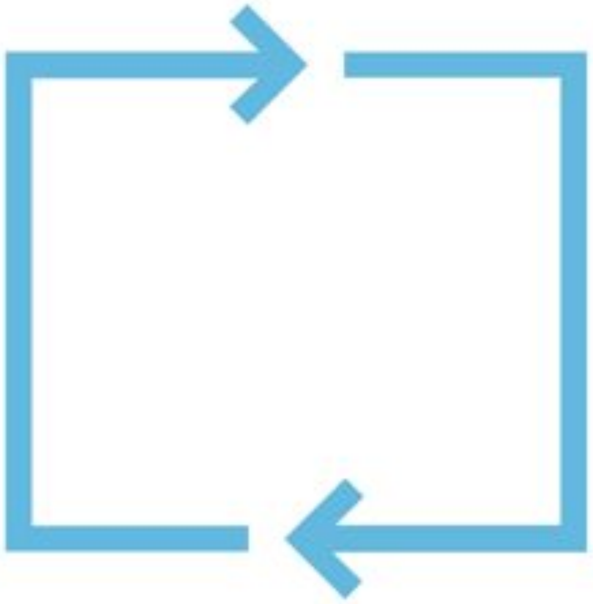
Multimodal learning

Gathering evidence over multiple lessons



Do,
Talk,
Read,
Write,
Visualize

Evidence sources work together to support developing scientific understandings



Teaching tip

- Every evidence source plays an important role in student learning.
- Be sure to teach every activity in order!

Text roles & active reading as embedded supports

Text Roles/Functions for Inquiry-Based Investigations

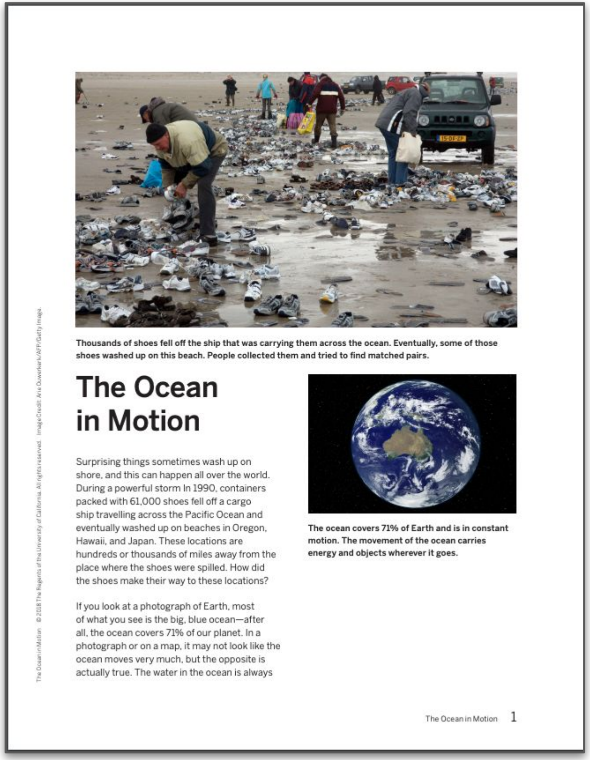
Provide context for inquiry-based investigations	**Scientists read and interpret others' data and findings**
Deliver content	**Illustrate phenomenon that would otherwise be unobservable; opportunities to apply what students are learning**
Model scientific processes	**Model inquiry processes; Modeling scientific dispositions; Depicting scientists and their work**
Support secondhand investigations (collection of textual data)	**Provides data for interpretation represented with graphs, pictures, tables; communicating visuals information based in data**
Support first-hand investigations (collection of empirical data)	**Providing students information to supplement their empirical (first-hand) studies; Support the design and implementation of investigations.**

From Cervetti, G. N. & Barber, J. (2009). Text in hands-on science. In Hiebert, E. H. & Sailors, M. (Eds.) *Finding the Right Texts: What Works for Beginning and Struggling Readers.* New York: The Guilford Press.

Embedded supports

Active Reading

- Consistent routine across units
- First read and second read
- Partner discussion of annotations
- Digital reading supports



Thousands of shoes fell off the ship that was carrying them across the ocean. Eventually, some of those shoes washed up on this beach. People collected them and tried to find matched pairs.

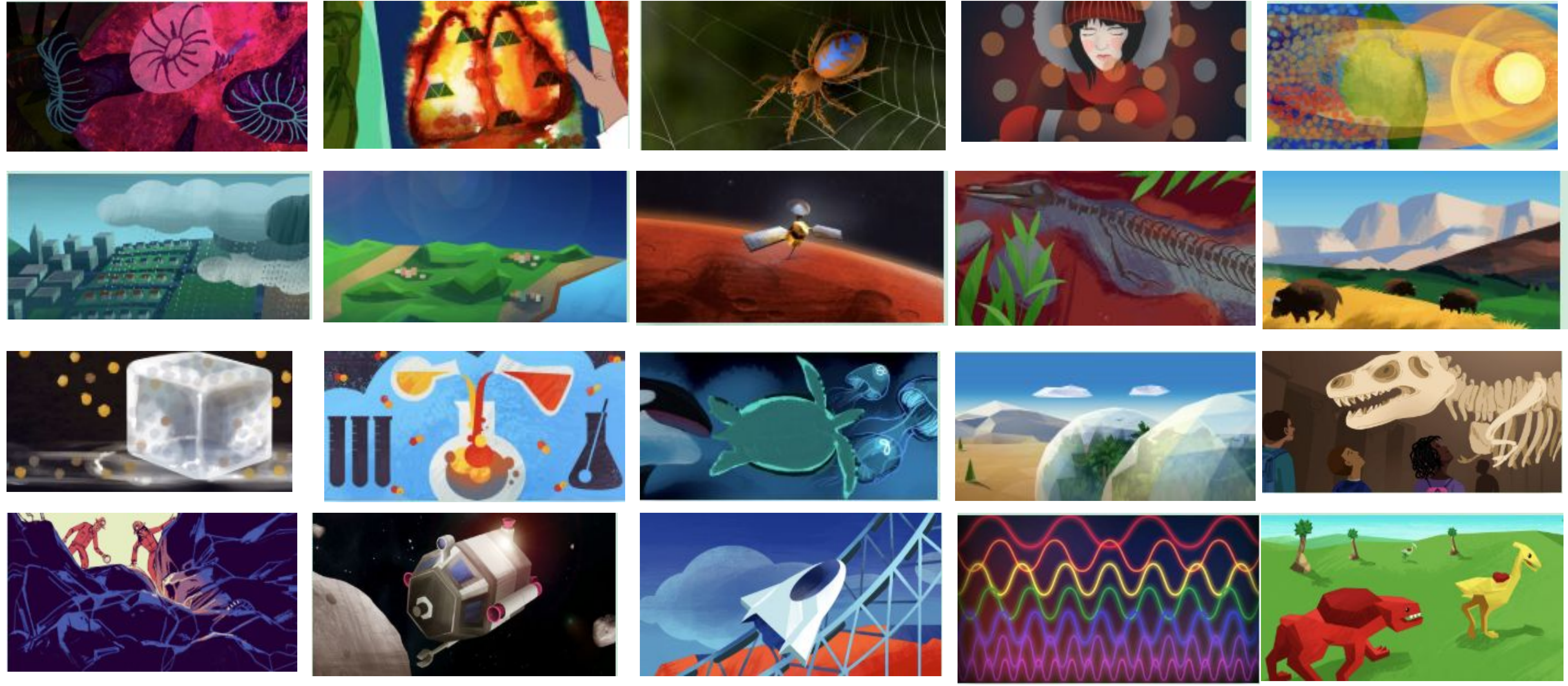
The Ocean in Motion

Surprising things sometimes wash up on shore, and this can happen all over the world. During a powerful storm In 1990, containers packed with 61,000 shoes fell off a cargo ship travelling across the Pacific Ocean and eventually washed up on beaches in Oregon, Hawaii, and Japan. These locations are hundreds or thousands of miles away from the place where the shoes were spilled. How did the shoes make their way to these locations?

If you look at a photograph of Earth, most of what you see is the big, blue ocean—after all, the ocean covers 71% of our planet. In a photograph or on a map, it may not look like the ocean moves very much, but the opposite is actually true. The water in the ocean is always

The ocean covers 71% of Earth and is in constant motion. The movement of the ocean carries energy and objects wherever it goes.

Amplify.



Explicit instruction in reading 56 times in each course x 3 years = at least 170 opportunities to practice

Active Reading in middle school science

A typical Active Reading sequence

First Read	Second Read	Third Read
Independent, followed by paired and whole class discussion	Reading for a teacher-directed purpose, followed by a paired, complementary activity	Diving into the text for other, content-related purposes

Students read each article twice
The first read is always to annotate
(questions, connections, comments, etc.

Science and Engineering Practices

8. Obtaining, Evaluating, and Communicating Information

Subsequent reads are for a particular purpose

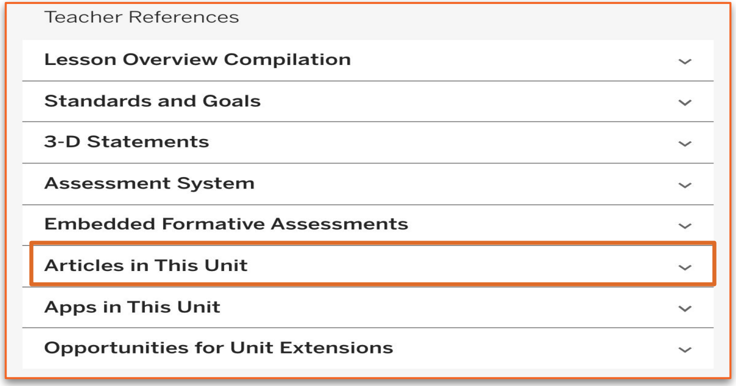
- To examine a specific visual representation
- To answer a question
- To find evidence to support a claim, or
- To draw conclusions across texts, etc.

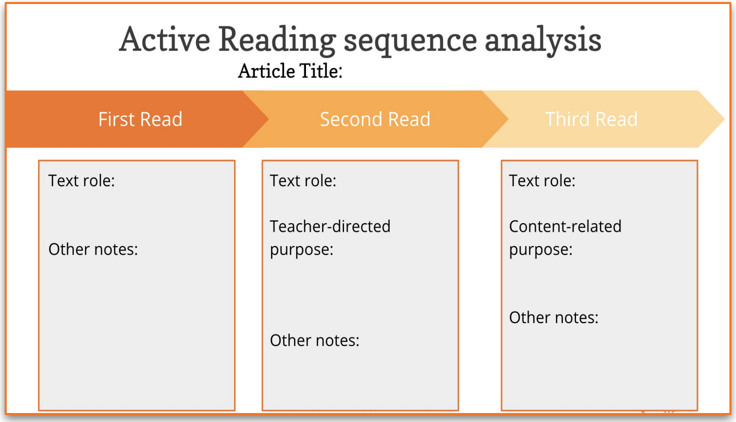
Active Reading

Analyzing an Active Reading Sequence

Directions:

- Join **breakout** room
- Navigate to the **current unit**
- Scroll down to the **Unit Guide**
- Click **Articles in This Unit**
- Choose an article & **read summary**
- Locate lessons & **analyze** active reading sequence using prompts on **collaborative slides** in groups





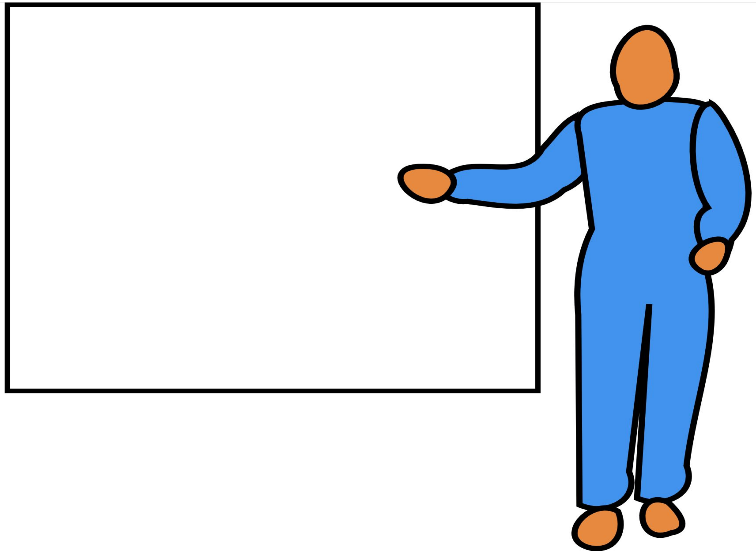
Active Reading sequence analysis

Article Title:

First Read	Second Read	Third Read
Text role: Other notes:	Text role: Teacher-directed purpose: Other notes:	Text role: Content-related purpose: Other notes:

Virtual group presentations

Summarize the key points related to the analysis of your chosen article.



Support for reading complex text

During various reading experiences

- Variety of reading experiences:
  - Short articles, homework, evidence cards, student notebook / digital platform
- Students are expected to continue using the basic components of Active Reading during these alternate reading experiences;
  - encouraged to annotate and are
  - often provided with guiding questions

Questions?

Attention to reader & task measures as an embedded support

Reader and Task Measures:

- Background, experience
- Purpose, assignment
- Motivation

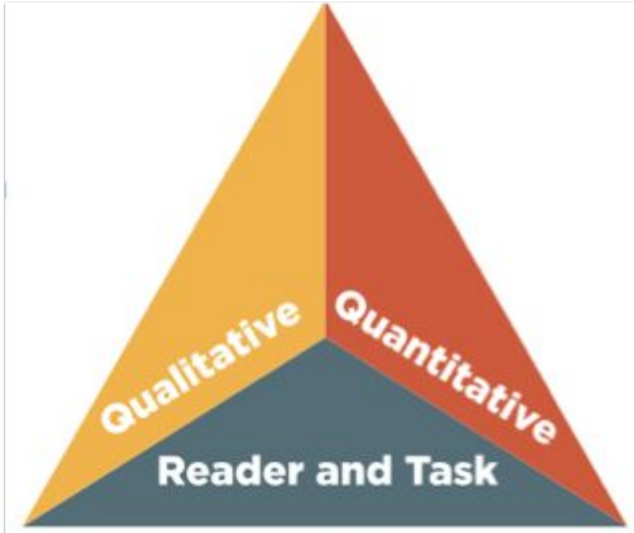


Figure 1: ...ndards' Model of Text Complexity

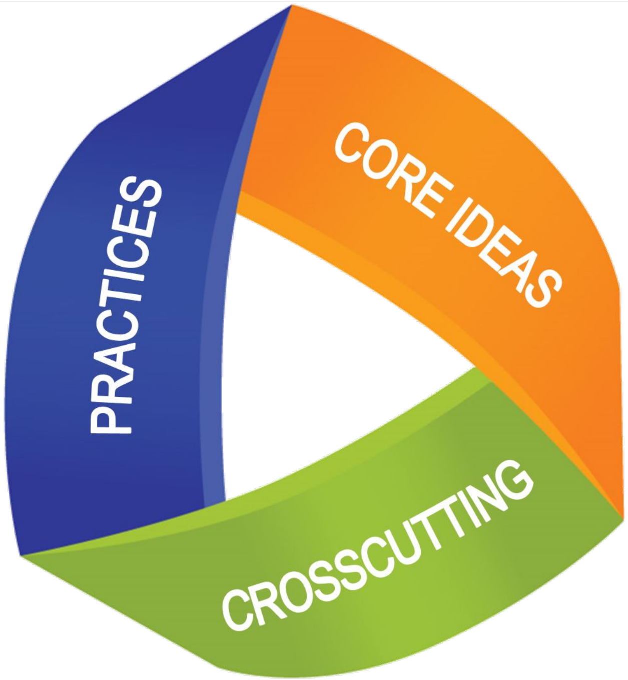
Amplify.

Our approach: Infuse disciplinary literacy practices into each unit

How?

- by paying explicit attention to the domain in which the literacy is taking place — not just science but geology or microbiology.
- by engaging students in literacy activities in each unit that are authentic to the practices of science

New York State Science Learning Standards (NYSSLS)



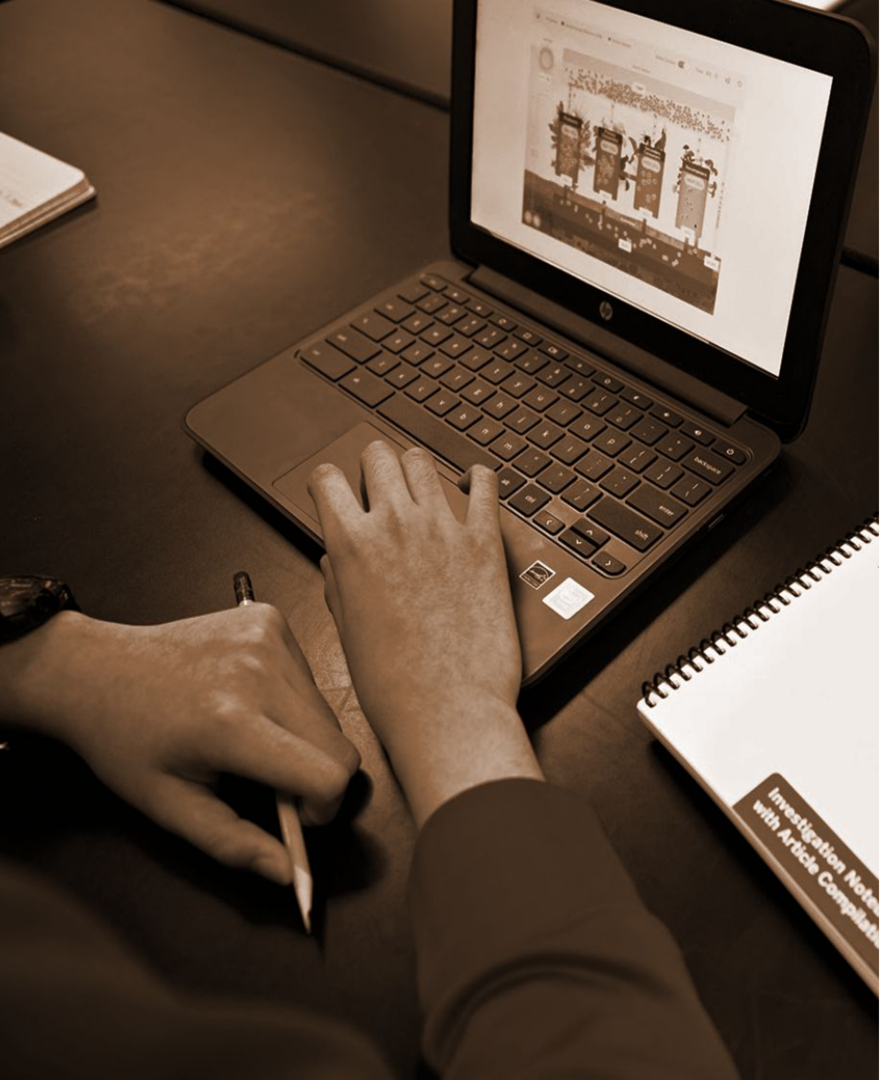
NYSSLS: Science Practices

1. Asking questions and defining problems
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 and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

NYSSLS: Science Practices

1. **Asking questions and defining problems**
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** and designing solutions
7. Engaging in argument **from evidence**
8. **Obtaining, evaluating**, and communicating information

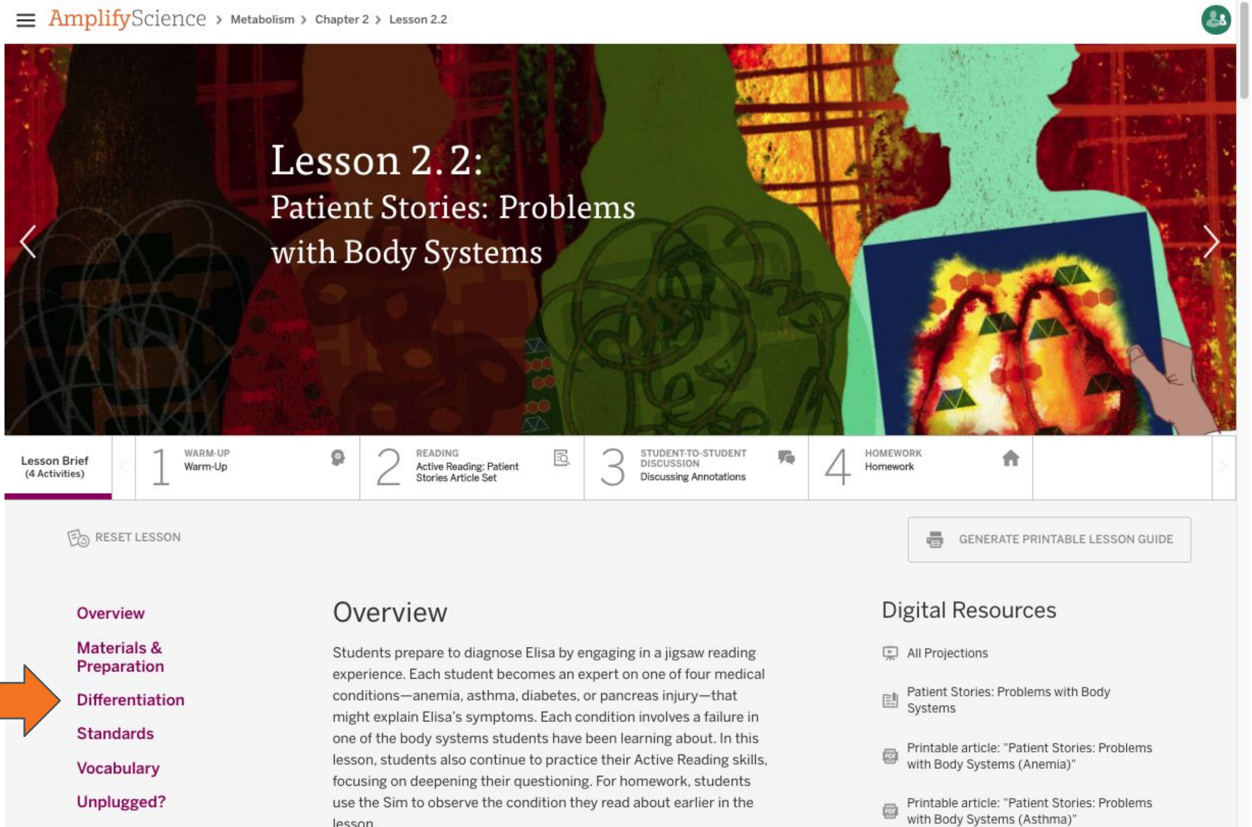
Questions?



Plan for the day

- Introduction and overview of approach
- Embedded supports in an instructional sequence
- Differentiation for reading
- Closing

Differentiation and Other Supports for Reading in Amplify Science



Differentiation Briefs

Categories of differentiation briefs

- Embedded supports for diverse learners
- Potential challenges in this lesson
- Specific differentiation strategies for:
  - English learners
  - students who need more support
  - students who need more challenge

Differentiation in Amplify Science

Lesson Brief

- Overview
- Materials & Preparation
- Differentiation
- Standards
- Vocabulary
- Unplugged?

Navigate to differentiation brief of exemplar assessment lesson. Which strategies would you utilize to support diverse learning needs?

Planning for Differentiation

Lesson #	Type of support	Instructional suggestion (summary)

Which of your students might need support? When could you provide it?

How would you use or modify the suggestion?

Analyzing Differentiation Opportunities

- Overview
- Materials & Preparation
- Differentiation
- Standards
- Vocabulary
- Unplugged?

Differentiation

Embedded Supports for Diverse Learners

Teacher modeling to support deeper reading practices. The oral teacher modeling (think aloud) of Active Reading offers support for students, as it conveys both ways of thinking about text and specific strategies for reading and annotating. This modeling also alerts students to the genre of the text (in this case, descriptive case studies of young people with various conditions).

Student-to-student discussion for making sense of the reading. The partner sharing and discussion following the independent reading provides students with an opportunity to deepen their own understanding through a purposeful conversation with their peers. Today's discussion is especially important, since students are paired with someone who read a similar article (those who read about oxygen-related conditions discuss with each other, and those who read about glucose-related conditions discuss with each other). Students have a chance to both share and expand their own understanding.

Potential Challenges in This Lesson

Reading-centered. Reading science texts is challenging, and

How is this lesson supportive of all students? What challenges do you anticipate?

Amplify.

Analyzing Differentiation Opportunities

Specific Differentiation Strategies for English Learners

Extra discussion time. Providing extended time for discussion during and after reading these articles gives English learners and other students who might need more reading support a chance to practice using new science vocabulary words and to process what they read. Having students stop part way through their reading to discuss may help some students process what they are reading more thoroughly.

***Metabolism* glossary.** Throughout this unit, you will find resources for supporting English learners in science, including a glossary in the Amplify Library that includes Spanish definitions for primary Spanish speakers. If you have English learners in your class whose primary language is Spanish, make sure to point out the glossary to them in the Digital Resources.

Specific Differentiation Strategies for Students Who Need More Support

Reveal Tool. Articles in the Amplify Library are equipped with the Reveal Tool, which allows students to click on difficult conceptual

Would the suggested additional supports in this lesson work for my remote/hybrid classroom? How can I adapt them?

Planning for Differentiation

Specific Differentiation Strategies for English Learners

Extra discussion time. Providing extended time for discussion during and after reading these articles gives English learners and other students who might need more reading support a chance to practice using new science vocabulary words and to process what they read. Having students stop part way through their reading to discuss may help some students process what they are reading more thoroughly.

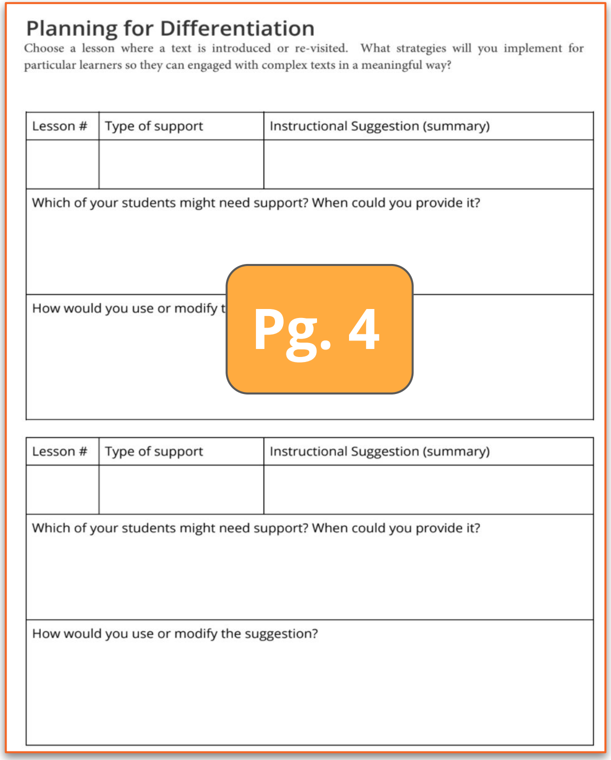
***Metabolism* glossary.** Throughout this unit, you will find resources for supporting English learners in science, including a glossary in the Amplify Library that includes Spanish definitions for primary Spanish speakers. If you have English learners in your class whose primary language is Spanish, make sure to point out the glossary to them in the Digital Resources.

Planning for Differentiation

Lesson #	Type of support	Instructional suggestion (summary)
2.2	Support for ELs	Review key vocabulary from Metabolism Multilingual glossary
Which of your students might need support? When could you provide it?		
7 students-- have them join at a back table (5 min) as others are reading independently or with a partner		
How would you use or modify the suggestion?		
• Highlight key vocabulary from the multilingual glossary that is used in the article together • Model how to use the glossary as a reference by reading and thinking aloud with the first paragraph		

Planning for differentiation in your unit

- Navigate to **2 reading lessons** you will be teaching in the next few weeks
- Navigate to and read the **Differentiation section** of the Lesson Brief(s)
- Complete the **Planning for Differentiation** for the these lessons



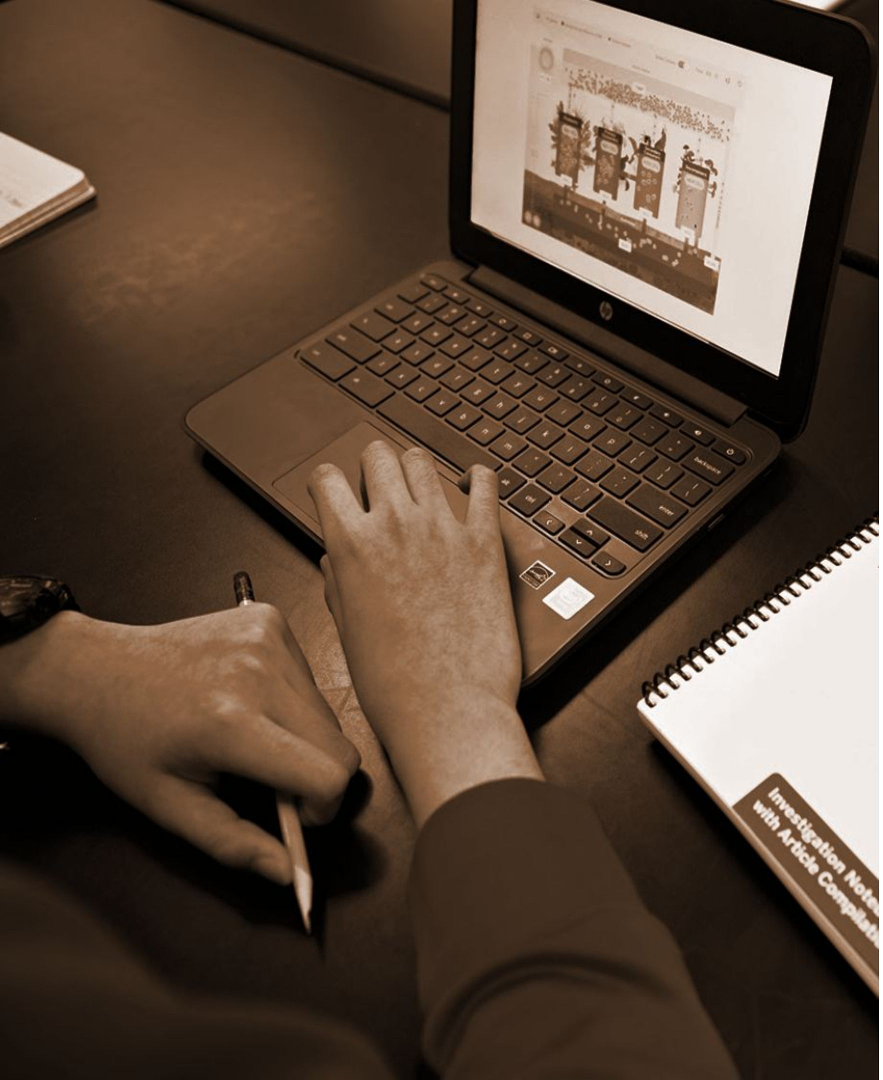
Planning for Differentiation

Choose a lesson where a text is introduced or re-visited. What strategies will you implement for particular learners so they can engaged with complex texts in a meaningful way?

Lesson #	Type of support	Instructional Suggestion (summary)
Which of your students might need support? When could you provide it?		
How would you use or modify t		

Lesson #	Type of support	Instructional Suggestion (summary)
Which of your students might need support? When could you provide it?		
How would you use or modify the suggestion?		

Questions?



Plan for the day

- Introduction and overview of approach
- Embedded supports in an instructional sequence
- Differentiation for reading
- Closing

AmplifyScience@Home

A suite of resources designed to make extended remote and hybrid learning easier for teachers and students.




Temperature Check

Rate your comfort level accessing and navigating the Amplify Science @Home resources

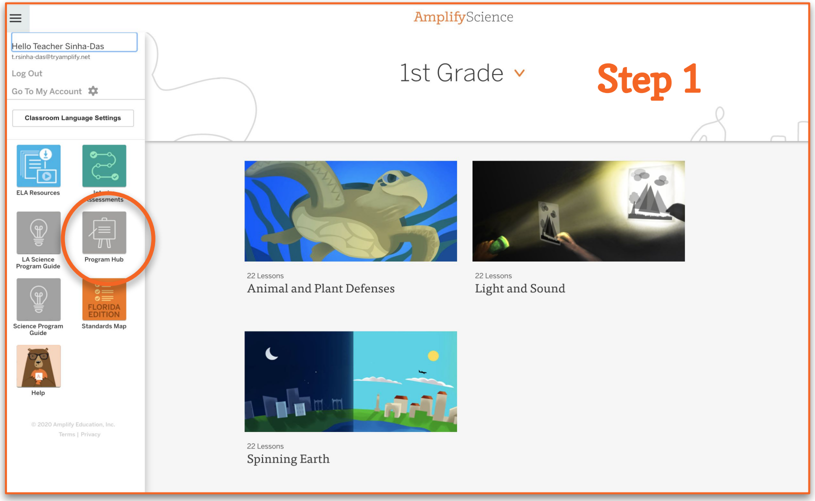
1 = Extremely Uncomfortable

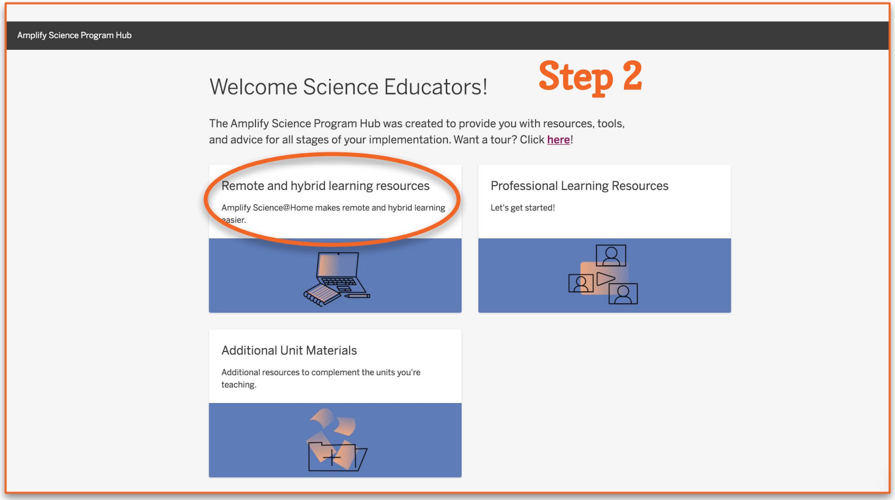
2 = Uncomfortable

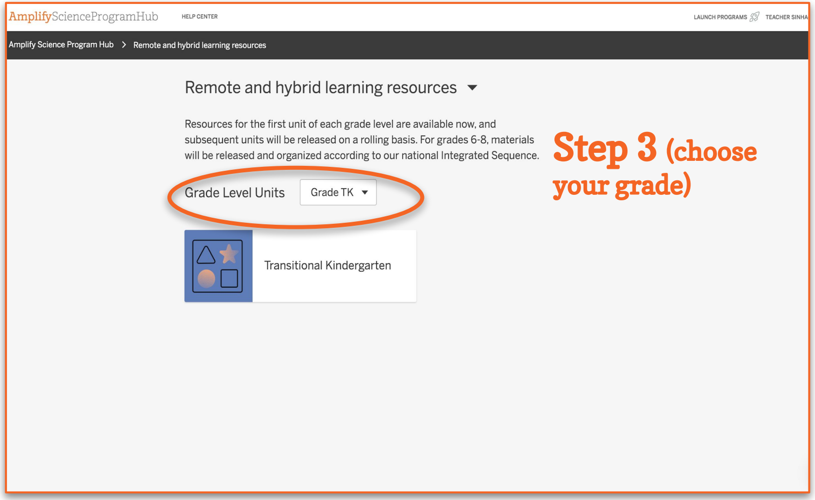
3 = Mild

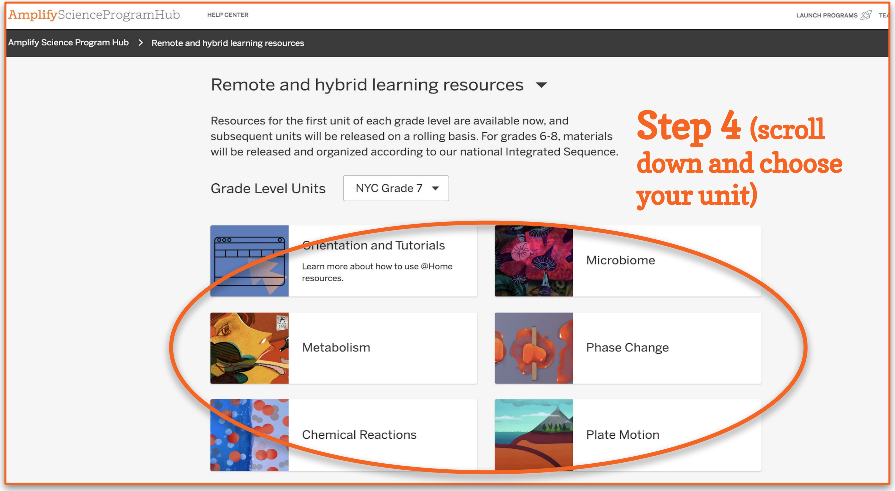
4 = Comfortable

5 = Extremely Comfortable


AmplifyScience
Hello Teacher Sinha-Das
t.rsinha-das@tryamplify.net
Log Out
Go To My Account
Classroom Language Settings
ELA Resources
Program Hub
LA Science Program Guide
Science Program Guide
Standards Map
Help
1st Grade
Step 1
22 Lessons
Animal and Plant Defenses
22 Lessons
Light and Sound
22 Lessons
Spinning Earth


Amplify Science Program Hub
Welcome Science Educators!
Step 2
The Amplify Science Program Hub was created to provide you with resources, tools, and advice for all stages of your implementation. Want a tour? Click here!
Remote and hybrid learning resources
Amplify Science@Home makes remote and hybrid learning easier.
Professional Learning Resources
Let's get started!
Additional Unit Materials
Additional resources to complement the units you're teaching.


AmplifyScienceProgramHub
HELP CENTER
LAUNCH PROGRAMS
Amplify Science Program Hub > Remote and hybrid learning resources
Remote and hybrid learning resources
Resources for the first unit of each grade level are available now, and subsequent units will be released on a rolling basis. For grades 6-8, materials will be released and organized according to our national Integrated Sequence.
Step 3 (choose your grade)
Grade Level Units
Grade TK
Transitional Kindergarten


AmplifyScienceProgramHub
HELP CENTER
LAUNCH PROGRAMS
Amplify Science Program Hub > Remote and hybrid learning resources
Remote and hybrid learning resources
Resources for the first unit of each grade level are available now, and subsequent units will be released on a rolling basis. For grades 6-8, materials will be released and organized according to our national Integrated Sequence.
Step 4 (scroll down and choose your unit)
Grade Level Units
NYC Grade 7
Learn more about how to use @Home resources.
Microbiome
Metabolism
Phase Change
Chemical Reactions
Plate Motion

AmplifyScience@Home

- Built for a variety of instructional formats
- Digital and print-based options
- No materials required
- Available in English and Spanish (student and family materials)
- Accessible on the Amplify Science Program Hub

Remote Active Reading best practices share-out

On Jamboard, please share:

- **Strategies** you've utilized to support students' **active reading** remotely

Jamboard

Questions?

3-2-1 Reflection

3	Strategies to take away

2	Things I learned

1	Question I still have

Amplify.

Revisiting our objectives

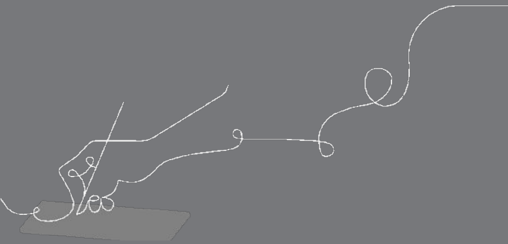
Do you feel ready to…

- Identify the different roles that text can play in figuring out science concepts.
- Describe how the Amplify Science approach to reading supports students in making sense of science ideas.
- Be ready to teach specific reading strategies for diverse learners.

1- I'm not sure how I'm going to do this!

3- I have some good ideas but still have some questions.

5- I have a solid plan for how to make this work!



Additional Amplify resources

Program Guide

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

my.amplify.com/programguide

Amplify Help

Find lots of advice and answers from the Amplify team.

my.amplify.com/help

Additional Amplify Support

Customer Care

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

scihelp@amplify.com

800-823-1969

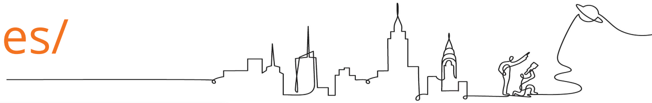
Amplify Chat

When contacting the customer care team:

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

New York City Resources Site

https://amplify.com/amplify-science-nyc-doe-resources/



Amplify.

Amplify Science Resources for NYC (K-5)

—

Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades K–5.

UPDATE: Summer 2020

Introduction

Getting started resources

Planning and implementation resources

Admin resources

Parent resources

COVID-19 Remote learning resources 2020

Professional learning resources

Questions

UPDATE: Summer 2020

Account Access: It's an exciting time for Amplify Sc
have access to the many updates and upgrades in ou
your regular credentials to login and begin your sur
curriculum until late August/early September whe
rosters from STARS.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

Upcoming PL Webinars: Join us for our Summer 2020 Professional Learning opportunities in July for NEW teachers and administrators and August for RETURNING teachers and administrators. Links to register coming soon!

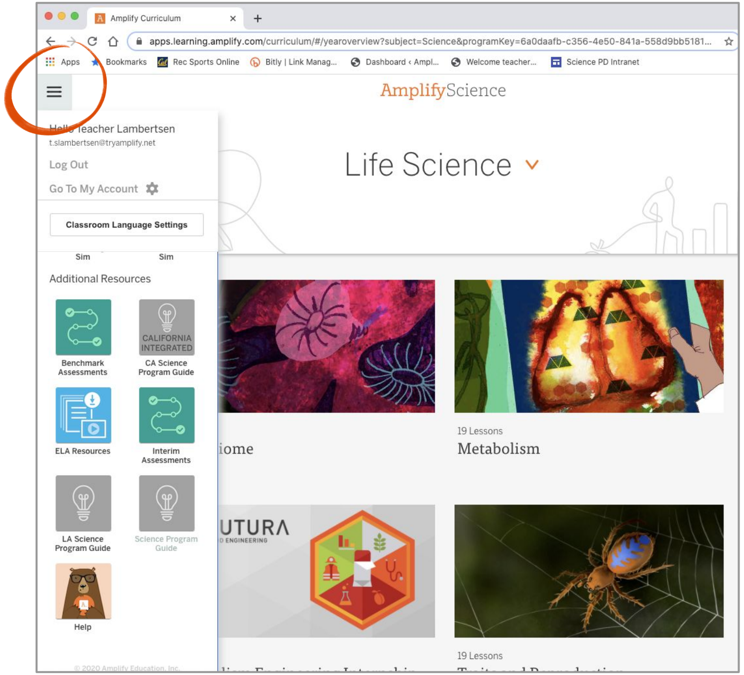
Site Resources

- Login information
- Pacing guides
- Getting started guide
- NYC Companion Lessons
- Resources from PD sessions
- And much more!

Amplify Science Program Hub

A hub for Amplify Science resources

- **Videos and resources to continue getting ready to teach**
- Amplify@Home resources
- Keep checking back for updates



Please provide us feedback!

URL: https://www.surveymonkey.com/r/BY56SBR

Presenter name: XXX