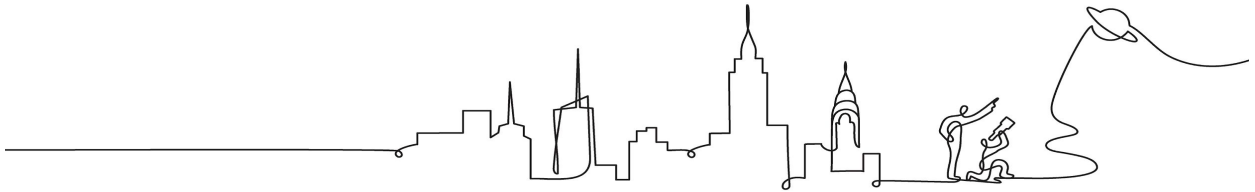
Welcome to Amplify Science!

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 name, grade level, & school you teach in.

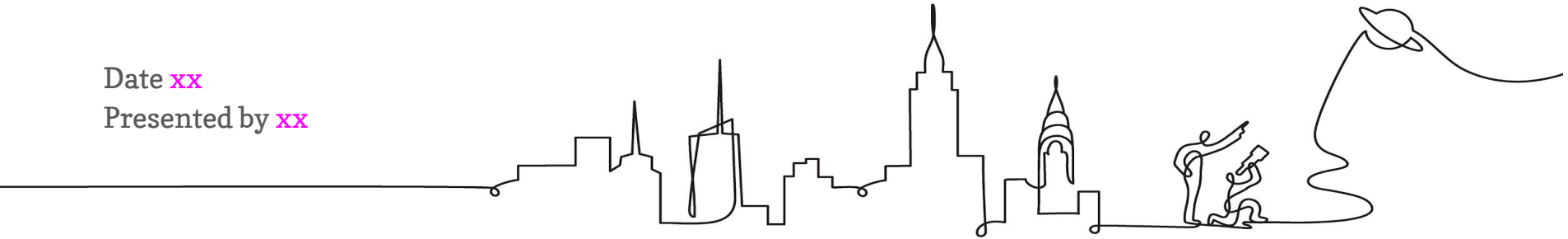


Amplify Science
New York City

Unit 3: Supporting Diverse Learner Needs

Grade 1 returning teachers

Date xx
Presented by xx



Remote Professional Learning Norms

Take some time to orient yourself to the platform

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

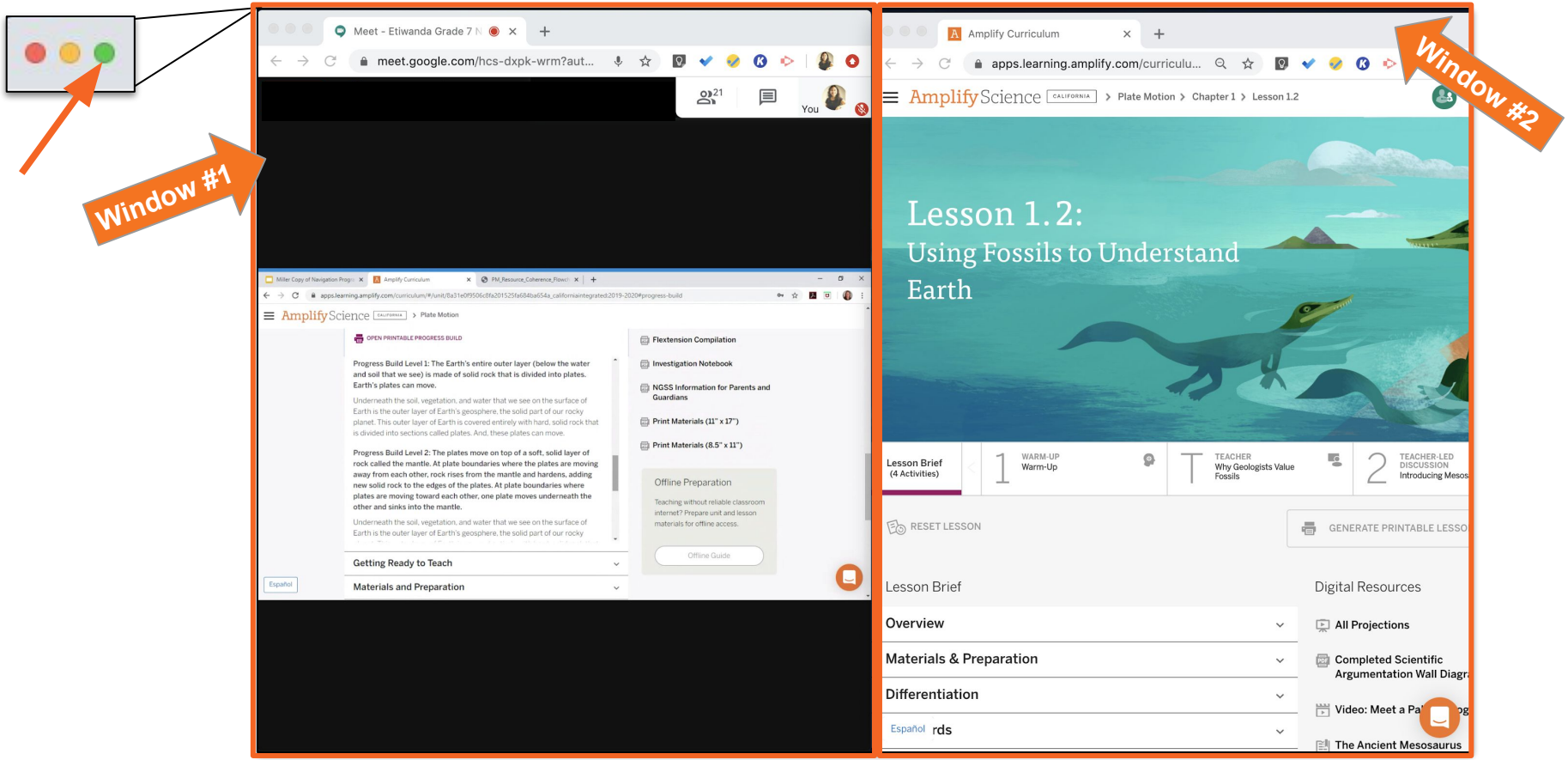
Mute your microphone to reduce background noise unless sharing with the group

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

Make sure you have a note-catcher present

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

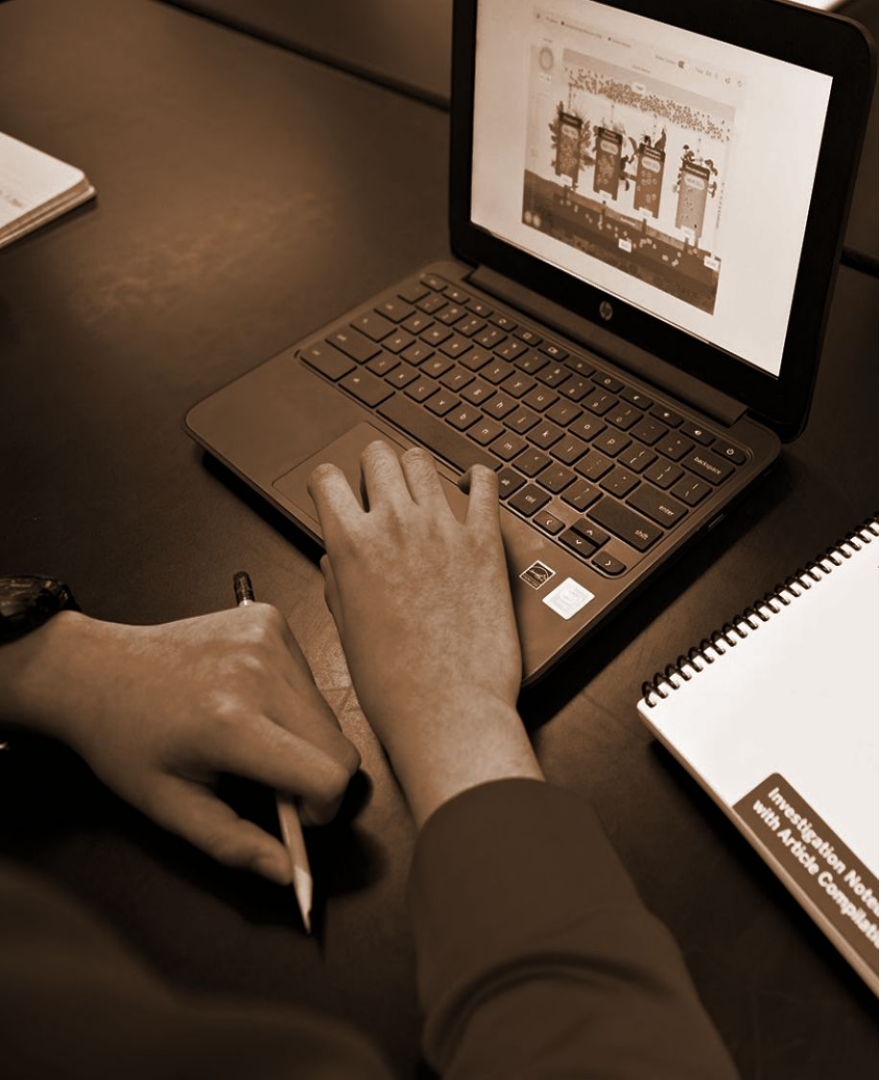
Use two windows for today's webinar



Overarching goals

By the end of this 1-hour workshop, you will be able to:

- Identify the embedded supports for diverse learner needs within your third unit.
- Understand the research-based principles that guided the creation of these supports & strategies in Amplify Science.



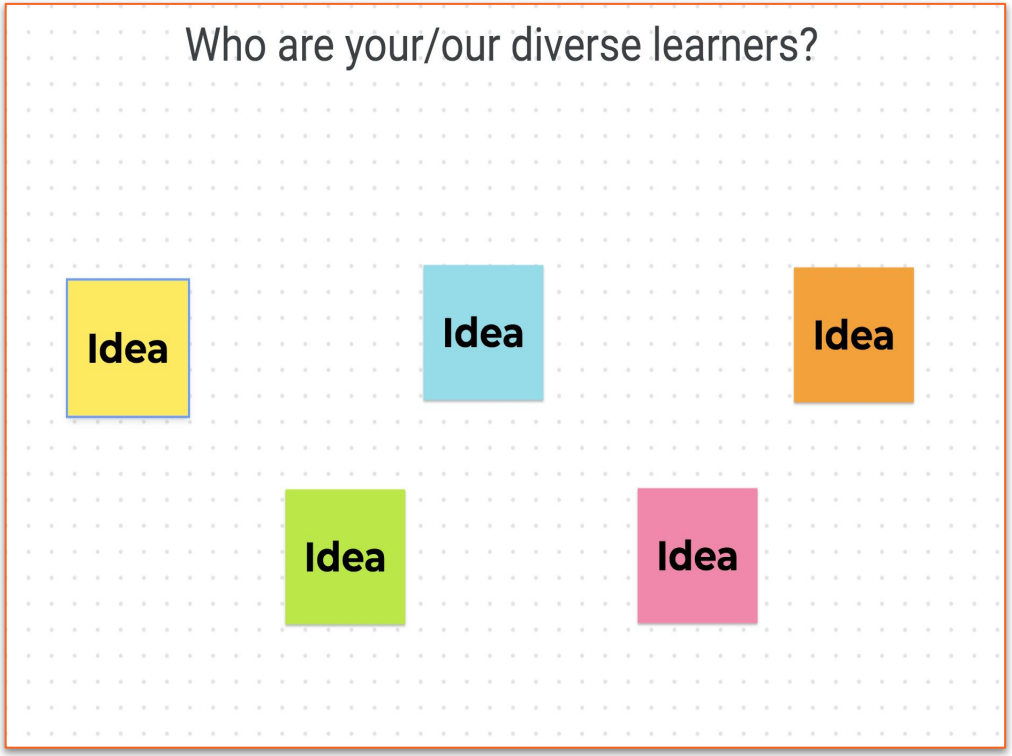
Plan for the day

- **Framing the day**
  - Welcome and introductions
  - Anticipatory activity
- Embedded supports for diverse learners
  - Research-based principles
- Analyzing an instructional sequence
  - Diverse learner profiles
  - Disciplinary literacy in science
- Multimodal instruction @home
- Closing
  - Reflection & additional resources
  - Survey

Anticipatory activity

On the Jamboard “post”….

- Your thoughts on this prompt: “Who are your/our **diverse learners**?

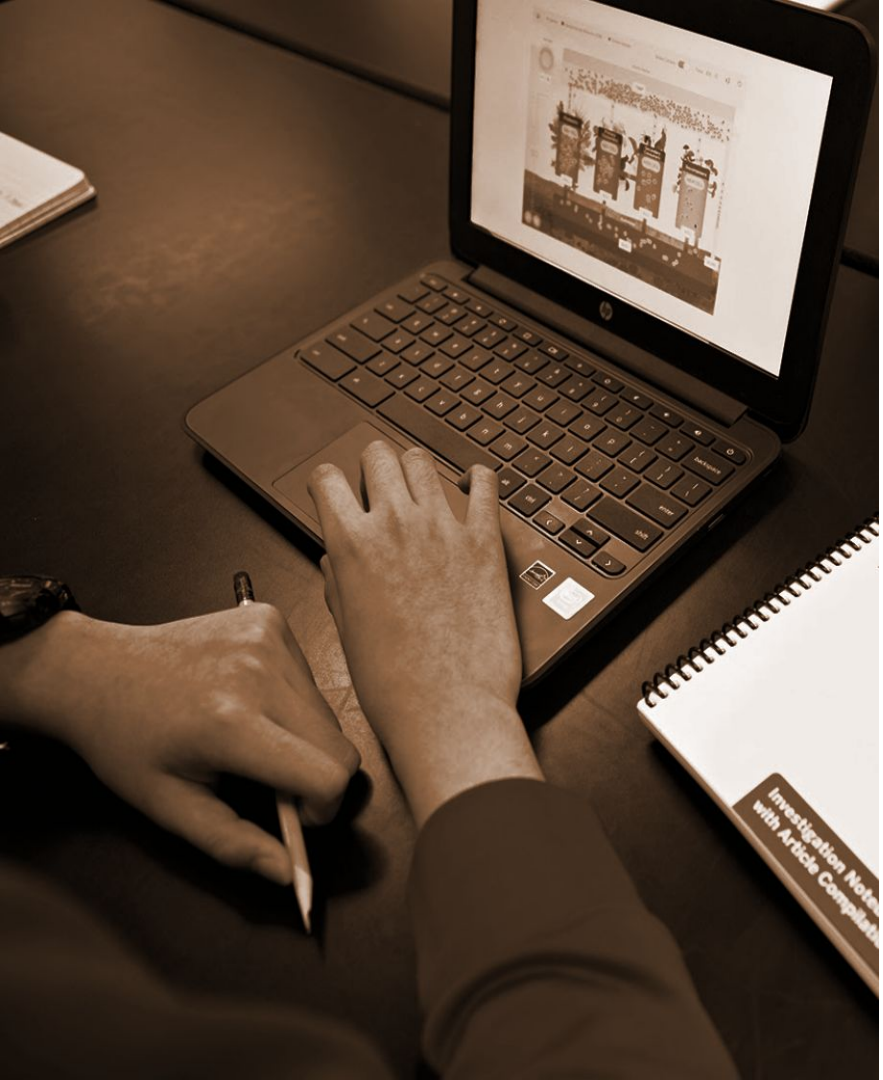


Who are our Diverse Learners?

"Diverse learning is not based on race or dependent on a deficit model. Students who are considered gifted are also diverse learners. All students are diverse and unique, in their own right. Let's agree that diverse learning recognizes that all students have unique learning needs and we educators must be prepared to provide multiple entry points for all learners to access the rigor of the goals and standards."

Anonymous Educator

Questions?



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The Amplify Science curriculum was developed with supporting diverse learning needs in mind.

Two overarching conceptual frameworks informed Amplify Science's approach to ensuring access and equity for all students:

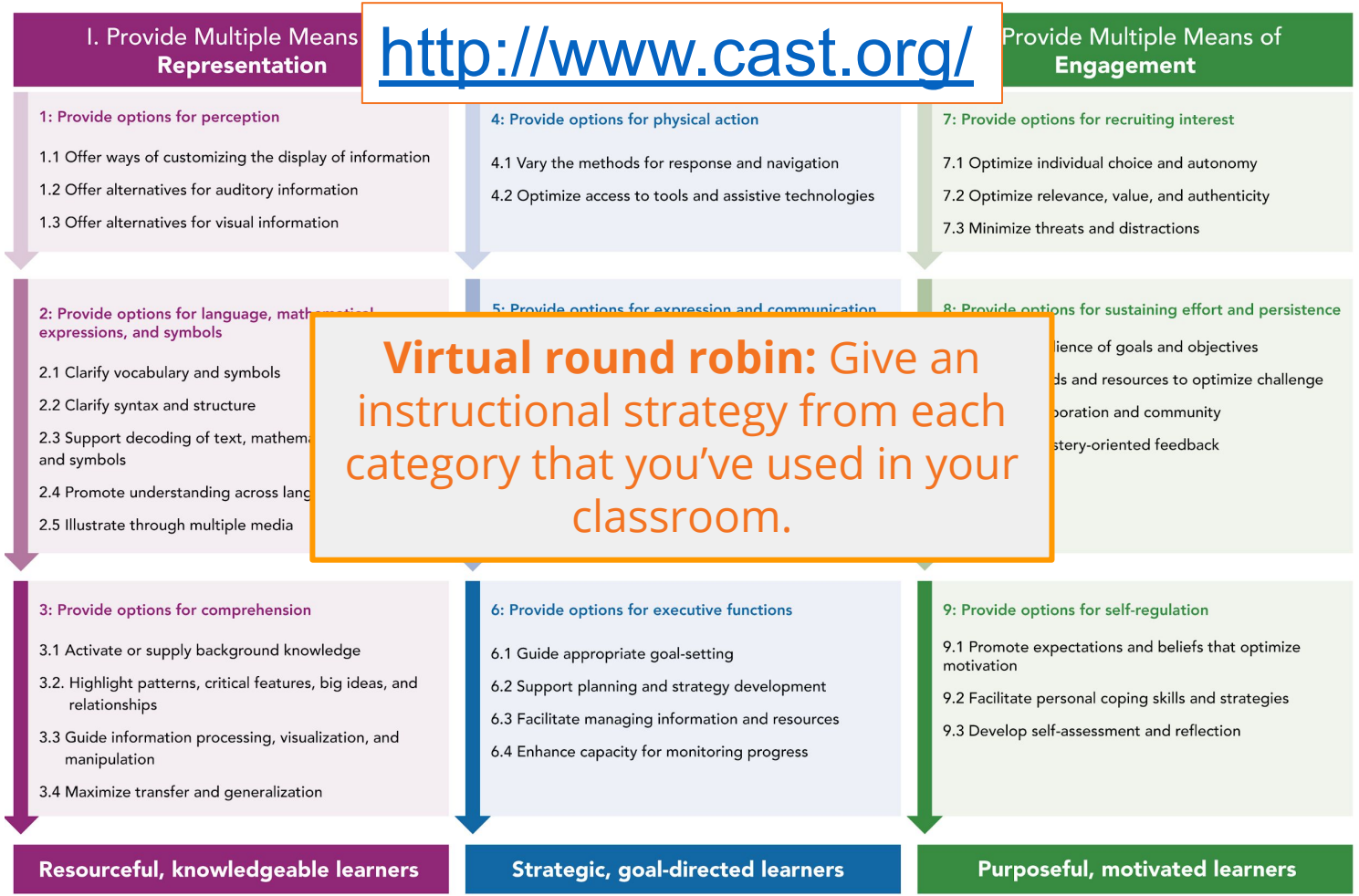
Universal Design for Learning & Culturally Linguistically Responsive Teaching.

Universal Design for Learning

Universal Design for Learning (UDL) is a **research-based framework** for improving student learning experiences and outcomes by **focusing on careful instructional planning to meet the varied needs of students.** UDL is **NOT a special-education initiative**. Through the UDL framework, the **needs of ALL learners are considered** and planned for at the point of first teaching, thereby **reducing the need to reteach concepts.**

Universal Design for Learning Guidelines

http://www.cast.org/



Virtual round robin: Give an instructional strategy from each category that you've used in your classroom.

Culturally and linguistically responsive teaching

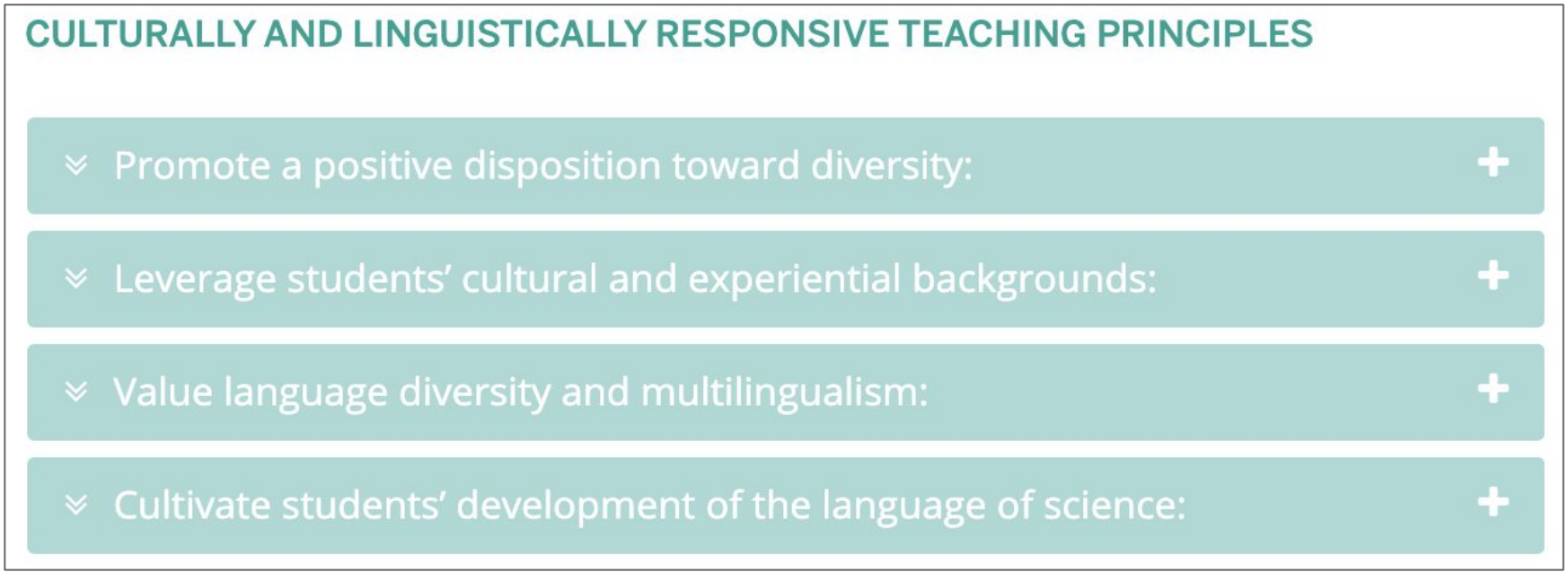
Culturally and linguistically responsive teaching (CLRT) principles **emphasize validating and valuing students' cultural and linguistic heritage** and **creating positive and nurturing learning environments** so that learning is more effective.

Source: (l): Aaron Yaazie; (um): Kyle Spradley/ University of Missouri; (lm) Dr. Grace O'Connell; (ur) Jane Rigby; (lr) Tina Shelton/ John A. Burns/ University of Hawaii at Manoa

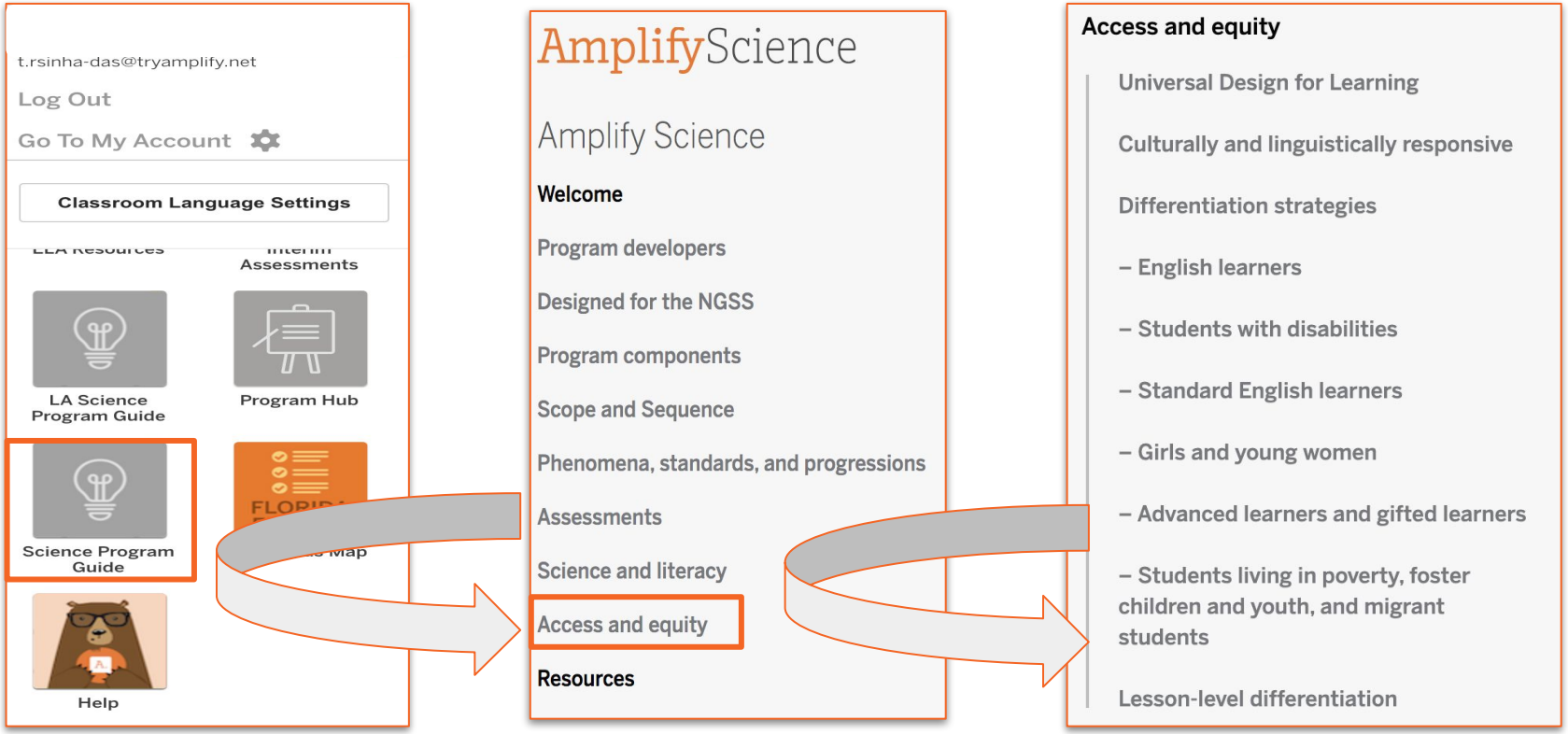
Access and Equity

Culturally and linguistically responsive teaching

Think, type, chat: What have you leveraged from the Amplify curriculum to support culturally and linguistically responsive teaching?



Differentiation strategies to support ALL students

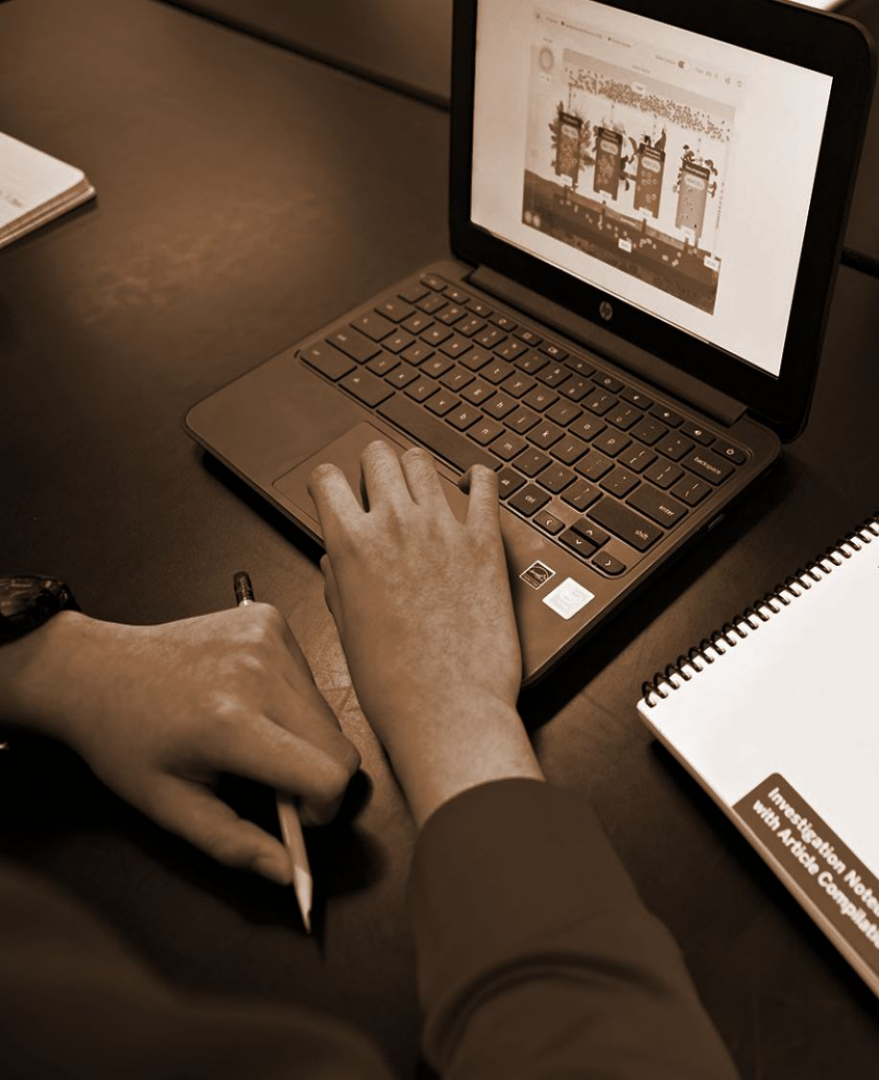


Diverse learner needs

Student population	Strategies for support
English learners	
Students with disabilities	
Standard English learners	
Girls and young women	
Advanced learners and gifted learners	
Students living in poverty, foster children and youth, and migrant students	

- In pairs, choose a **student population.**
- Jot down strategies you've read about from the **Program Guide** & those from your **own practice**.

Questions?



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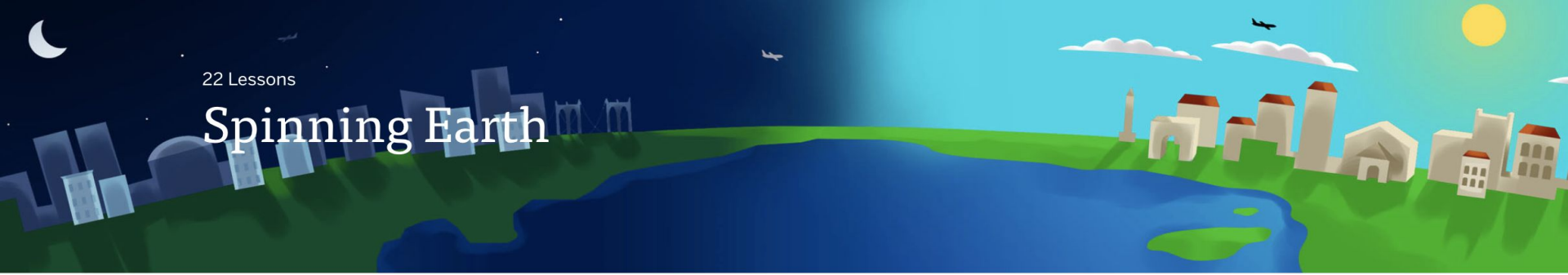
Sample student profiles

Learner A: Enjoys science and math. Loves to tell stories about her many travels and enjoys figuring out phenomena presented. While she finds verbal explanations to be sufficient, she does not find it necessary to elaborate on her ideas through emergent writing tasks.

Learner B: Enjoys reading and writing, at the requisite developmental level. When provided a written assignment, he is anxious to provide lengthy developmentally appropriate written and verbal explanations. Although this learner enjoys reading, writing and speaking, he is challenged by staying on topic.

Learner C: This new student enjoys expressing himself through art and drawings. He is not a strong reader, yet, as English is his second language. This student has strong comprehension skills and has adapted to using the classroom artifacts to help him construct written explanations, at the appropriate developmental level.

Learner D: Enjoys solving critical thinking problems and has rich science vocabulary. She works best when provided independent tasks and does not work well in collaborative group settings. She relies on step by step teacher validation and is not likely to complete a task without making sure her answer is affirmed by an adult in the room.



22 Lessons

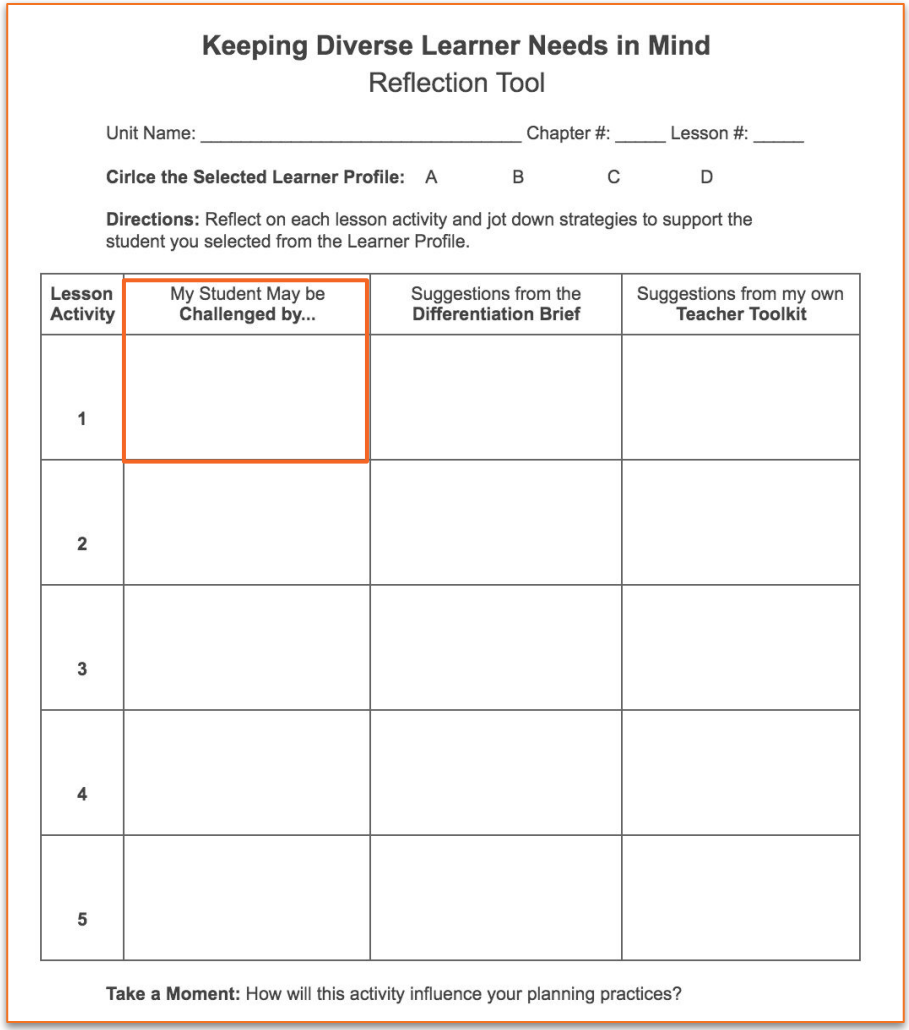
Spinning Earth

Why doesn't the sky always look the same?

As sky scientists, students explain why a boy living in a nearby place sees different things in the sky than his grandma who lives in a faraway place. Students record, organize, and analyze observations of the sun and other sky objects as they look for patterns and make sense of the cycle of daytime and nighttime.

As you experience model activity:

- Choose a **learner profile**.
- Reflect on what this student may be **challenged by**.



Keeping Diverse Learner Needs in Mind

Reflection Tool

Unit Name: _____ Chapter #: _____ Lesson #: _____

Cirlce the Selected Learner Profile: A B C D

Directions: Reflect on each lesson activity and jot down strategies to support the student you selected from the Learner Profile.

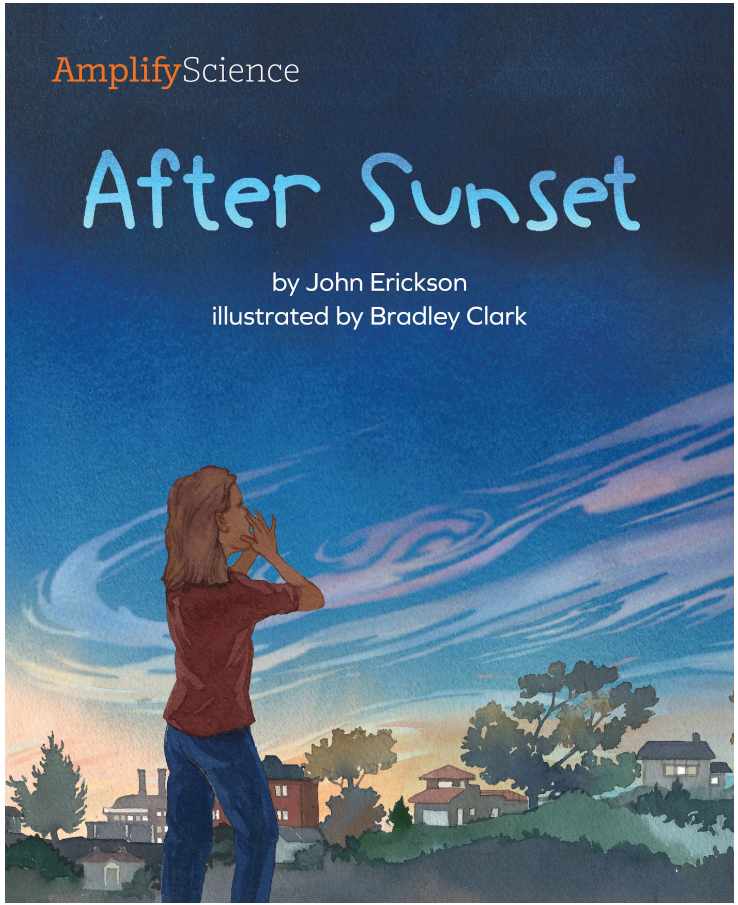
Lesson Activity	My Student May be **Challenged by...**	Suggestions from the **Differentiation Brief**	Suggestions from my own **Teacher Toolkit**
1			
2			
3			
4			
5			

Take a Moment: How will this activity influence your planning practices?

15 MIN

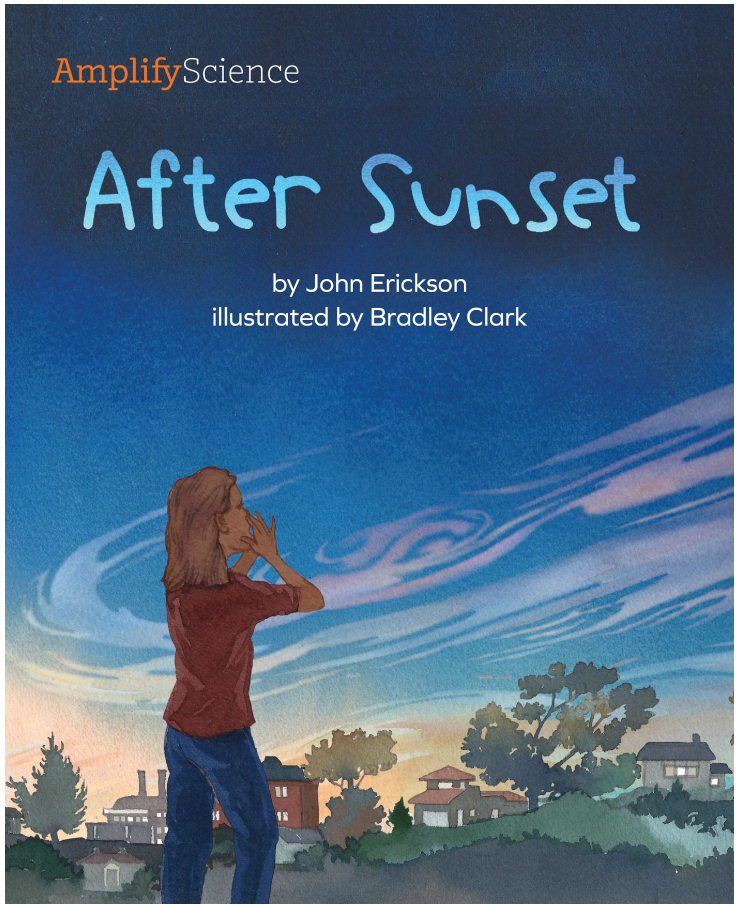
Activity 4

Reading: After Sunset



Today we will **read** a book about two kids who observe the sky, just like we did.

They make their observations when it is nighttime, after sunset.

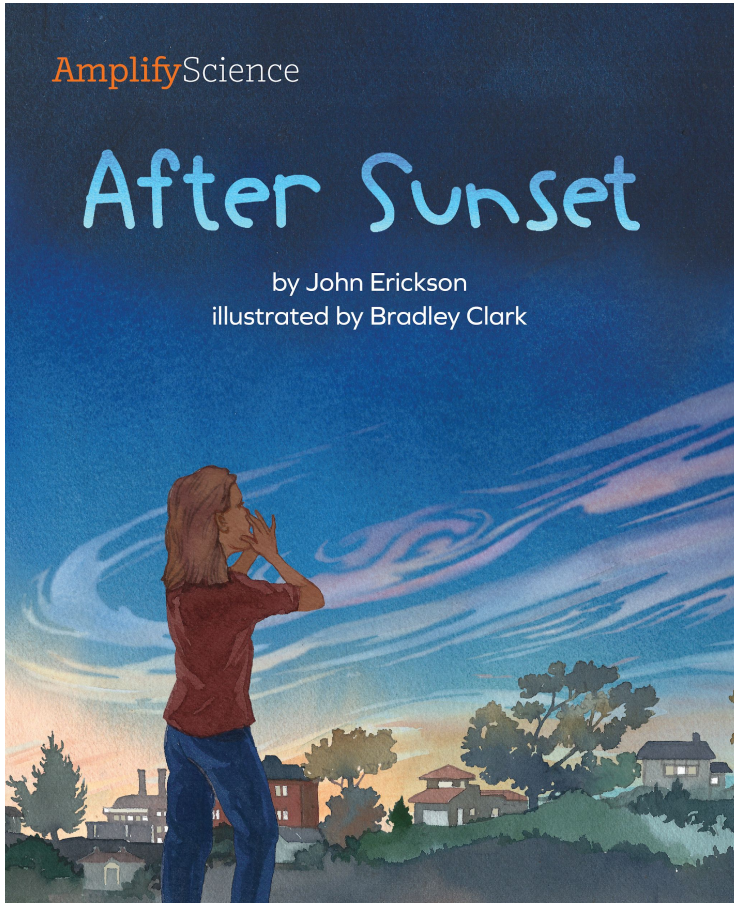


This book is called *After Sunset*.

What do you notice on the **cover** of the book?

An important way that readers learn from a book is to make **predictions.** When we make a prediction, we use what we already know to decide what we think might happen.

As we read, we can check our predictions to see if they match what we decided before we started reading.



I will use what I know to **predict** what the kids will observe after sunset.

"Hey, come watch the **sunset**," I called to my little sister.

We watched as the sky got darker. Some pigeons flew by. "I guess they're finding a place to rest for the night," I said.

"Let's go inside," said my sister. "It's getting dark, and we won't be able to see anything."

"Just wait," I said. "There's a lot to see after sunset." We watched the sky until the **sun** was below the **horizon**. A few bright **stars** appeared.

"Where do the stars come from?" my sister asked.

"The stars are just *there*," I said.

"But they weren't there a little while ago," she said.

"Is that what you think?" I asked her.

"The pigeons go rest at **nighttime** and come out in the **daytime**," she answered. "Do the stars go somewhere in the daytime and come out at nighttime?"

I said, "The stars are hard to see in the daytime, but they are still there. When the sky is bright with sunlight, you can't see stars. When the sky gets darker, the stars look brighter. Look at the sky now!"

We could see many more stars.

As we looked up, we saw the blinking lights of an airplane.

"Airplanes aren't like stars or pigeons," said my sister. "You can see them in the daytime when the sky is bright, and you can see them at nighttime when the sky is dark."

"You're right," I answered. "Stars and pigeons and airplanes are not alike."

"But they are all things we see in the sky," my sister added.

"Where is the **Moon**?" my sister asked. "I can't see it."

"I'm not sure," I said. "But I like it when the Moon is not in the sky at night. I can see the stars better."

"Isn't the Moon in the sky every night?" she asked.

"No," I told her. "Some nights we don't see the Moon at all. Sometimes we see the Moon in the daytime instead!"

Suddenly, we saw a **streak** of light in the sky.

"Ooh. A **meteor**!" I said.

"That was cool!" she said. "Will we see another one?"

"I don't know," I told her. "I don't think you can **predict** a meteor. But I do know we'll see the Moon again one night soon."

A dark shape flew over our heads. My sister said, "Did you see that bat? You were right. There *is* a lot to see after sunset."

A dark shape flew over our heads. My sister said, "Did you see that bat? You were right. There *is* a lot to see after sunset."

The children have observed many things in the sky during the nighttime.

What else do you **predict** they will observe in the nighttime sky?

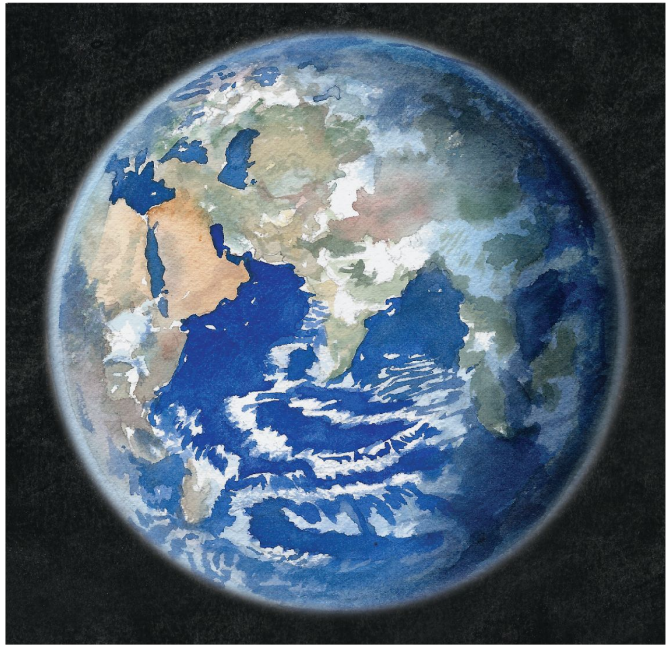
I pointed to the sky again. "Do you see that bright light?"

"Yeah," she said. "Is it a star?"

"No," I replied. "It's a **planet**. I think that one is Jupiter."

"I've heard of Jupiter," she said. "And other planets, like Venus and Mars. Can we see those?"

"I'm not sure. I don't know if they are in the sky right now." Then I remembered something. "There is one other planet that I know you can see. Look down. That's planet **Earth**!"



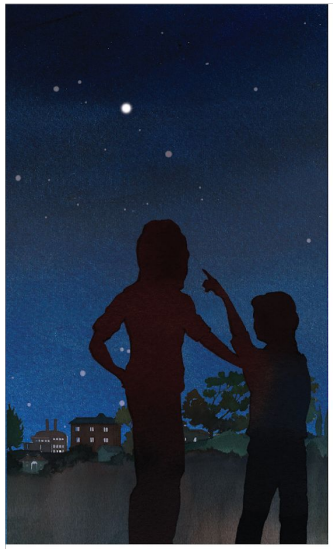
"It's funny to think that Earth is a planet," said my sister. "It's not up in the sky."

12

"Right," I said. "We are standing on Earth. But if we were in space it would look different." Then I saw something that I don't see very often. It was the perfect time to see it.

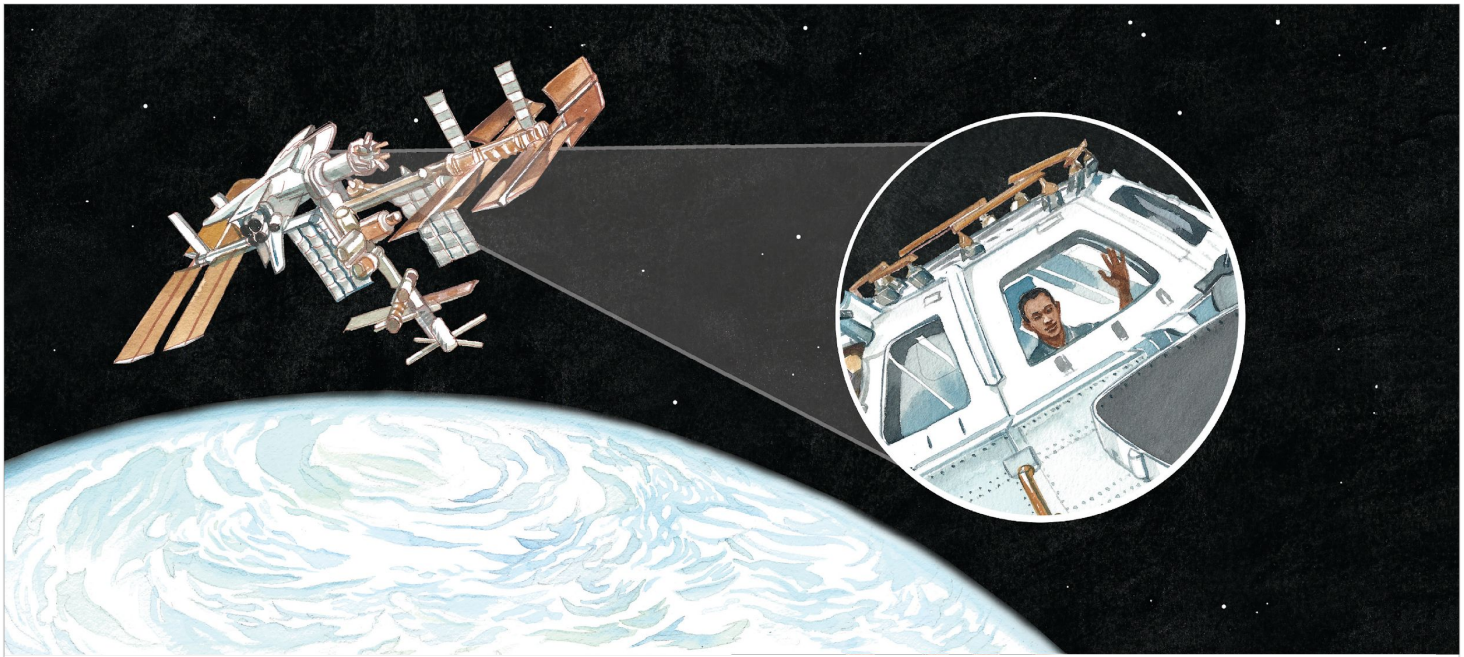
13

"This is your lucky night," I said. "Look at that bright light moving across the sky!"



"Keep watching," I said.

"It's not blinking or making any noise like an airplane. What is it?" my sister asked.



"It's a space station!" I told her. "It's farther away from Earth than any birds or airplanes. Much farther. It's so far from Earth that they can look out and see that Earth is a planet in space just like Jupiter and Mars."

"There are people up there?" she asked.

"Yes," I answered. "Rockets take people up to the space station to live."

"The space station has windows so the people can look down at Earth," I said. "They take pictures so we can see what Earth looks like from space."

My sister said, "I wonder what they see."

I pointed to the sky again. “Do you see that bright light?”

“Yeah,” she said. “Is it a star?”

“No,” I replied. “It’s a **planet**. I think that one is Jupiter.”

10

Did your **predictions** about what the kids would observe match what we read in the book?

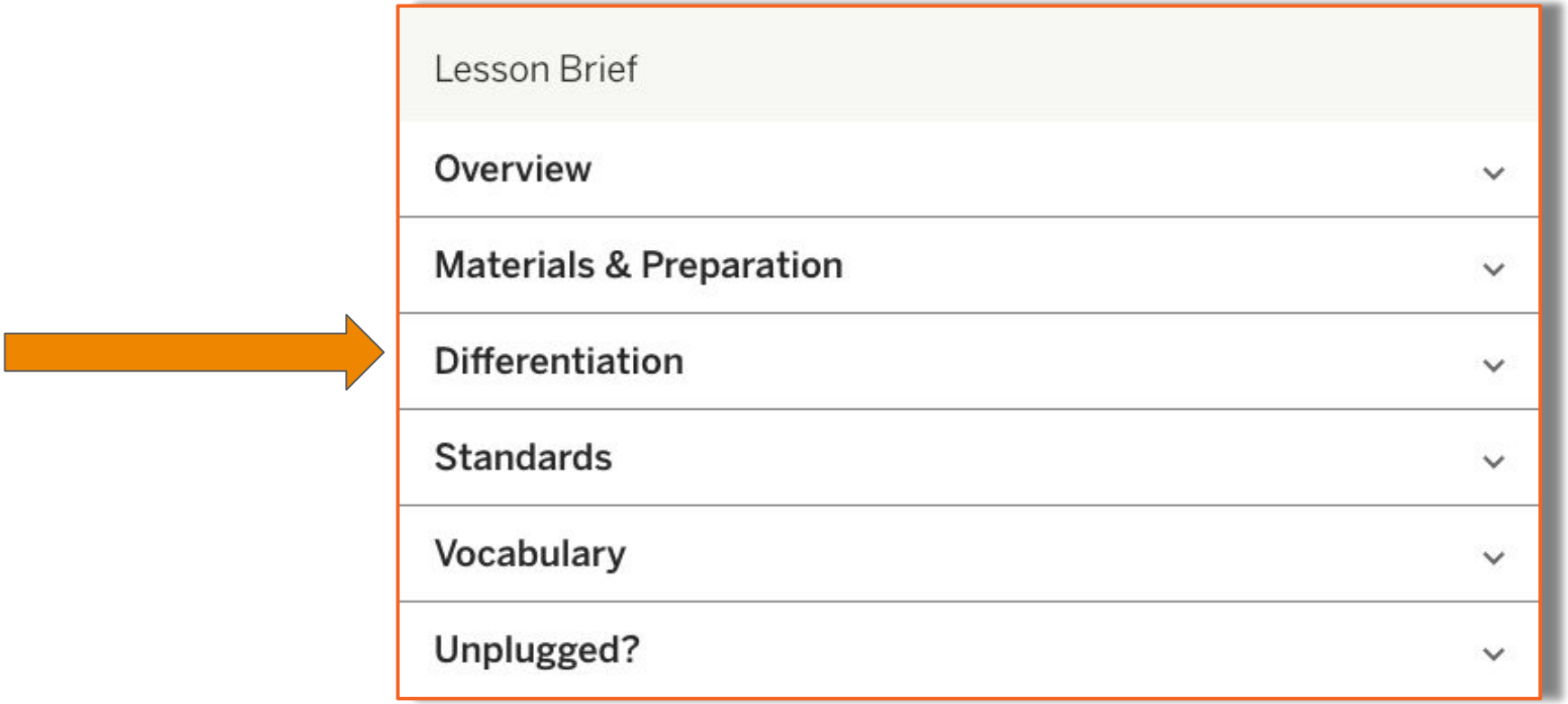
Vocabulary

predict

to use what you already know to decide what you think might happen

End of model activity

Differentiation in Amplify Science



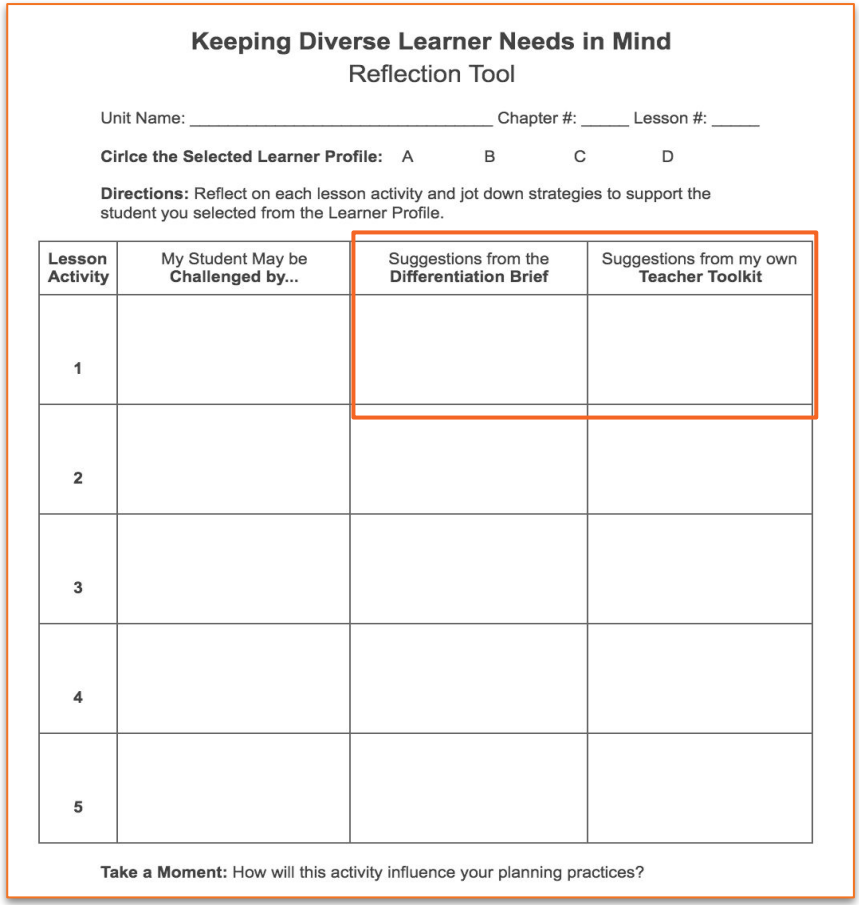
Differentiation briefs

Categories of differentiation briefs

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

Reflection part 1:

- Navigate to the **model** lesson **activity**.
- Review the **differentiation brief** and jot down notes on the **note-catcher** to describe the supports you think would would best support your **diverse learner**.



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4			
5			

Take a Moment: How will this activity influence your planning practices?

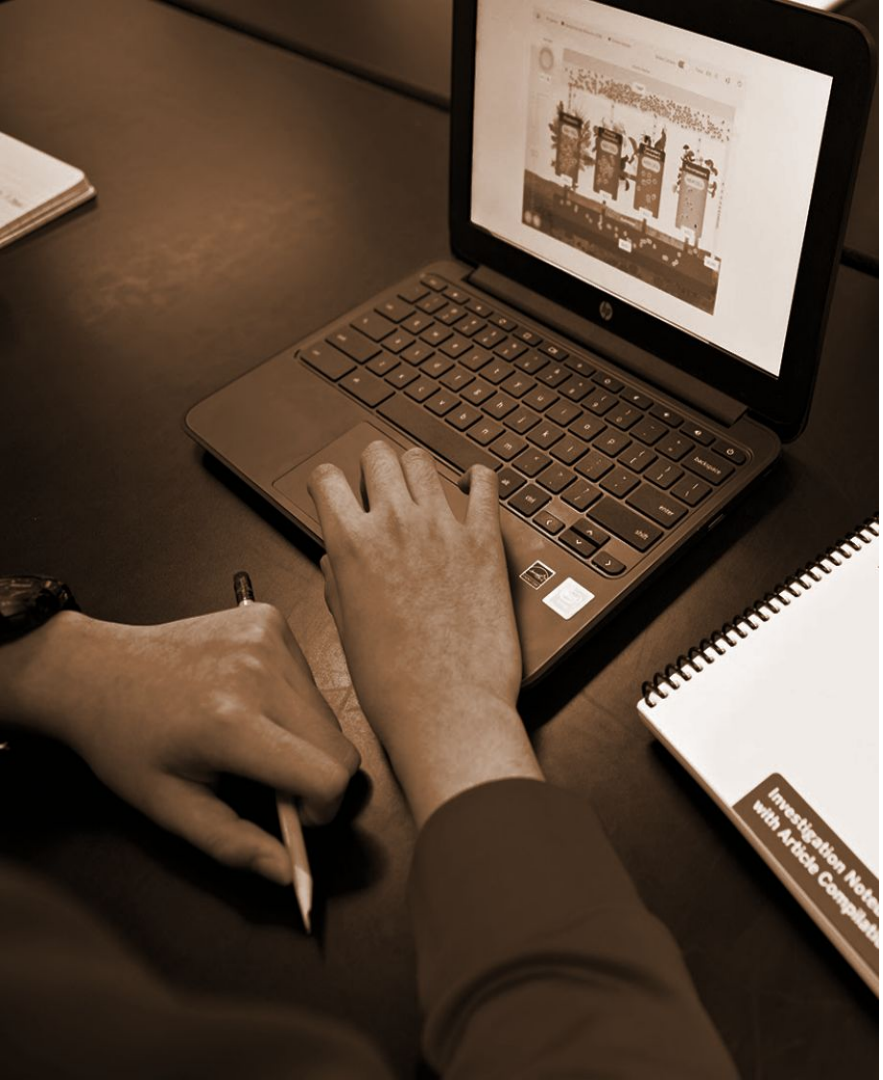
A disciplinary literacy approach to learning science

In the Amplify Science program, students l**earn to read, write, and speak as scientists do** as they acquire facility with the **academic language** and vocabulary of science. Through the **seamless integration of science and literacy instruction**, students also learn that reading, writing, and talking are **essential practices of science**, and that all scientists use these practices to gather information, communicate claims, leverage evidence, draw conclusions from data, and share their ideas through oral and written **explanations and arguments**.

Reflection part 2:

How did language & literacy help students in developing scientific understanding in the model activity?

Questions?



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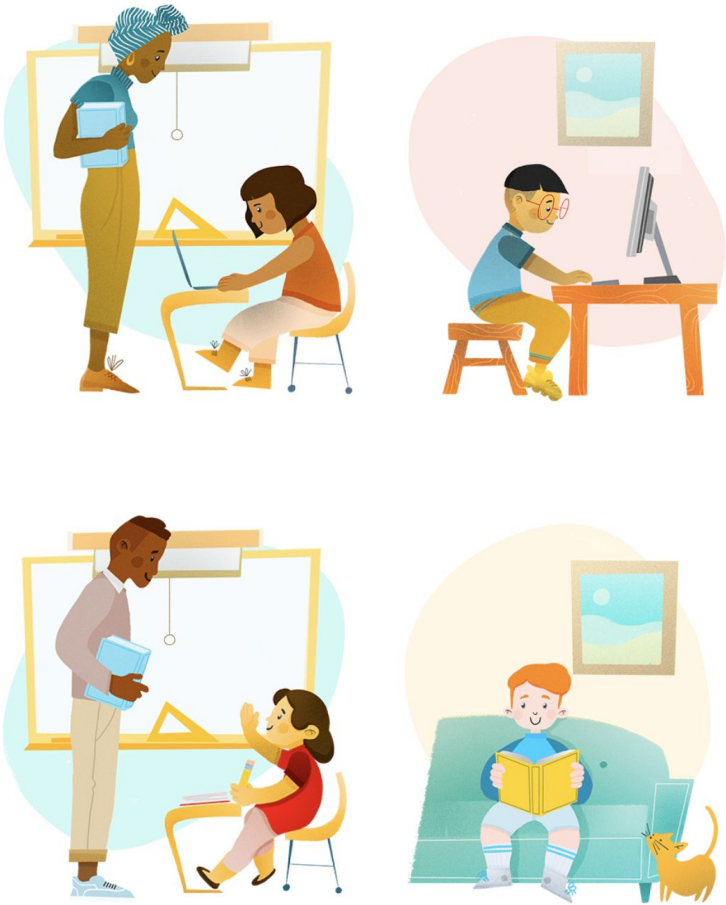
AmplifyScience@Home

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

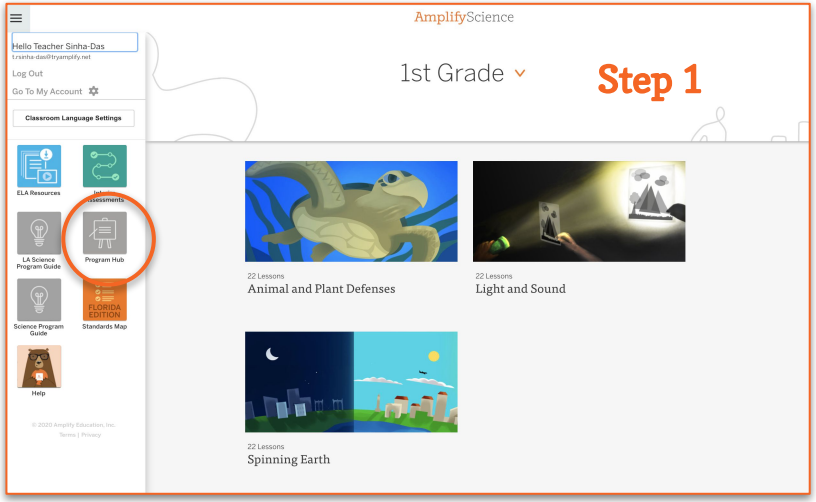
1 = Extremely Uncomfortable

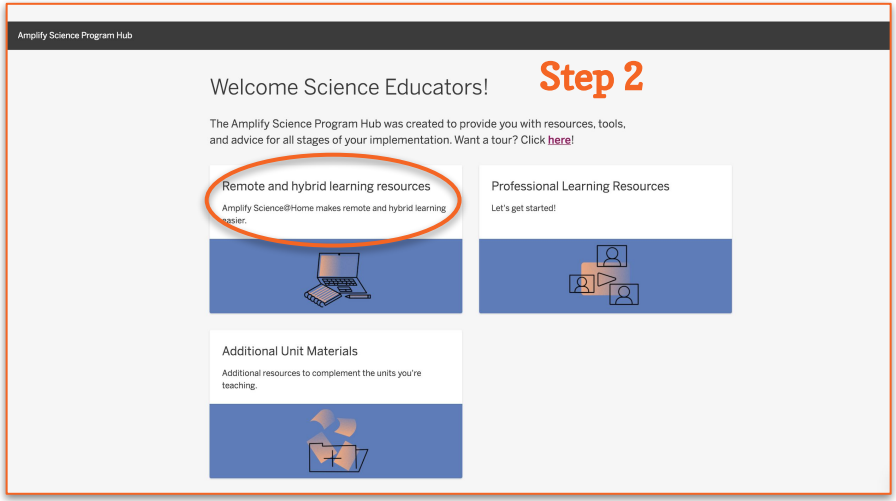
2 = Uncomfortable

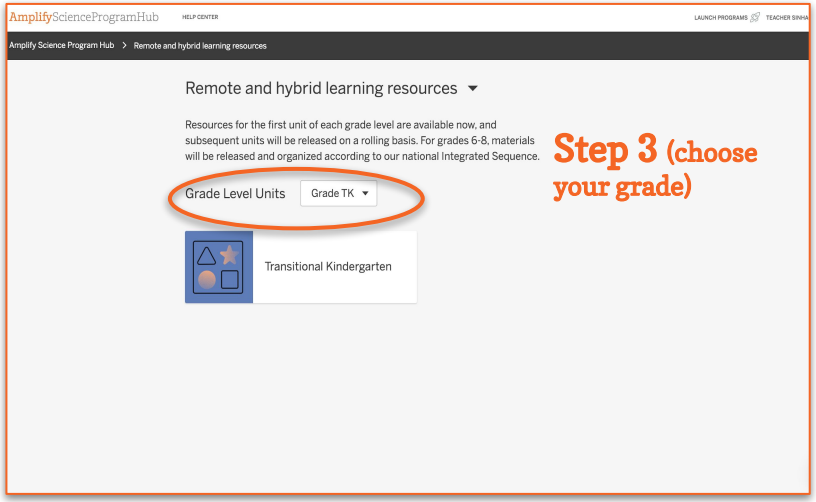
3 = Mild

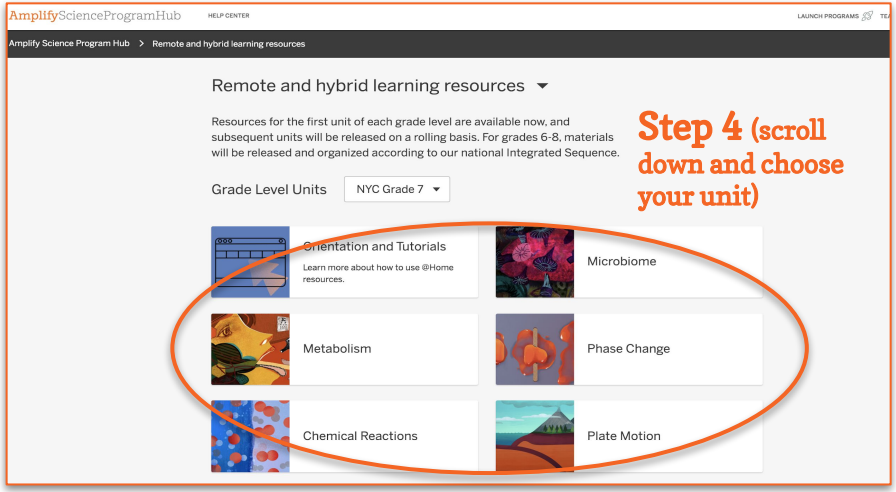
4 = Comfortable

5 = Extremely Comfortable


AmplifyScience
Hello Teacher Sinha-Das
Log Out
Go To My Account
Classroom Language Settings
ELA Resources
Program Hub
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
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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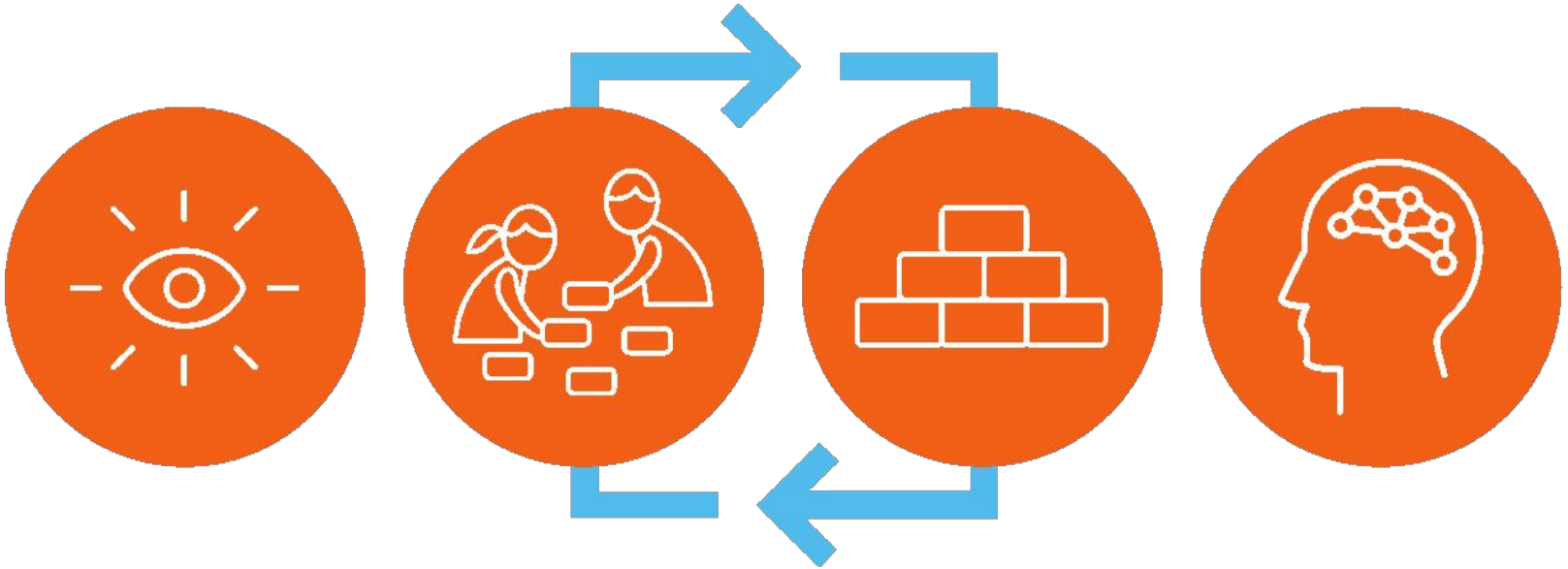
Step 4 (scroll down and choose your unit)
Grade Level Units
NYC Grade 7
Orientation and Tutorials
Learn more about how to use @Home resources.
Microbiome
Metabolism
Phase Change
Chemical Reactions
Plate Motion

Amplify Science approach



Introduce a phenomenon and a related problem

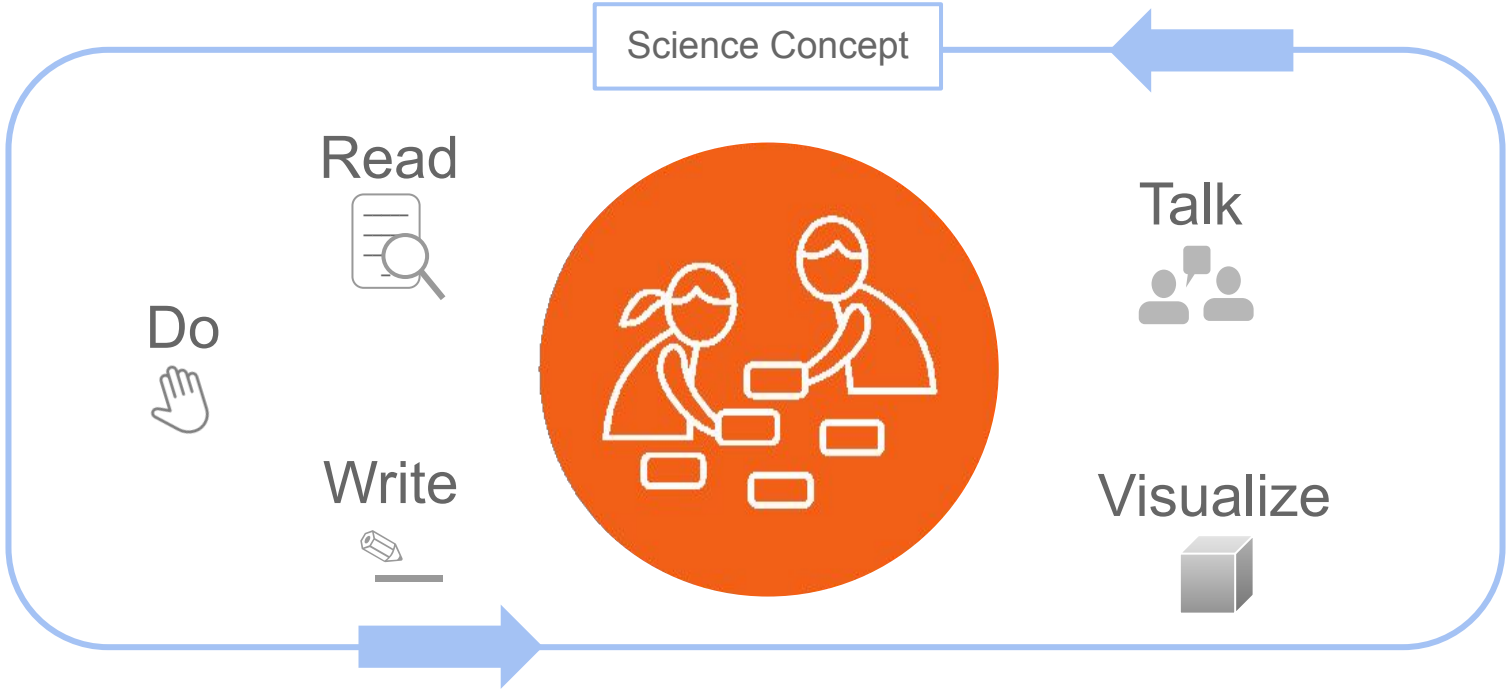
Collect evidence from multiple sources

Build increasingly complex explanations

Apply knowledge to a different context

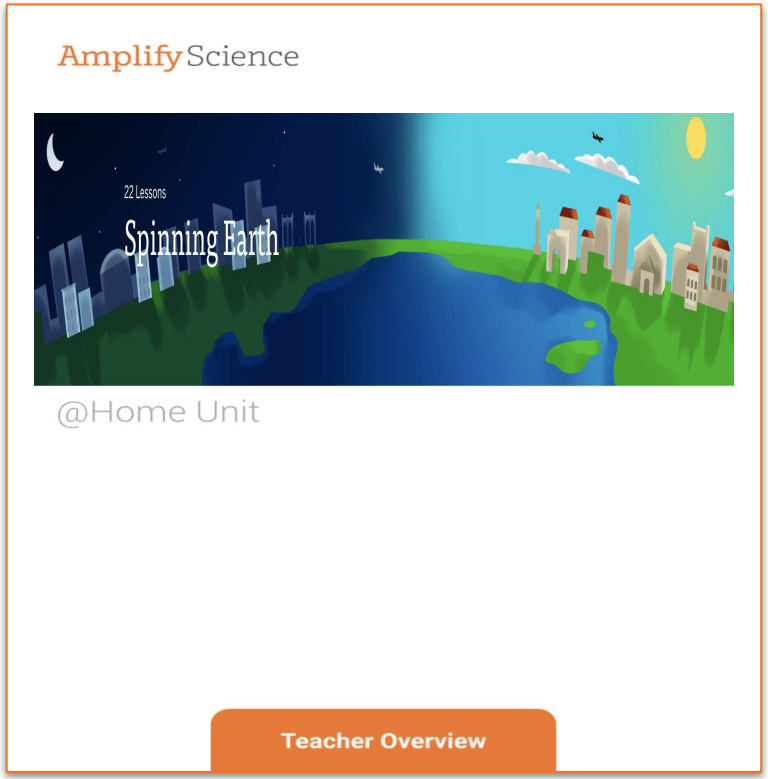
Multimodal learning

Gathering evidence from different sources



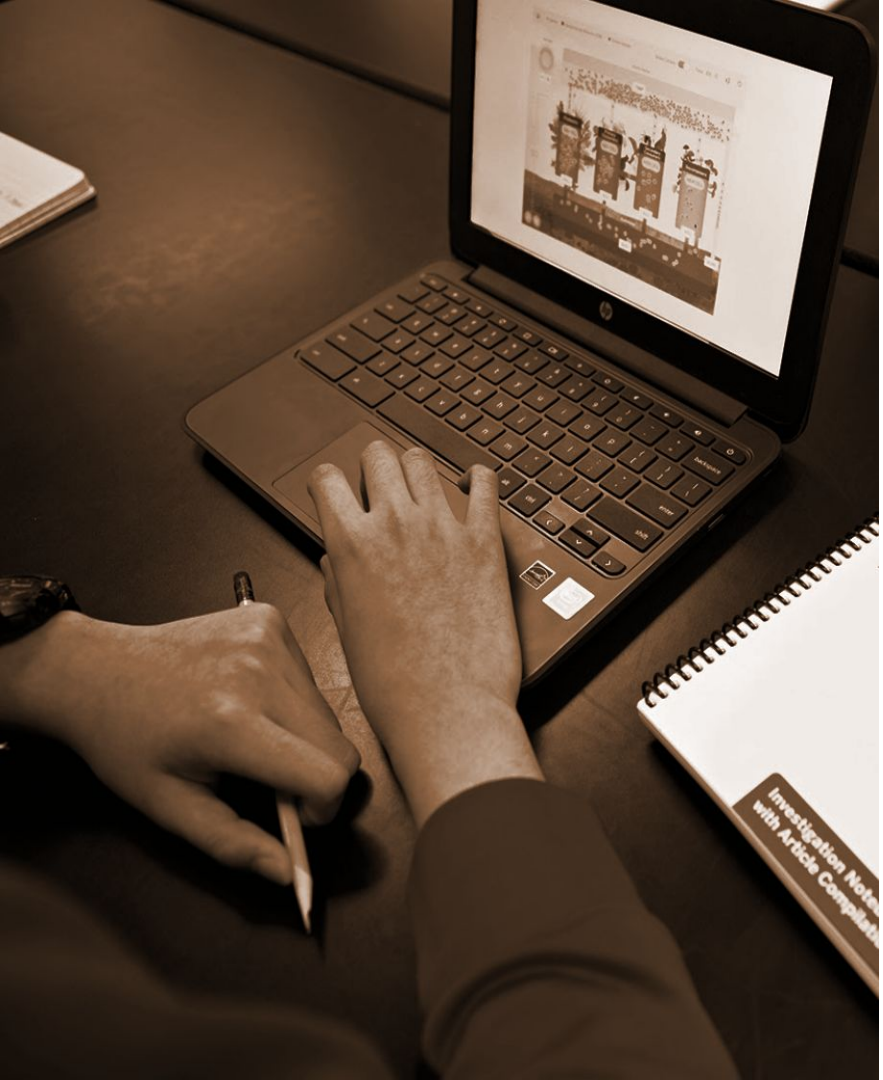
@Home units diverse learner supports

The multimodal approach



- Preserves a **coherent** instructional build
- Retains a **multi-modal** & **3-D** learning approach
- **Adapted** versions of doing, talking, reading, and writing

Questions?



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Revisiting our objectives

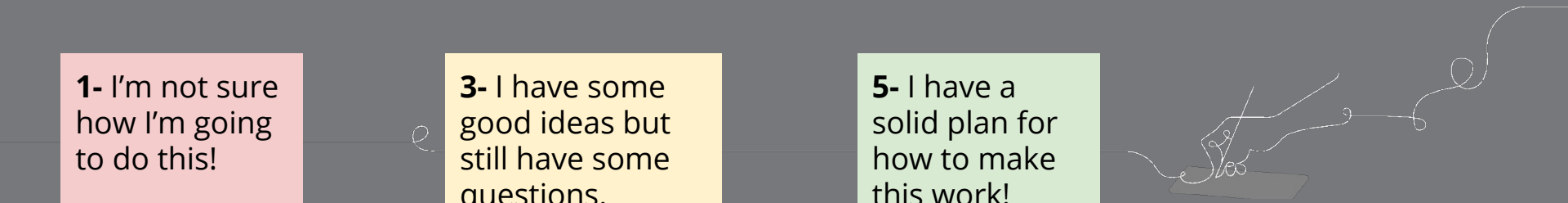
Do you feel ready to...

- Identify the embedded supports for diverse learner needs within your third unit.
- Understand the research-based principles that guided the creation of these supports & strategies in Amplify Science.

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

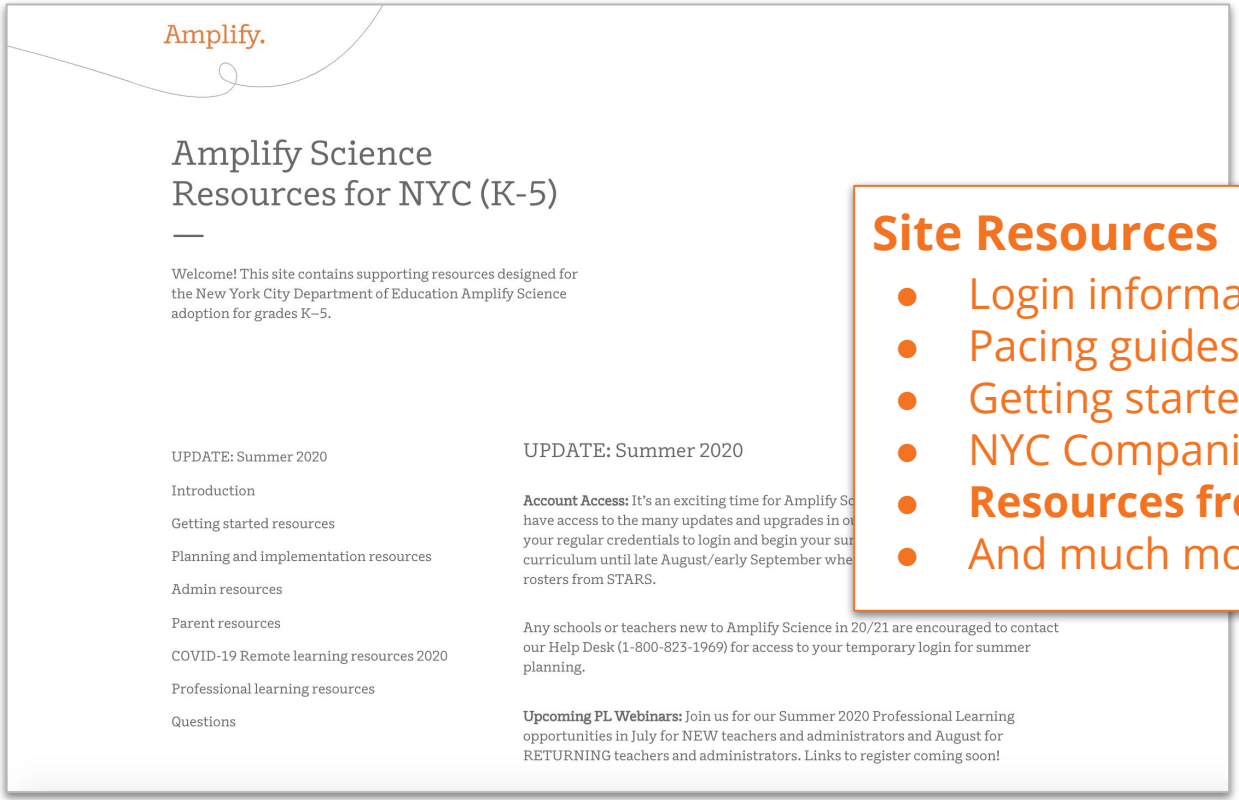
3- I have some good ideas but still have some questions.

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



New York City Resources Site

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



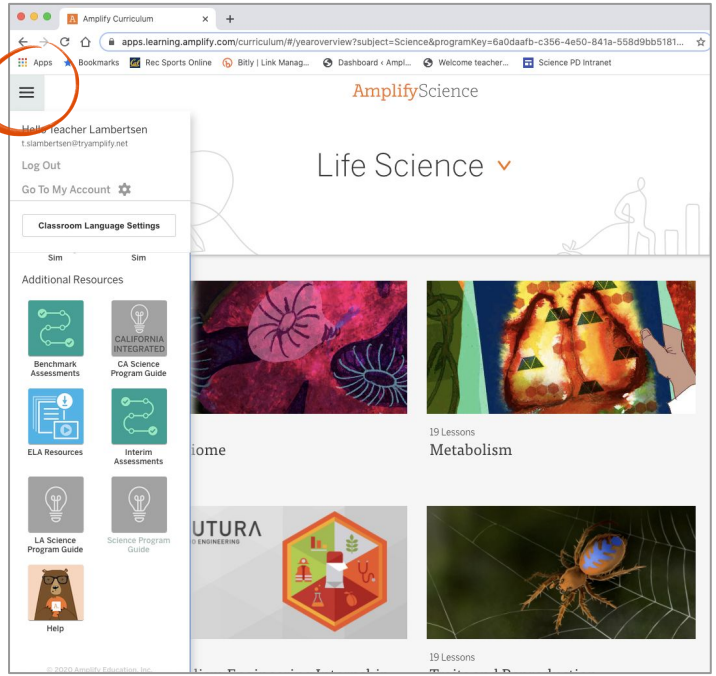
Site Resources

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

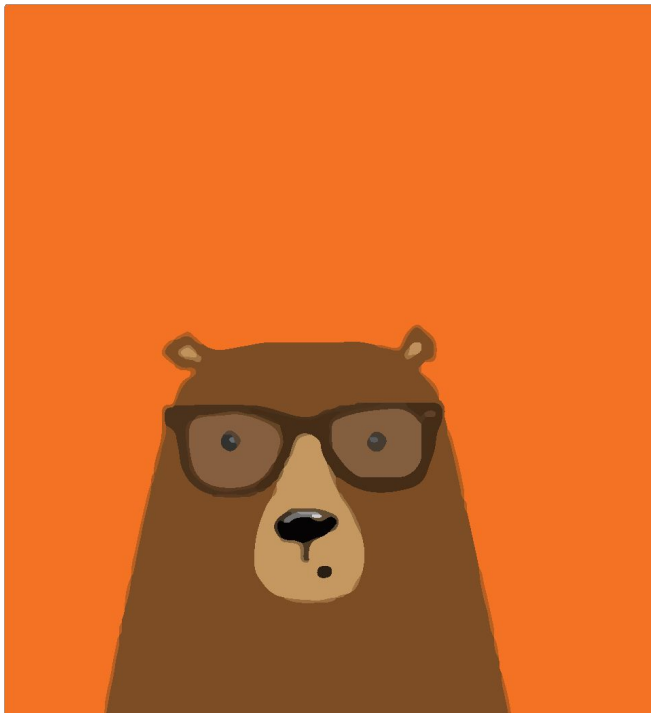
Amplify Science Program Hub

A hub for Amplify Science resources

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



Additional Amplify resources



Program Guide

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

https://my.amplify.com/programguide/content/national/welcome/science/

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:

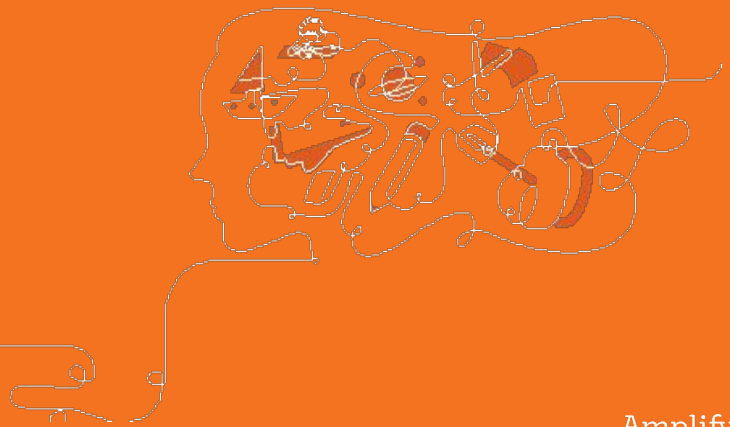
- Identify yourself as an Amplify Science user.
- Note the unit you are teaching.
- Note the type of device you are using (Chromebook, iPad, Windows, laptop).
- Note the web browser you are using (Chrome or Safari).
- Include a screenshot of the problem, if possible.
- Copy your district or site IT contact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

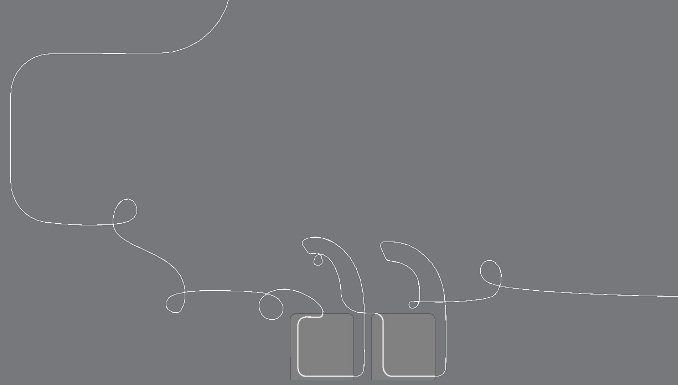

Final Questions?

Please provide us feedback!

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

Presenter name: XXX





30 minute open office hours to follow...