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.

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Amplify Science
New York City

Unit 3: Supporting Diverse Learner Needs
Kindergarten 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!

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Use two windows for today's webinar

Window #1

Window #2

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 your/our diverse learners?

Idea

Idea

Idea

Idea

Idea
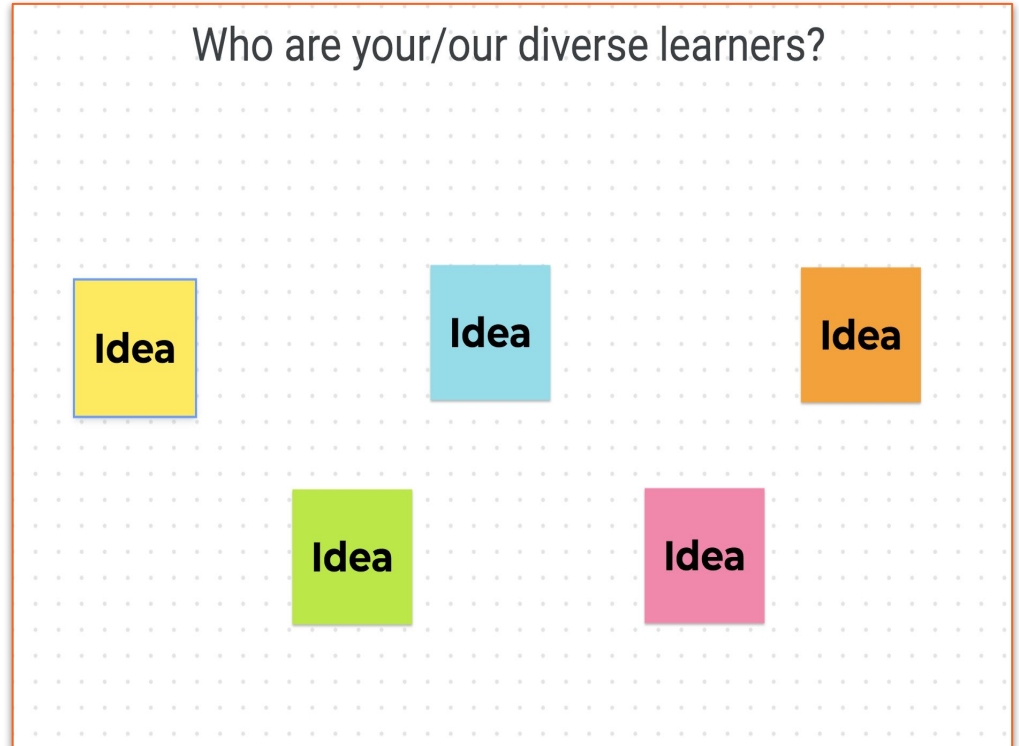
Who are our Diverse Learners?

"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?

Plan for the day

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

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/

I. Provide Multiple Means of **Representation**	II. Provide Multiple Means of	III. Provide Multiple Means of **Engagement**
1: Provide options for perception	**4: Provide options for physical action**	**7: Provide options for recruiting interest**
1.1 Offer ways of customizing the display of information	4.1 Vary the methods for response and navigation	7.1 Optimize individual choice and autonomy
1.2 Offer alternatives for auditory information	4.2 Optimize access to tools and assistive technologies	7.2 Optimize relevance, value, and authenticity
1.3 Offer alternatives for visual information		7.3 Minimize threats and distractions
2: Provide options for language, mathematical expressions, and symbols	**5: Provide options for expression and communication**	**8: Provide options for sustaining effort and persistence**
2.1 Clarify vocabulary and symbols		...lience of goals and objectives
2.2 Clarify syntax and structure		...ds and resources to optimize challenge
2.3 Support decoding of text, mathe... and symbols		...oration and community
2.4 Promote understanding across lang...		...stery-oriented feedback
2.5 Illustrate through multiple media		
3: Provide options for comprehension	**6: Provide options for executive functions**	**9: Provide options for self-regulation**
3.1 Activate or supply background knowledge	6.1 Guide appropriate goal-setting	9.1 Promote expectations and beliefs that optimize motivation
3.2. Highlight patterns, critical features, big ideas, and relationships	6.2 Support planning and strategy development	9.2 Facilitate personal coping skills and strategies
3.3 Guide information processing, visualization, and manipulation	6.3 Facilitate managing information and resources	9.3 Develop self-assessment and reflection
3.4 Maximize transfer and generalization	6.4 Enhance capacity for monitoring progress	
Resourceful, knowledgeable learners	**Strategic, goal-directed learners**	**Purposeful, motivated learners**

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

14

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

Culturally and linguistically responsive teaching

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

CULTURALLY AND LINGUISTICALLY RESPONSIVE TEACHING PRINCIPLES

⌄ Promote a positive disposition toward diversity: ＋

⌄ Leverage students' cultural and experiential backgrounds: ＋

⌄ Value language diversity and multilingualism: ＋

⌄ Cultivate students' development of the language of science: ＋

Differentiation strategies to support ALL students

t.rsinha-das@tryamplify.net

Log Out

Go To My Account ⚙

Classroom Language Settings

LLA Resources | Interim Assessments

LA Science Program Guide | Program Hub

Science Program Guide | FLORIDA

Help

AmplifyScience

Amplify Science

Welcome

Program developers

Designed for the NGSS

Program components

Scope and Sequence

Phenomena, standards, and progressions

Assessments

Science and literacy

Access and equity

Resources

Access and equity

Universal Design for Learning

Culturally and linguistically responsive

Differentiation strategies

– 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

Lesson-level differentiation

Amplify.

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?

Plan for the day

- **Framing the day**
  - Welcome and introductions
  - Anticipatory activity
- Embedded supports for diverse learners
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  - Reflection & additional resources
  - Survey

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.

Sunlight and Weather

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

The students at Woodland and Carver Elementary schools are not comfortable outside during their recess times. The Carver students are too cold in the morning, and the Woodland students are too hot in the afternoon. The school principals need student weather scientists to help them explain the difference in playground temperatures. Students gather data from models of the sun and of Earth's surface and observe their own playgrounds to figure out how sunlight causes changes in the temperature of different surfaces. Students then use models to figure out why Woodland's playground sometimes floods.

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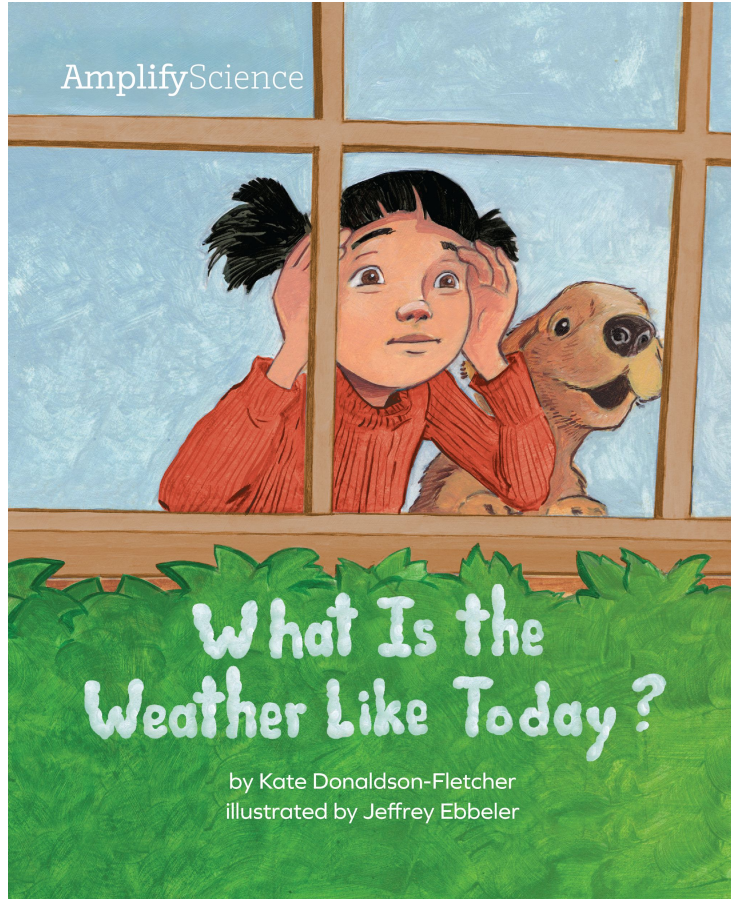
Lesson Activity	My Student May be Challenged by...	Suggestions from the Differentiation Brief	Suggestions from my own Teacher Toolkit
1			
2			
3			
4			
5			

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

Activity 2

Reading: What Is the Weather Like Today?

There are **many types of weather**.

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

Every morning, I wake up with a question.

"What is the **weather** like today?"

3

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

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

4

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

What is the weather like today?

5

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

The weather today is rainy.

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

6

I can check my **prediction.**

The weather today is rainy.

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

6

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

What is the weather like today?

7

The weather today is sunny and windy.

There are no clouds, and the sun is high in the sky. **Sunlight** is shining on houses, trees, people, and everything else. The wind is blowing. It blows leaves through the air and makes branches sway. The sunlight is very bright today, so I'm going to wear my sunglasses. I'll keep my hair tied back to keep the wind from blowing it around.
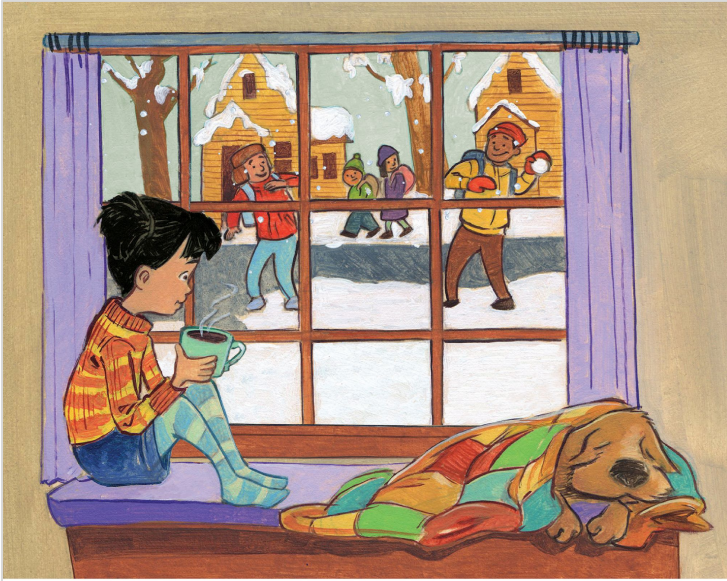
8

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

What is the weather like today?

9

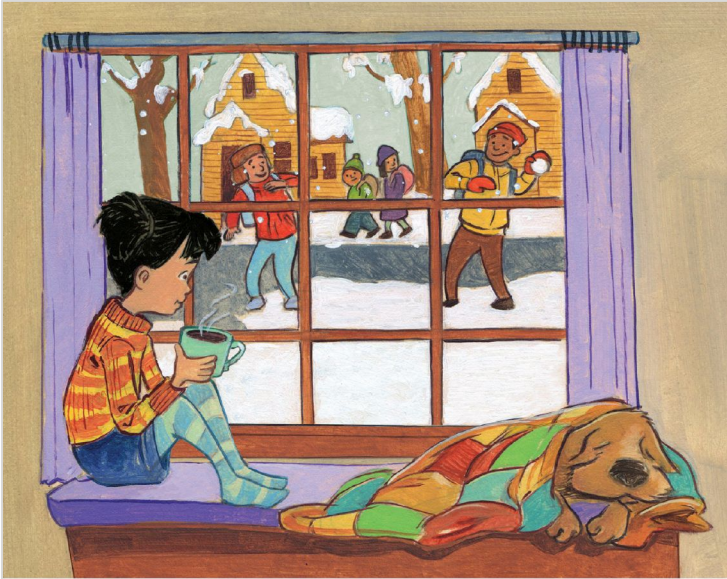What do you **predict** the weather will be like today?

The weather today is snowy.

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

10

Let's keep reading to check our predictions.

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

The weather today is snowy.

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

10

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

What is the weather like today?

11

The weather today is cloudy.

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

12

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

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

13

Vocabulary

predict

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

End of model activity

Differentiation in Amplify Science

Lesson Brief

Overview ⌄

Materials & Preparation ⌄

→ Differentiation ⌄

Standards ⌄

Vocabulary ⌄

Unplugged? ⌄

Amplify.

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

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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**.

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?

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**.

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Reflection part 2:

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

Questions?

Plan for the day

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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

Step 1

Hello Teacher Sinha-Das
t.sinha-das@tryamplify.net

Log Out

Go To My Account ⚙

Classroom Language Settings

ELA Resources

Interim Assessments

LA Science Program Guide

Program Hub

Science Program Guide

FLORIDA EDITION Standards Map

Help

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Terms | Privacy

1st Grade ⌄

22 Lessons
Animal and Plant Defenses

22 Lessons
Light and Sound

22 Lessons
Spinning Earth

Step 2

Amplify Science Program Hub

Welcome Science Educators!

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.

Step 3 (choose your grade)

AmplifyScienceProgramHub   HELP CENTER   LAUNCH PROGRAMS 🖥 TEACHER SINHA

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.

Grade Level Units   Grade TK ▾

Transitional Kindergarten

Step 4 (scroll down and choose your unit)

AmplifyScienceProgramHub   HELP CENTER   LAUNCH PROGRAMS 🖥 TEA

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.

Grade Level Units   NYC Grade 7 ▾

Orientation and Tutorials
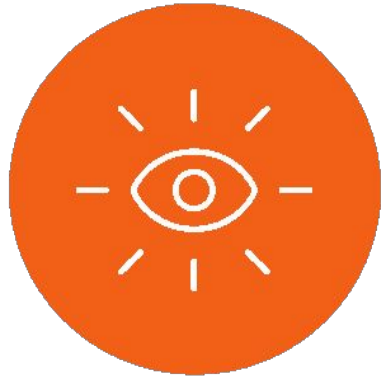Learn more about how to use @Home resources.

Microbiome

Metabolism

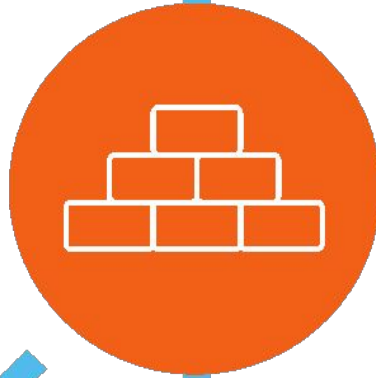Phase Change

Chemical Reactions
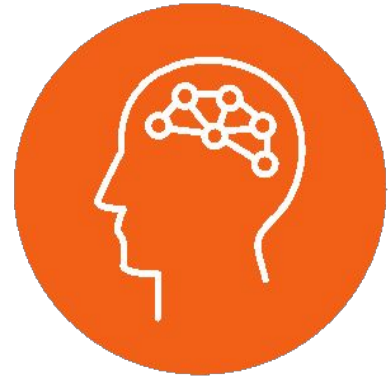
Plate Motion

Amplify Science approach

Introduce a phenomenon and a related problem
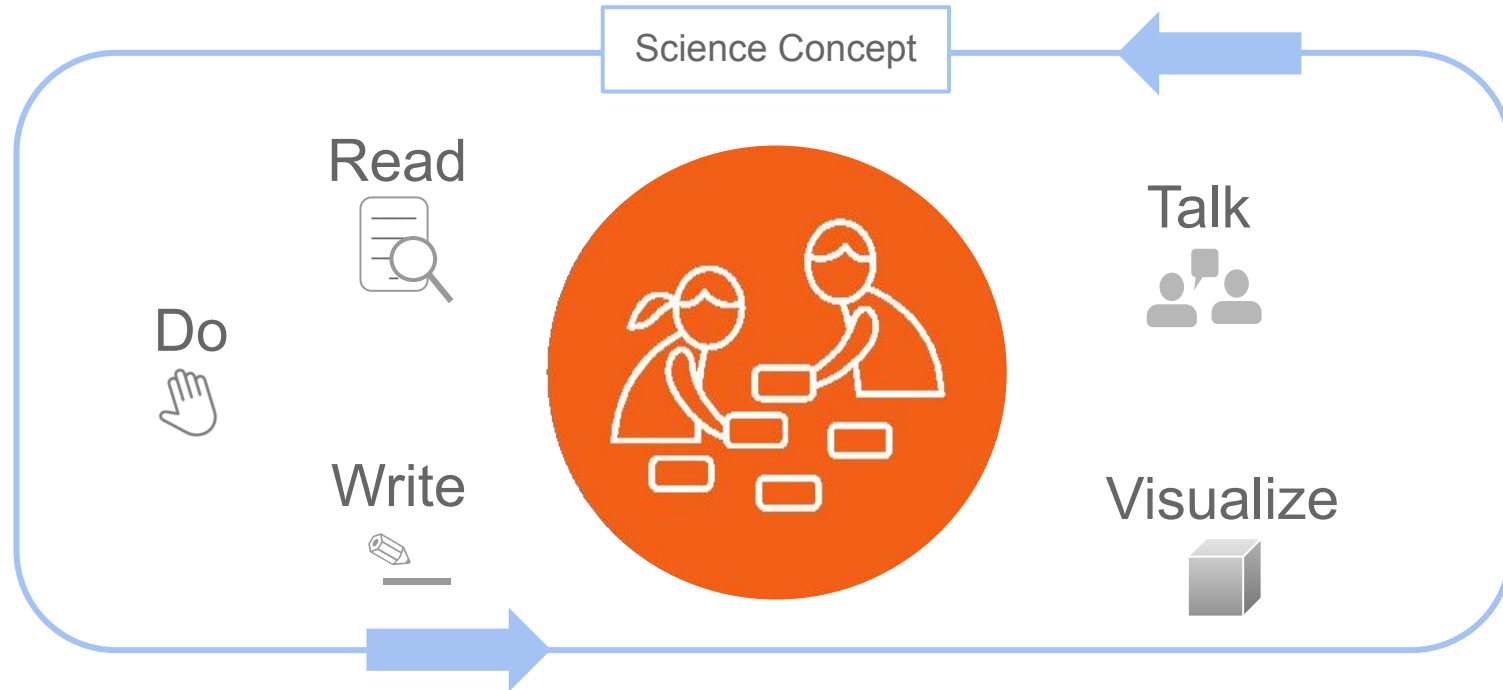
Collect evidence from multiple sources

Build increasingly complex explanations
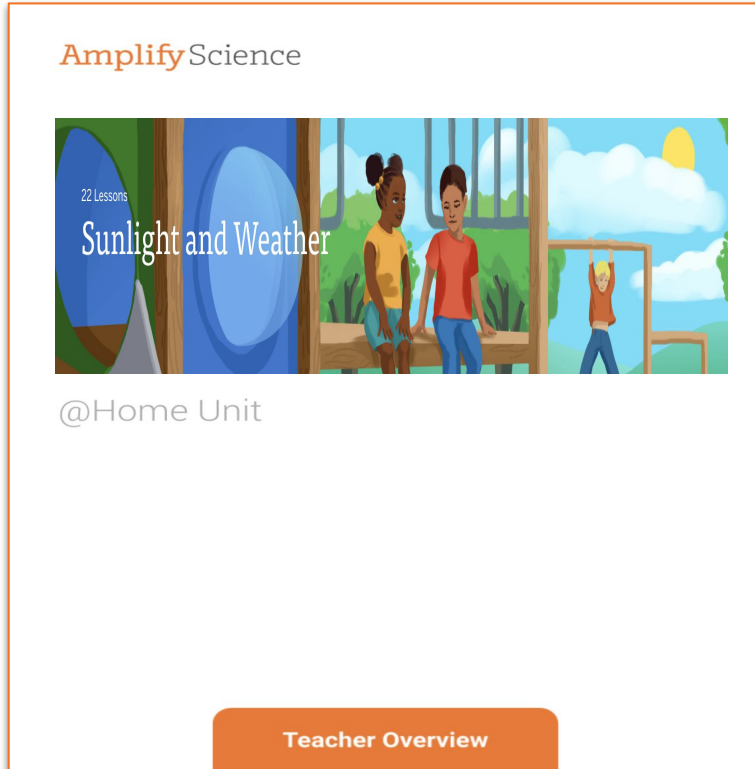
Apply knowledge to a different context

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Multimodal learning

Gathering evidence from different sources

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@Home units diverse learner supports
The multimodal approach

Amplify Science

22 Lessons
Sunlight and Weather

@Home Unit

Teacher Overview

- Preserves a **coherent** instructional build

- Retains a **multi-modal** & **3-D** learning approach

- **Adapted** versions of doing, talking, reading, and writing

Questions?

Plan for the day

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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!
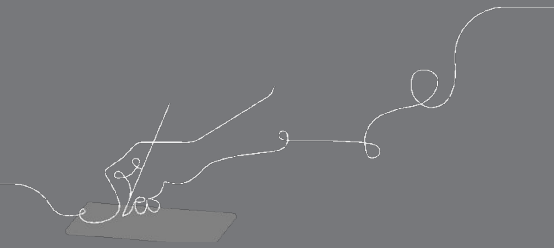
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New York City Resources Site

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

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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 su... 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
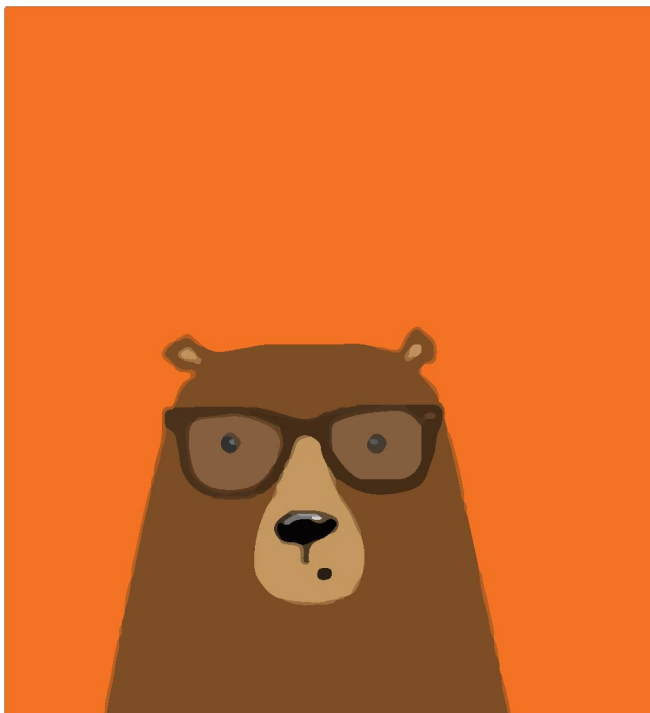- **Resources from PD sessions**
- And much more!

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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.
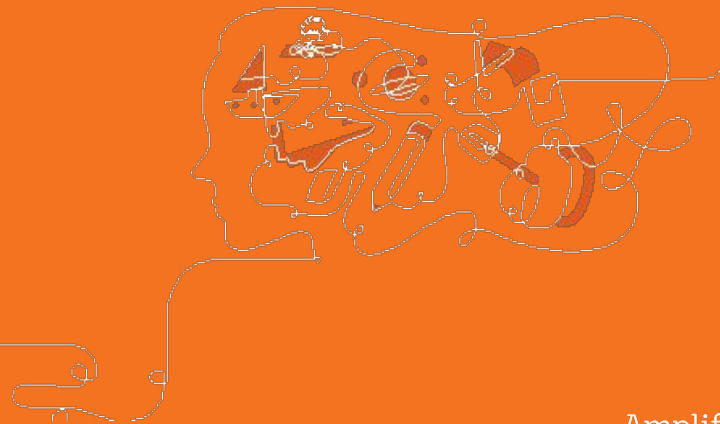- Copy your district or site IT contact on emails.

Final Questions?

Please provide us feedback!

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

Presenter name: XXX

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30 minute open office hours to follow…

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