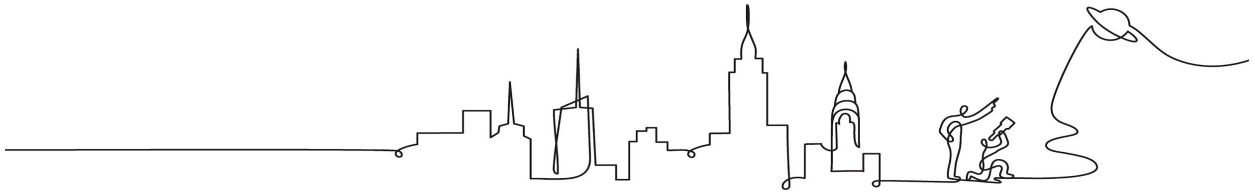
Welcome to Amplify Science!

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.



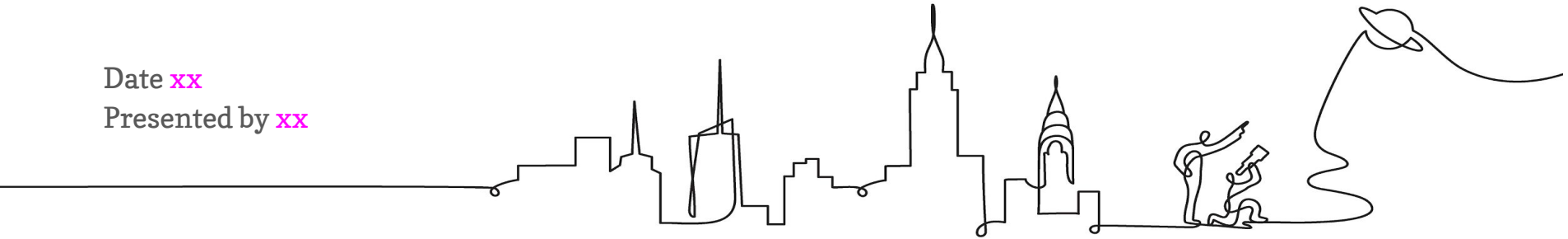
Amplify Science
New York City

Unit 3: Focusing on the Assessment System

Grade 3 new 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

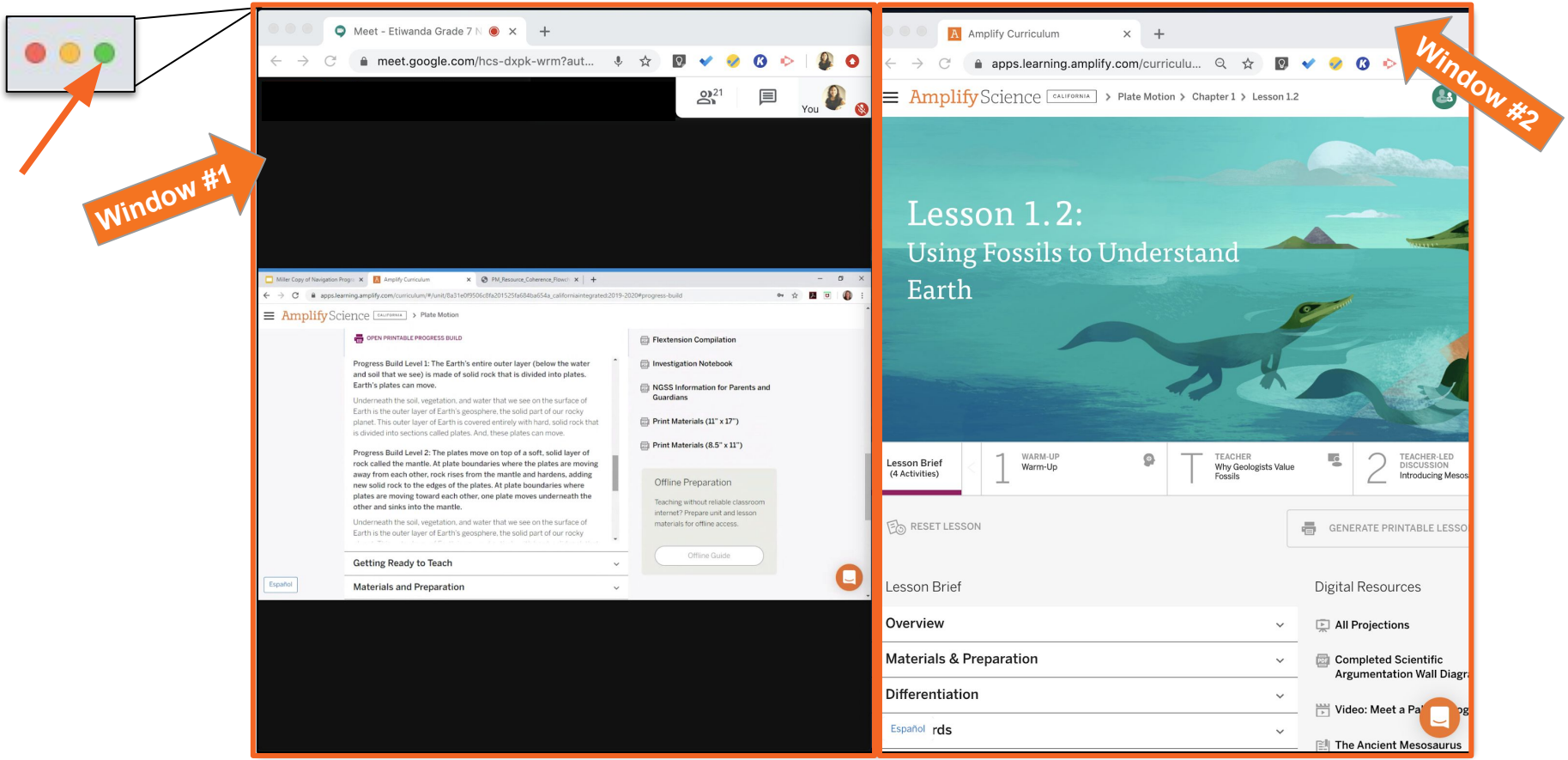
The chat box is available for posting questions or responses to during the training

Make sure you have a note-catcher present

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

Amplify.

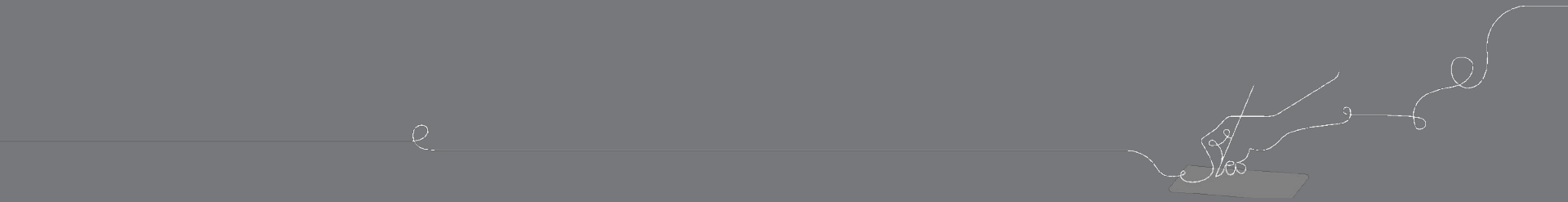
Use two windows for today's webinar



Overarching goals

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

- Use unit resources to understand learning goals
- Apply formative assessment resources to analyze student responses and gauge progress towards the unit's learning goals
- Implement embedded differentiation strategies and supports



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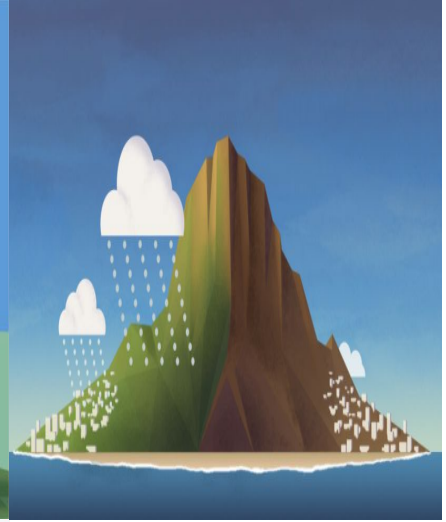


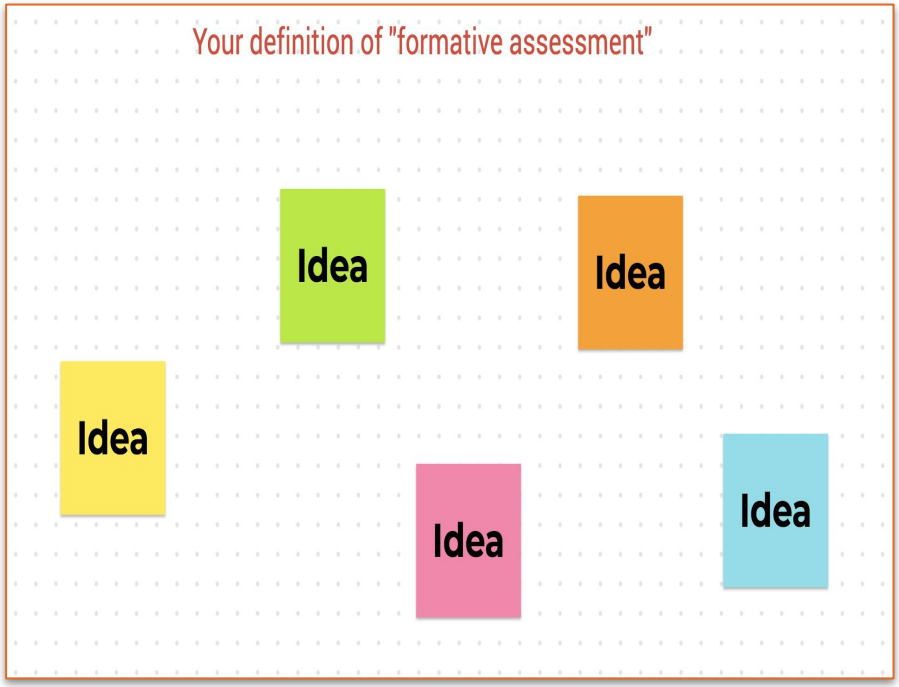
Plan for the day

- **Framing the day**
  - Welcome and introductions
  - Anticipatory activity
- Unpacking the progress build
- Exemplar assessment experience
- Deconstructing on-the-fly assessments
- Differentiation & other supports
- Closing
  - Reflection & additional resources
  - Survey

Anticipatory activity

On the Jamboard “post”….

- Your definition of **formative assessment**
- Strategies you’ve used so far to formatively **assess** students **remotely**



What is formative assessment?

Formative assessment is a cycle of eliciting, interpreting, and taking action on information about student learning.

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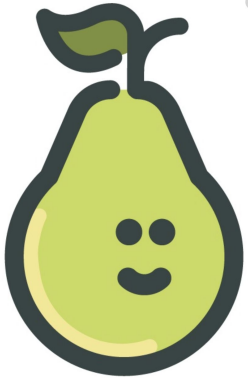
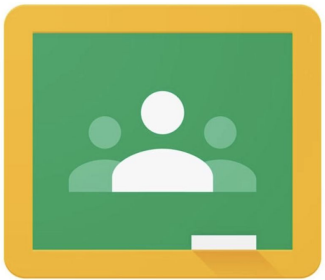
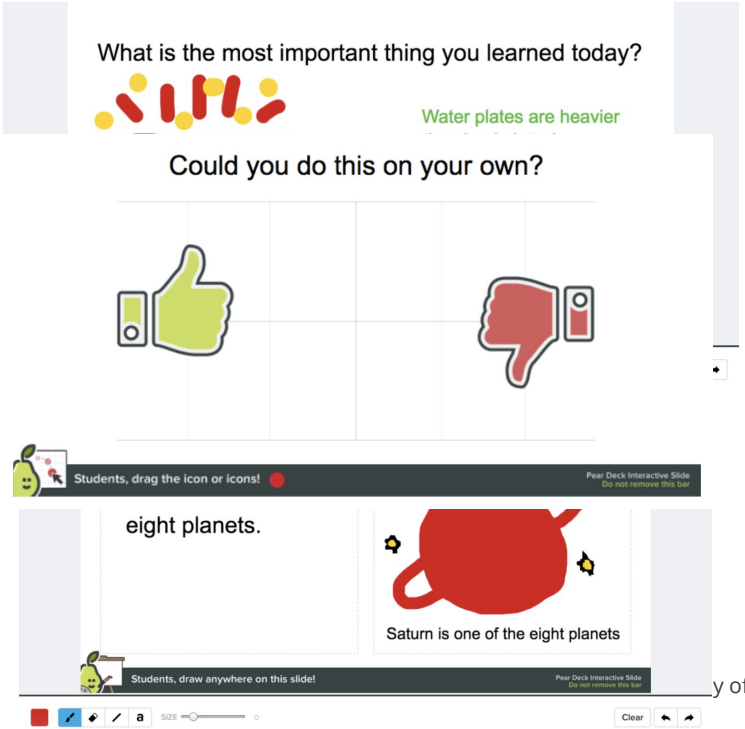
Formatively assessing during remote learning







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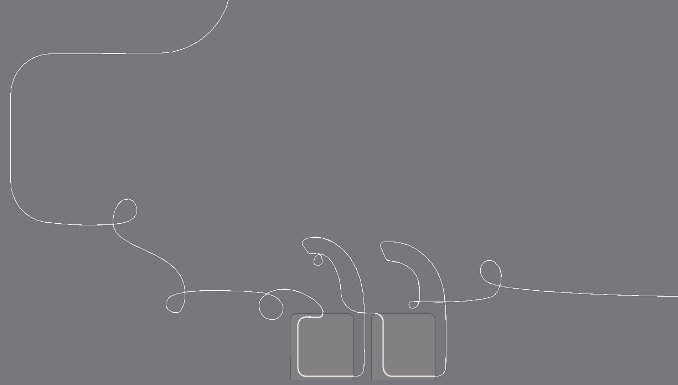
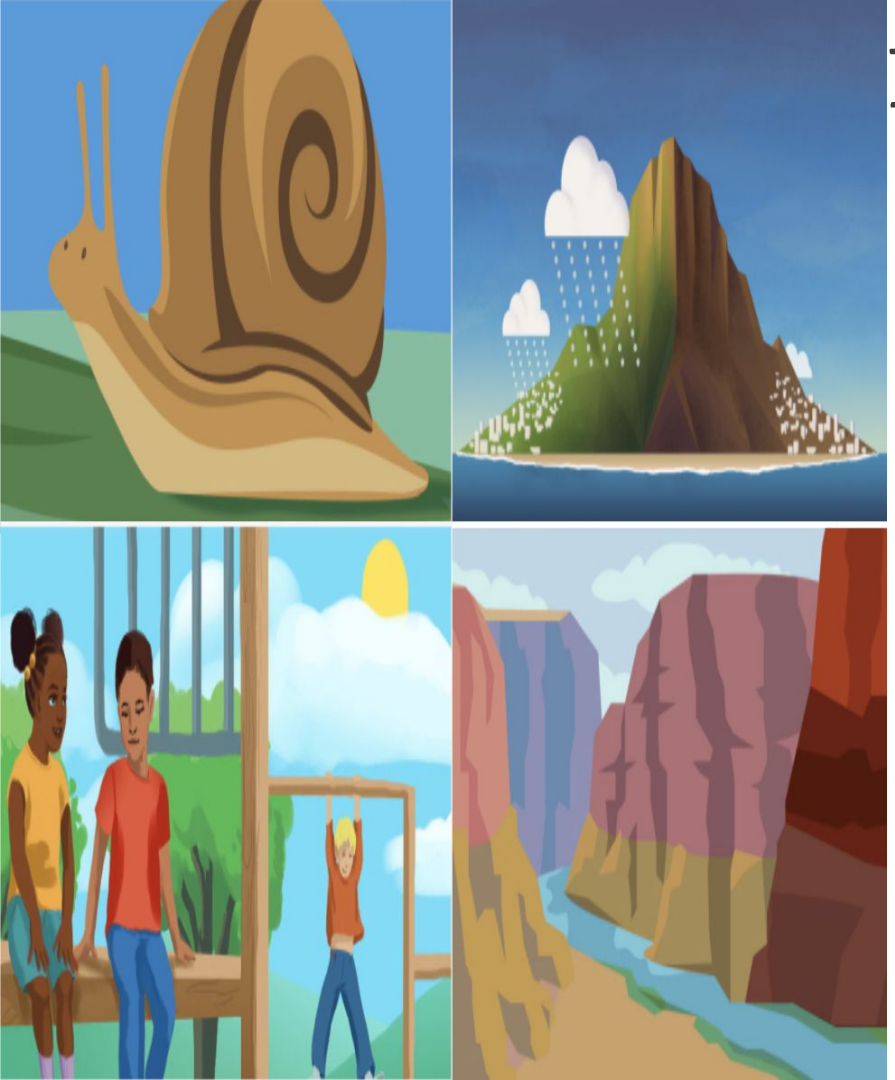


Questions?



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22 Lessons

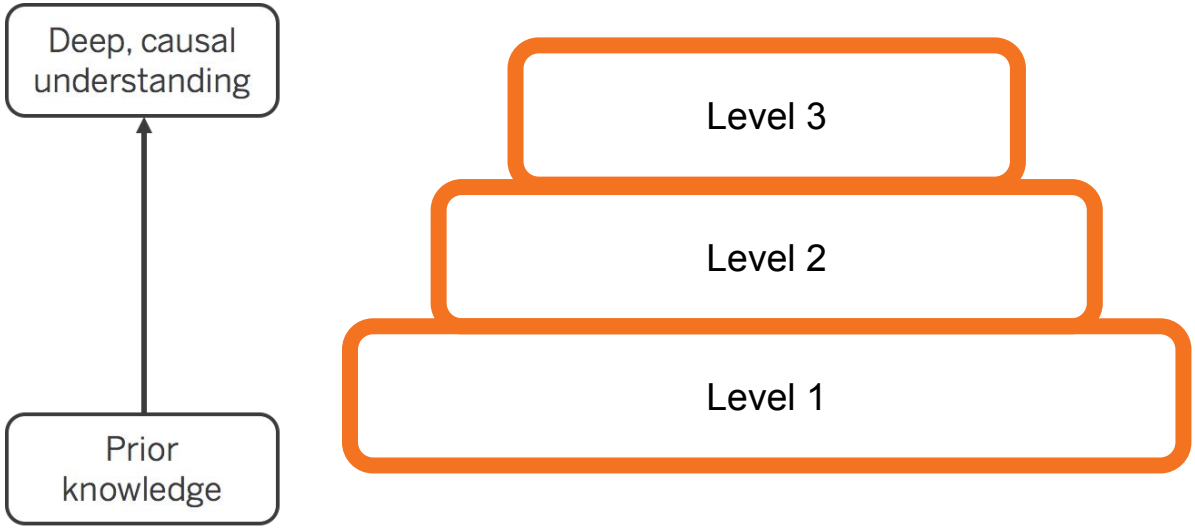
Environments and Survival

How can learning about how grove snails survive help engineers design effective solutions to problems?

In their role as biomimicry engineers, students figure out how the traits of grove snails affect their survival in different environments. They apply that understanding as they explore other organisms, their traits, and the likelihood of survival in different environments. Students then design effective solutions to the problem of invasive plant removal using the structural traits of giraffes as inspiration.

Learning Progression

Amplify's system of assessments is tied to unit specific learning progressions called **Progress Builds**



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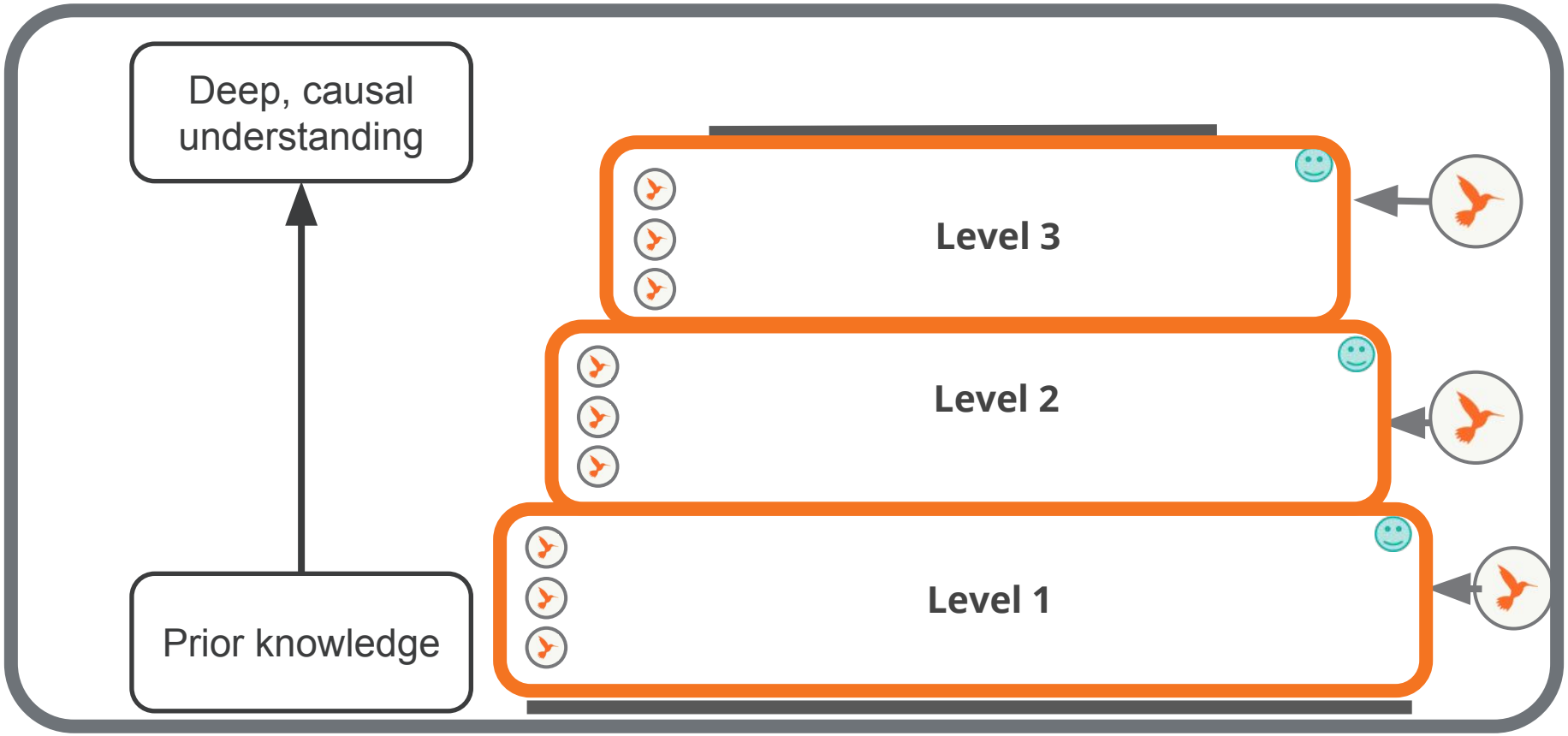
Assessment System



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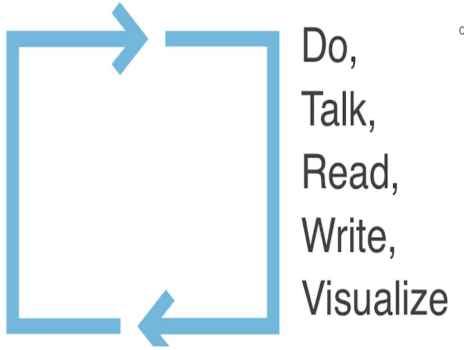
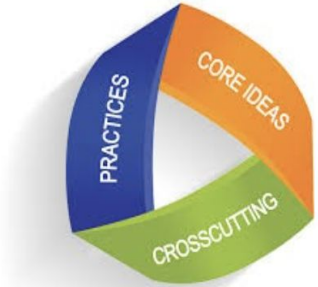
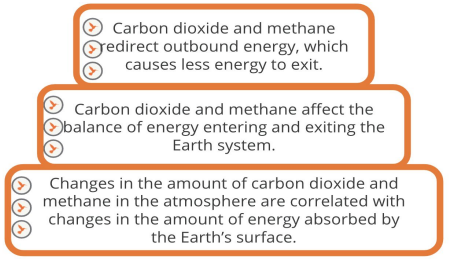
Formative assessment in Amplify Science

- Encompasses a range of modalities
- Provides window into student thinking
- Assesses the 3 dimensions
- Embedded into instruction







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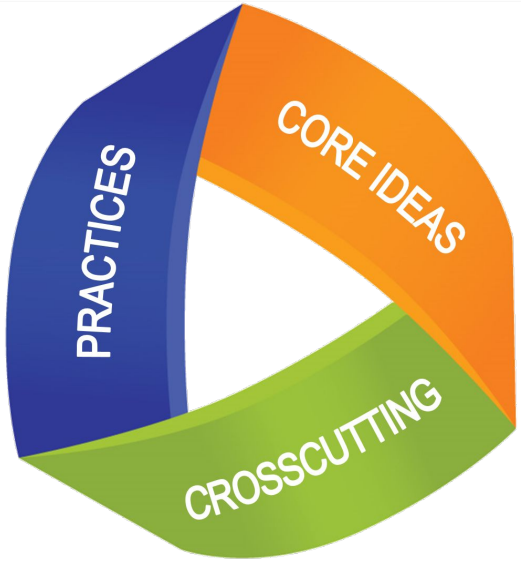
Assesses 3 dimensions



Teacher References

- Lesson Overview Compilation
- Standards and Goals
- 3-D Statements
- Assessment System
- Embedded Formative Assessments
- Books in This Unit

Lesson 1.2, Activity 3:
Student Discussion: Making Inferences About Survival

Assessment Type:
On-the-Fly Assessment

Evaluation Guidance:
- Look For/Now What? Notes

DCIs:
- LS4.B: Natural Selection
- LS4.C: Adaptation

SEPs:
- Practice 4: Analyzing and Interpreting Data
- Practice 8: Obtaining, Evaluating, and Communicating Information

CCCs:
- Systems and System Models
- Structure and Function

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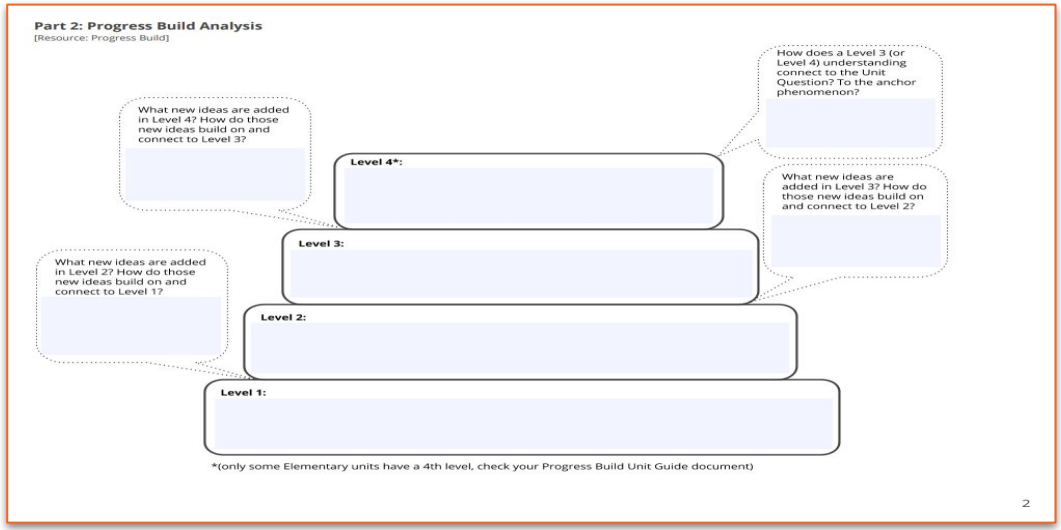
Unpacking the progress build

Review this unit's progress build, then complete the Progress Build Analysis graphic organizer collaboratively to internalize the ideas and reflect on how the levels are connected.



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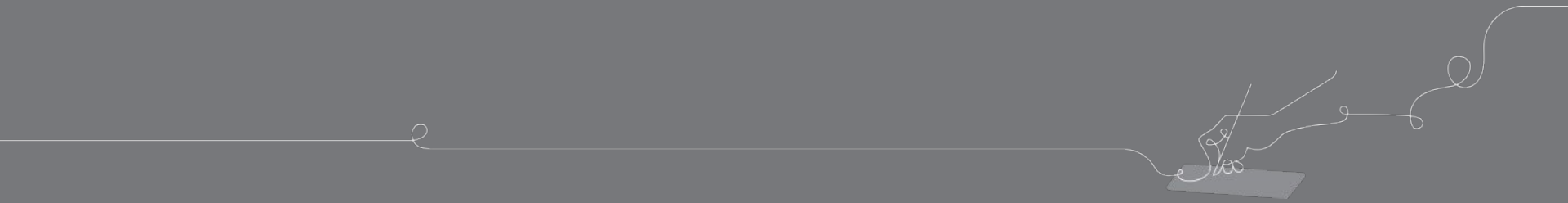
Questions?



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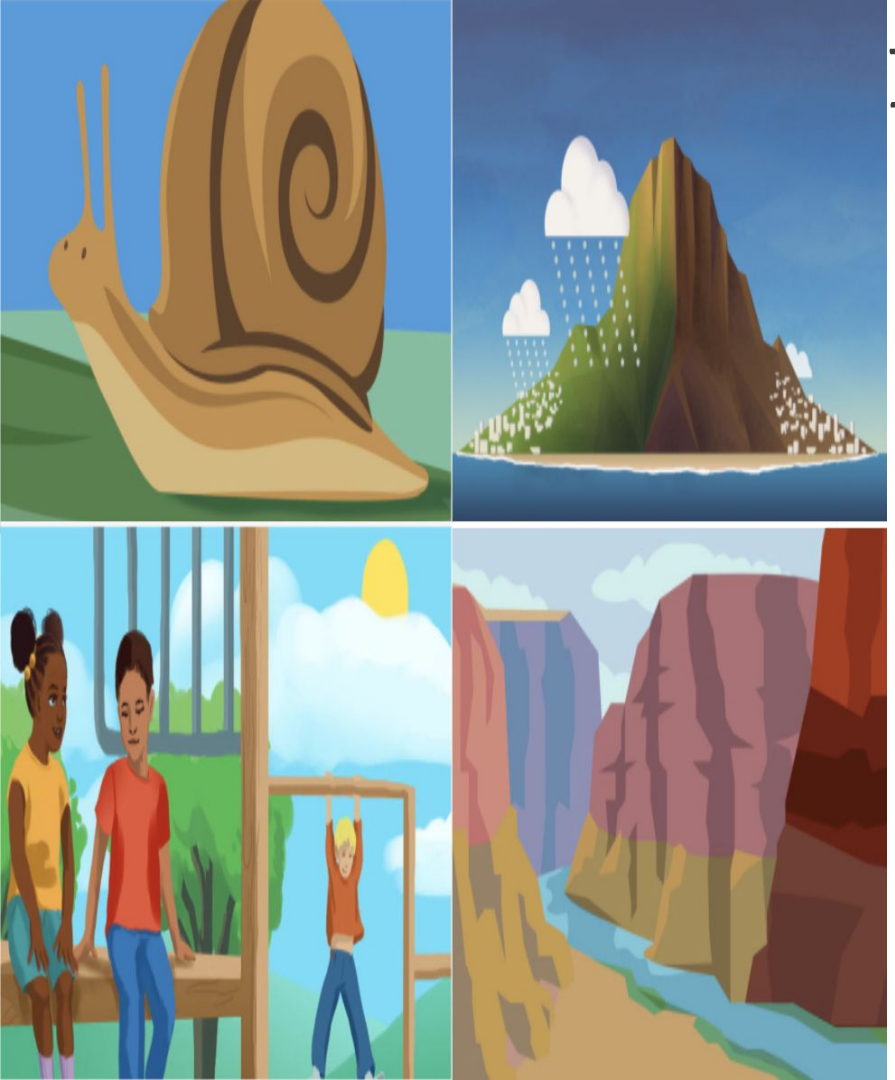

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Placeholder for @ home lesson insert

20 MIN

Activity 3

Making Inferences About Survival - model activity with embedded formative assessment

How likely do you think it is that your **organism** would **survive** in each environment?

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Let's think about what it means for something to be likely to happen.

Do you think it is likely to rain in this place? Why or why not?

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Imagine you are picking one of these marbles with your eyes closed. Are you **likely** to pick a **red marble**? Why or why not?

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Is this **fish likely to survive** in this environment? Why or why not?

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Vocabulary

inference

something you figure out based on observations and what you already know

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Name: _____ Date: _____

Needs for Survival (continued)

Environment	Needs	Can this organism meet this need in this environment?
Tropical Forest	Food	Yes No Maybe
	Water	Yes No Maybe
	Avoid predators	Yes No Maybe
		Yes No Maybe

Environment	Needs	Can this organism meet this need in this environment?
Grassland	Food	Yes No Maybe
	Water	Yes No Maybe
	Avoid predators	Yes No Maybe
		Yes No Maybe

How well do you think your organism could meet its needs in each environment? Circle whether it is likely or not likely to survive.

Organism: _____

is likely / not likely to survive in a desert environment.

is likely / not likely to survive in an alpine tundra environment.

is likely / not likely to survive in a tropical forest environment.

is likely / not likely to survive in a grassland environment.

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Turn to page 5 in your notebooks.

You'll make an **inference** about whether your organism is **likely to survive** in each of the environments.

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We can make an inference about the common collared lizard surviving in the desert.

Environment	**Needs**	**Can the organism meet this need in this environment?**		
Desert	Food	Yes	No	Maybe
	Water	Yes	No	Maybe
	Avoid predators	Yes	No	Maybe
	Temperature	Yes	No	Maybe

Organism: common collared lizard

is likely / not likely to survive in a desert environment.

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Name: _____ Date: _____

Needs for Survival (continued)

Environment	Needs	Can this organism meet this need in this environment?
Tropical Forest	Food	Yes No Maybe
	Water	Yes No Maybe
	Avoid predators	Yes No Maybe
		Yes No Maybe

Environment	Needs	Can this organism meet this need in this environment?
Grassland	Food	Yes No Maybe
	Water	Yes No Maybe
	Avoid predators	Yes No Maybe
		Yes No Maybe

How well do you think your organism could meet its needs in each environment? Circle whether it is likely or not likely to survive.

Organism: _____

is likely / not likely to survive in a desert environment.

is likely / not likely to survive in an alpine tundra environment.

is likely / not likely to survive in a tropical forest environment.

is likely / not likely to survive in a grassland environment.

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Record an inference about whether your organism is likely to survive in each environment.

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ON-THE-FLY

Remember that we are investigating this question:

What makes organisms in a population more likely to survive or less likely to survive?

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When scientists want to understand **how or why something happens**, they need to figure out all the **different parts that work together** to make it happen.

The parts and the way those parts work together is called a **system**.

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End of Lesson

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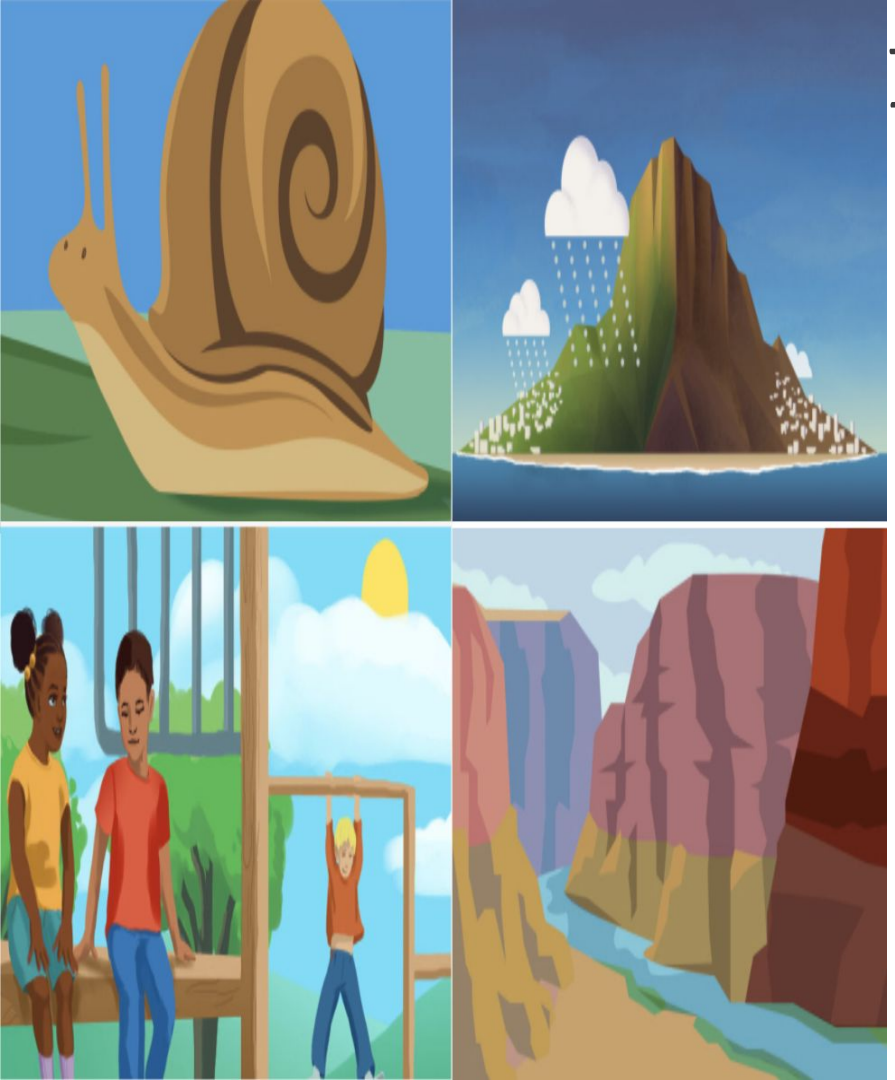

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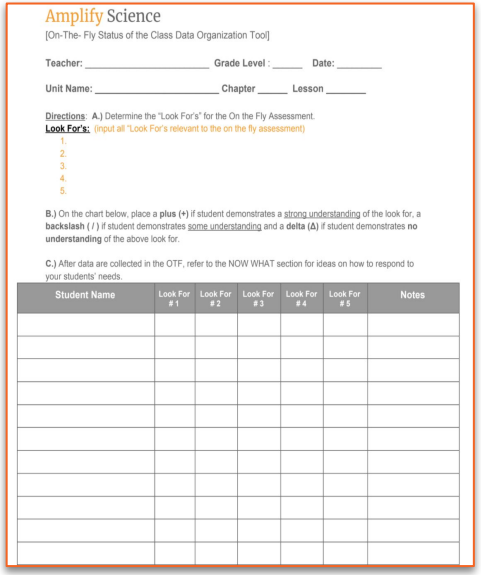
Unpack the embedded formative assessment from exemplar:

- Summarize look-fors in your own words
- Enter into data collection tool

Lesson 1.2, Activity 3

On-the-Fly Assessment 1: Systems Thinking About Survival Needs and Environment

Look for: As students discuss their inferences about whether or not an organism is likely or not likely to survive in a given environment, listen to how they are incorporating the environment into their reasoning. Students should be building an understanding that in order to determine whether or not an organism is likely to survive, they must think about the organism and its needs and also about the affordances of the environment. This is an early opportunity for students to practice systems thinking. Students should be learning to recognize that in order to answer the question about their organism (on page 5, Needs for Survival, in their notebooks), they must include in their thinking all the important parts of the system—the organism and its needs as well as the environment with which the organism interacts. Look for students who are focused on their organisms or their organisms' needs without reference to the environment. Some students are likely to have ideas about some organisms being inherently good or bad at surviving or better at surviving than another organism, regardless of environment.



Amplify Science

[On-The- Fly Status of the Class Data Organization Tool]

Teacher: _____ **Grade Level :** _____ **Date:** _____

Unit Name: _____ **Chapter** _____ **Lesson** _____

Directions: **A.)** Determine the "Look For's" for the On the Fly Assessment.

Look For's: (input all "Look For's relevant to the on the fly assessment)

1.
2.
3.
4.
5.

B.) On the chart below, place a **plus (+)** if student demonstrates a strong understanding of the look for, a **backslash (/)** if student demonstrates some understanding and a **delta (Δ)** if student demonstrates **no understanding** of the above look for.

C.) After data are collected in the OTF, refer to the NOW WHAT section for ideas on how to respond to your students' needs.

Student Name	Look For # 1	Look For # 2	Look For # 3	Look For # 4	Look For # 5	Notes

Tailoring instruction: which suggestions will you use?

Now what? In order to focus students on the idea that an organism's chances of survival depend on what is in its environment, have students look at the Red-Eyed Tree Frog Organism Card and the Tropical Forest Environment Card. Have students make an inference about how likely the red-eyed tree frog is to survive in a tropical forest. If students do not bring it up, point out that the tree frog can find food and water and can possibly avoid predators in the tropical forest environment. In addition, the temperature in a tropical forest is not too hot or too cold for the tree frog. Guide students to agree on the inference that the tree frog is likely to survive in this environment. Then, ask students if the tree frog is just better at surviving than the red fox, for whom the tropical forest would be too hot. Have students share their ideas and then focus them on the Grassland Environment Card. Ask students to make an inference about how likely the red-eyed tree frog is to survive in a grassland environment. Lead a discussion in which students conclude that a grassland environment does not have enough water, nor is the temperature good for the tree frog, so it is not likely to survive in a grassland environment. Emphasize that what is in an organism's environment affects how well the organism can survive. Depending on the needs of your class, you may wish to conduct a whole-class discussion, a small-group discussion, or discuss with individual students.

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Analyzing and taking action on student data

Situating the assessment in the Progress Build: Which level of the Progress Build are students working on during this assessment opportunity?

- ❑ Level 1
- ❑ Level 2
- ❑ Level 3

Notes:

Analyzing student data: refer to the Look for section of the assessment and refer to your observation notes.

Taking action based on student data: refer to the Now what section of the assessment and consider how you might adjust instruction in your classroom.

Which dimension?	Which modality?	When?	How?
❑ Key Concept ❑ Practice ❑ Crosscutting Concept Notes:		❑ In the moment ❑ In upcoming activity ❑ Outside of lesson Notes:	❑ Keep an eye on certain students ❑ Provide additional instruction ❑ Revisit an activity Notes:

Situating the assessment in the Progress Build: Which level of the Progress Build are students working on during this assessment opportunity?

- ❑ Level 1
- ❑ Level 2
- ❑ Level 3

Notes: *Level 1 - when it is easier for organisms to meet their needs in an environment, they are more likely to survive.*

Analyzing student data: refer to the Look for section of the 1.2.3 assessment and refer to your observation notes.

Taking action based on student data: refer to the Now what section of the 1.2.3 and consider how you might adjust instruction in your classroom.

Which dimension?

- ❑ Key Concept
- ❑ Practice
- ❑ Crosscutting Concept

Notes:

Key Concept: survival needs
Practice - analyzing & interpreting data
CCC: System & system models

Which modality?

Talk, write

Look/listen-fors:

- *Referencing environment when discussing organism's needs (systems thinking)?*

When?

- ❑ In the moment
- ❑ In upcoming activity
- ❑ Outside of lesson

Notes:

In the moment during break-out rooms

How?

- ❑ Keep an eye on certain students
- ❑ Provide additional instruction
- ❑ Revisit an activity

Notes:

Keep an eye on certain students and keep them in mind for future lessons when engaging in sytems thinking

On-the-fly exploration

Choose **next** on-the-fly assessment for this unit and use the unpacking tool to deconstruct it.

.

Situating the assessment in the Progress Build: Which level of the Progress Build are students working on during this assessment opportunity?

- ❑ Level 1
- ❑ Level 2
- ❑ Level 3

Notes:

Analyzing student data: refer to the Look for section of the assessment and refer to your observation notes.

Taking action based on student data: refer to the Now what section of the assessment and consider how you might adjust instruction in your classroom.

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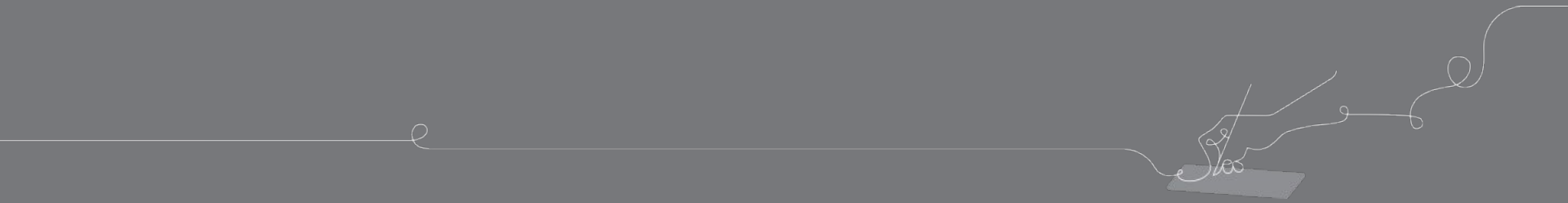
Questions?



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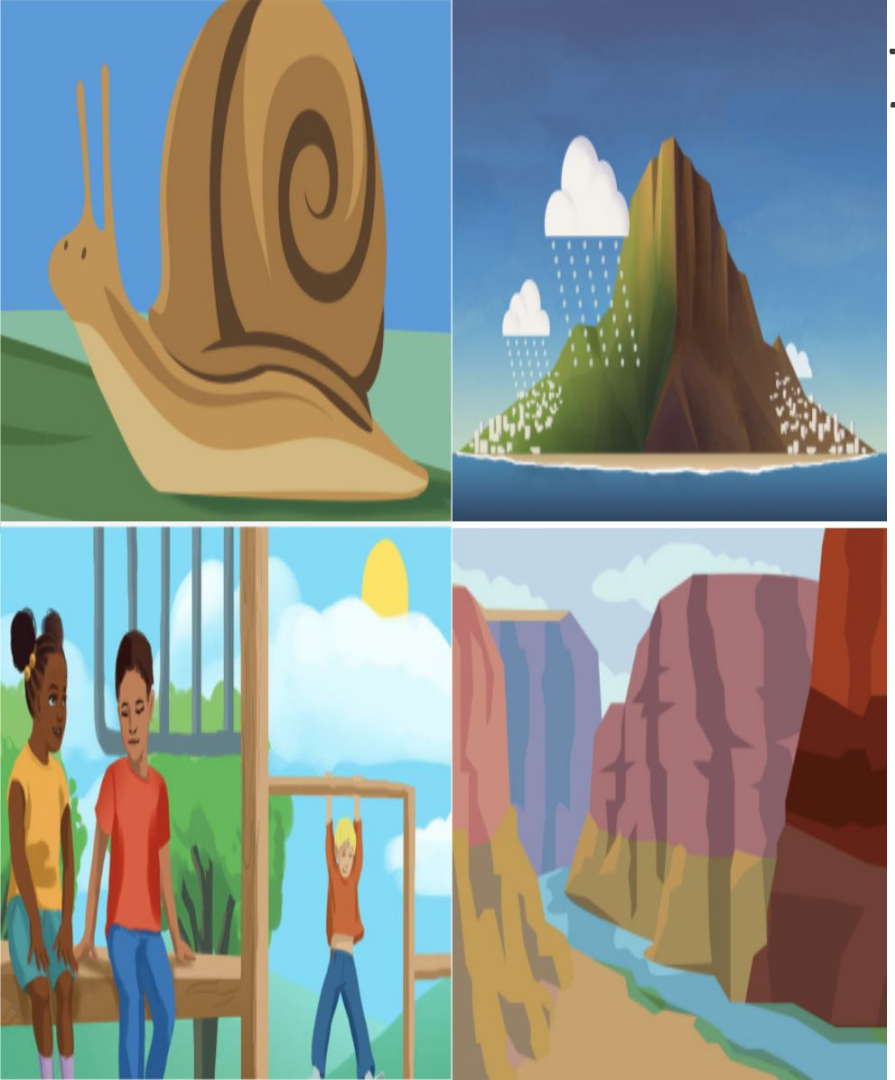

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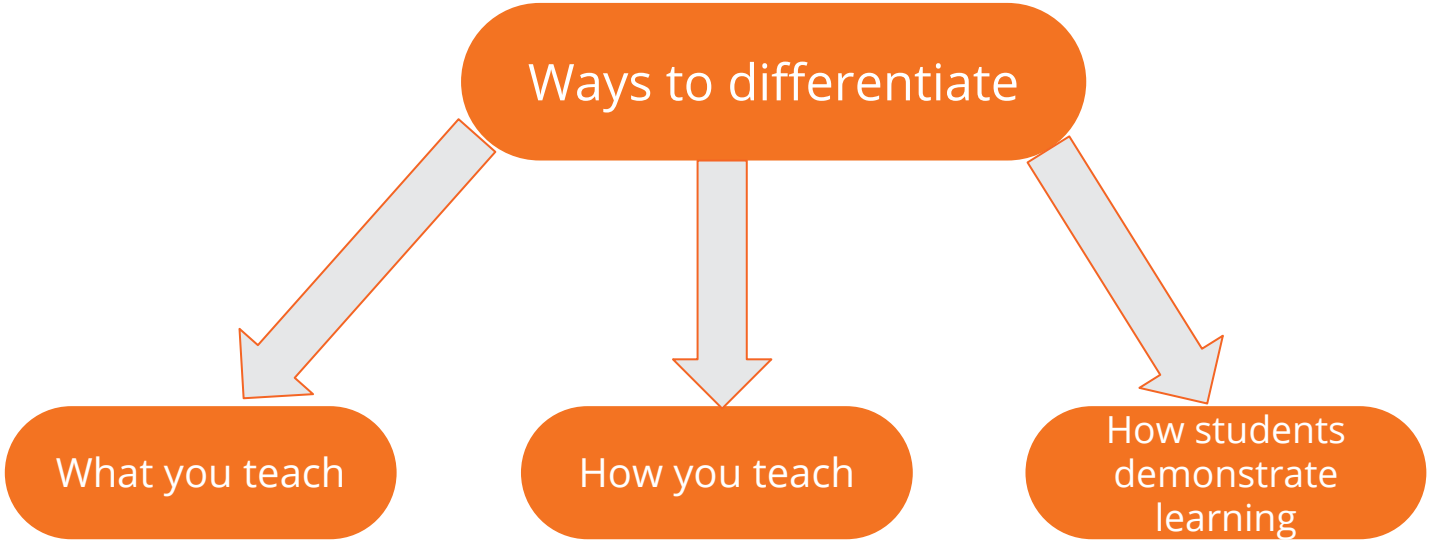
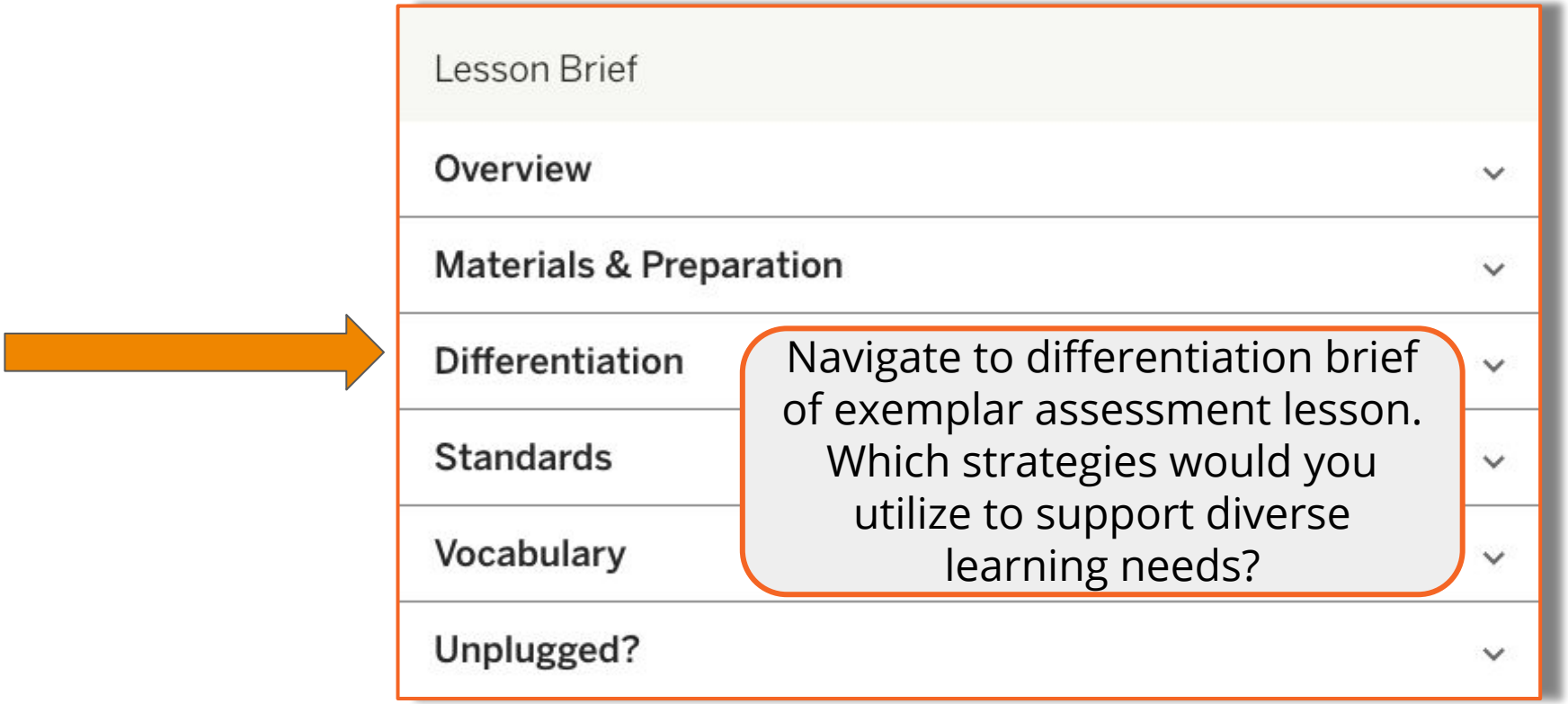
Differentiation



How do you already utilize these ways in your remote and/or in-person instructional practice?

Differentiation in Amplify Science



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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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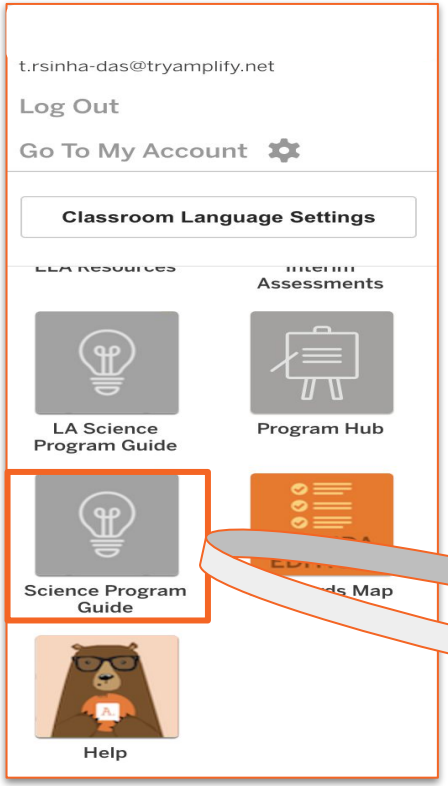
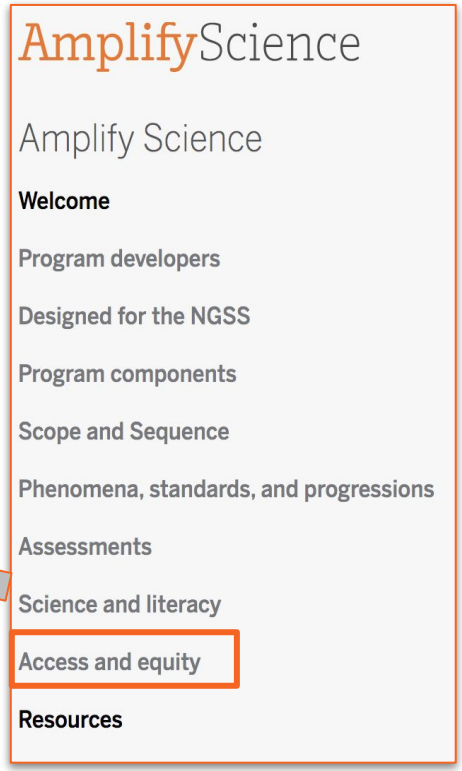
Diverse learners: access & equity

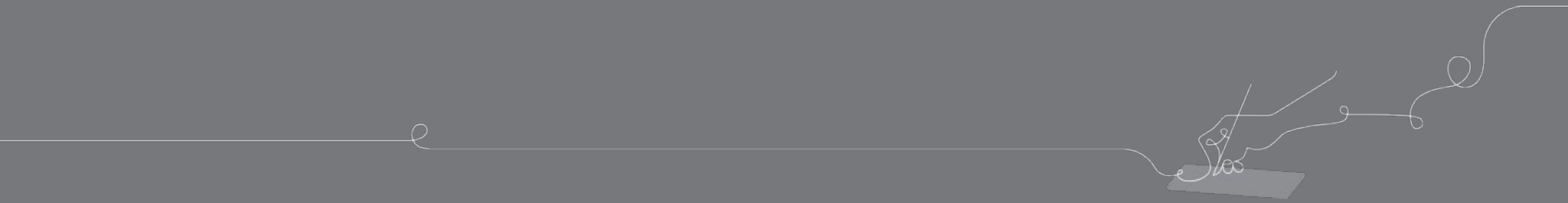




Student population	Strategies for support
English learners	
Students with disabilities	
Standard English learners	
Girls and young women	
Advanced learners and gifted learners	
Students living in poverty, foster children and youth, and migrant students	

Amplify.

Questions?



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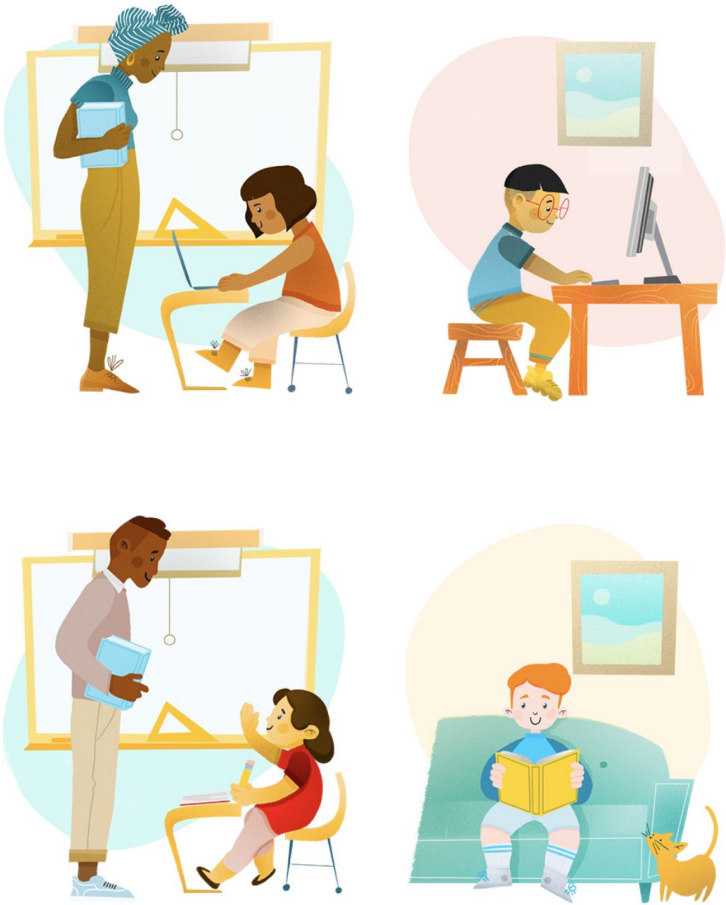
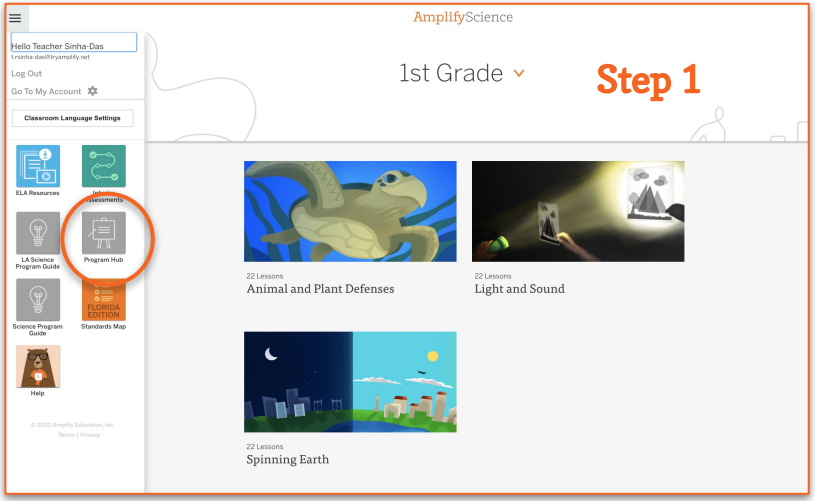
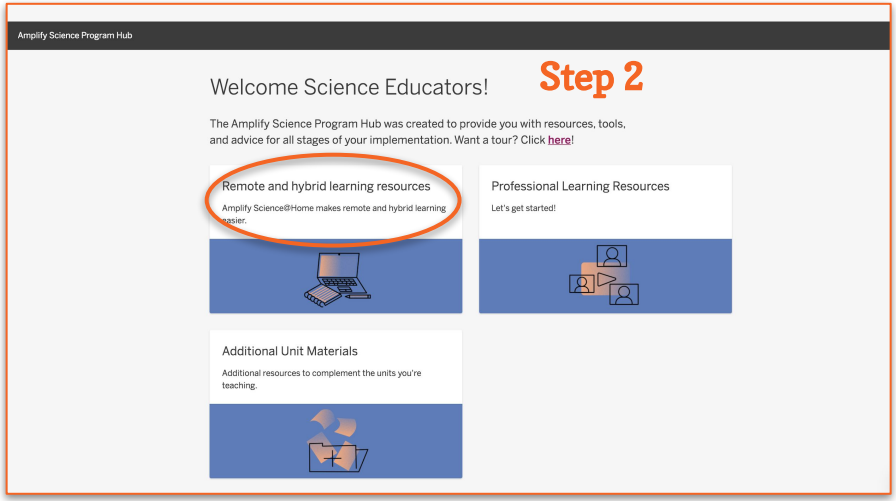
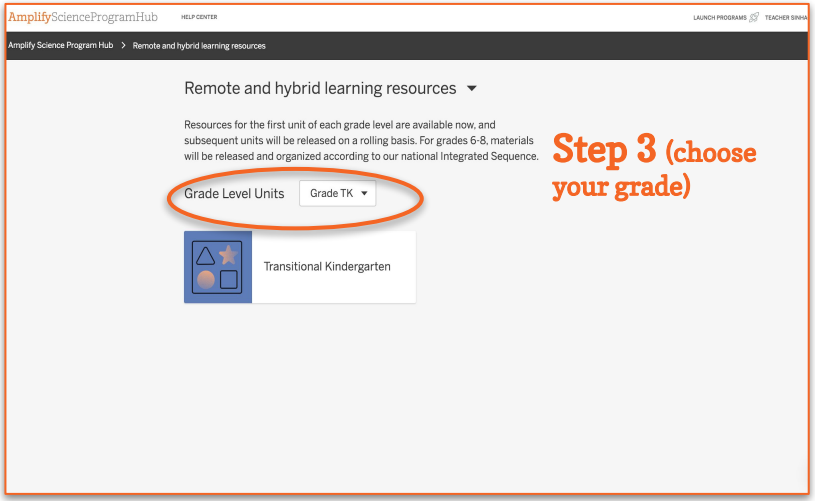
AmplifyScience@Home

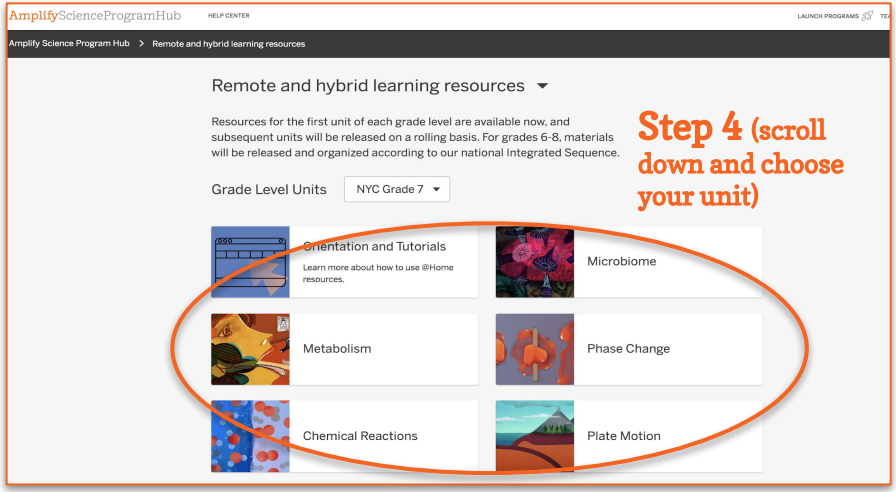
A suite of resources designed to make extended remote and hybrid learning easier for teachers and students.




AmplifyScience
Hello Teacher Sinha-Das
Log Out
Go To My Account
Classroom Language Settings
ELA Resources
Program Hub
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


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 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

@Home assessment considerations

Amplify Science

@Home Unit

Teacher Overview

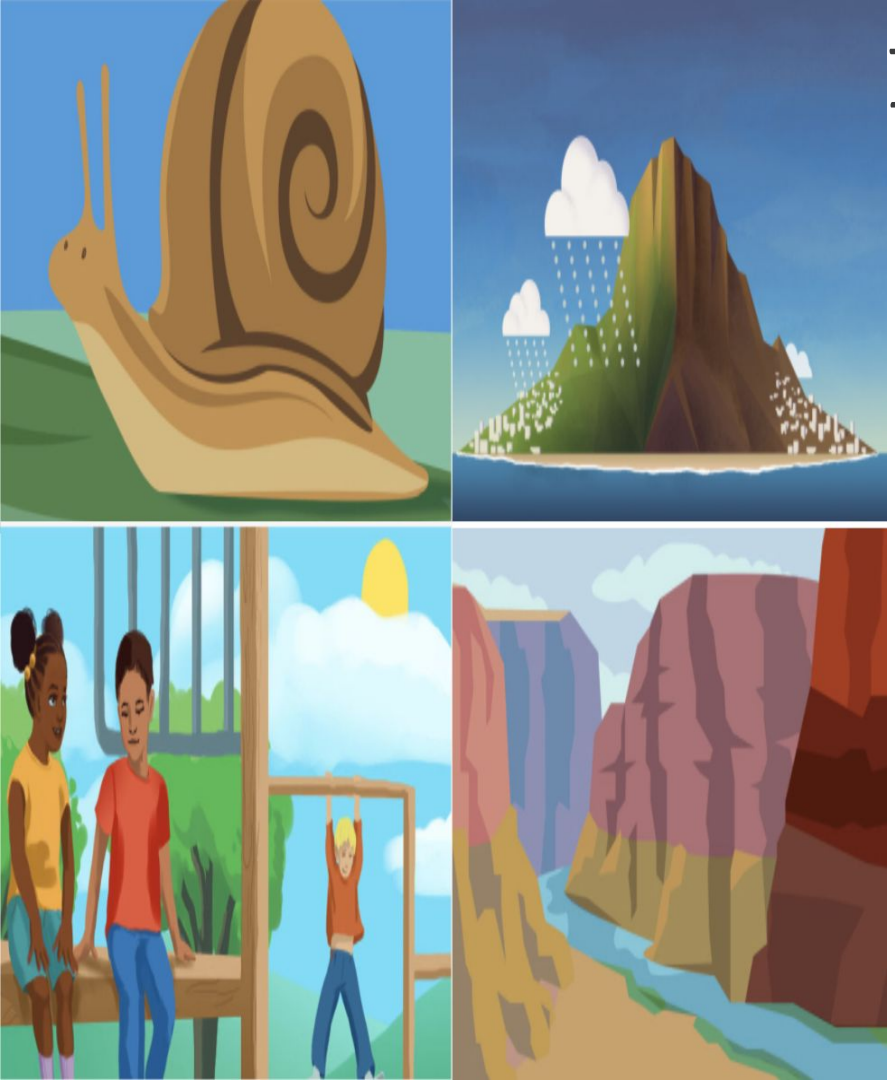
@Home Units assessment considerations

Each Chapter Outline contains considerations for assessment and feedback in the Amplify Science units, and in some cases, the pre-unit and end-of-unit assessments. Generally, we recommend the following:

- You may need to adapt the format in which you collect student work. See the "Student writing options" above.
- When providing feedback to students, you may wish to focus on how students are attending to the Investigation and/or the Chapter Questions, if they are using evidence they have gathered to support their responses to questions, and if they are using appropriate unit vocabulary in their responses.

Chapter 2 Assessment and Feedback Considerations

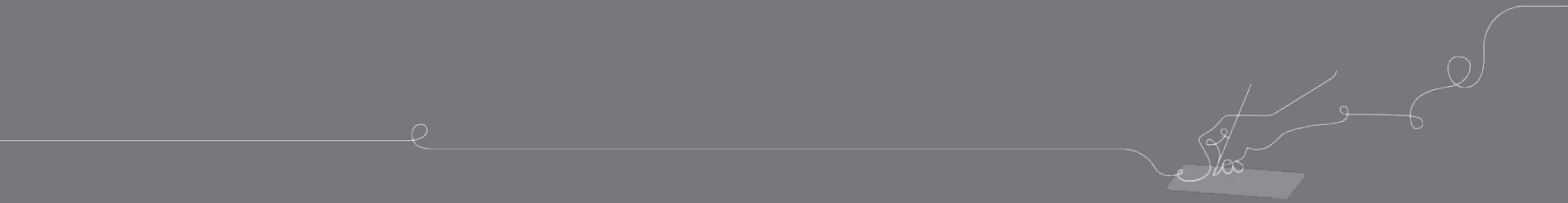
Students' written argument (Writing an Argument to Support a Diagnosis, @Home Lesson 7) provides information about students' understanding of how the body's systems take in, break down, and deliver molecules to the cells and how they use that understanding to support a claim. See *Metabolism*, Lesson 2.7, Activity 3, Embedded Formative Assessment for more information.



Plan for the day

- Framing the day
  - Welcome and introductions
  - Anticipatory activity
- Unpacking the progress build
- Exemplar assessment experience
- Deconstructing on-the-fly assessments
- Differentiation & other supports
- Closing
  - Reflection & additional resources
  - Survey

Questions?



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Revisiting our objectives

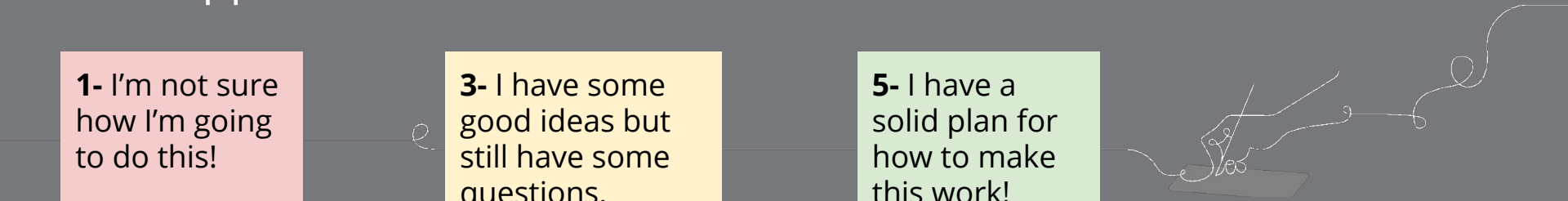
Do you feel ready to…

- Use unit resources to understand learning goals
- Apply formative assessment resources to analyze student responses and gauge progress towards the unit's learning goals
- Implement embedded differentiation strategies and supports

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

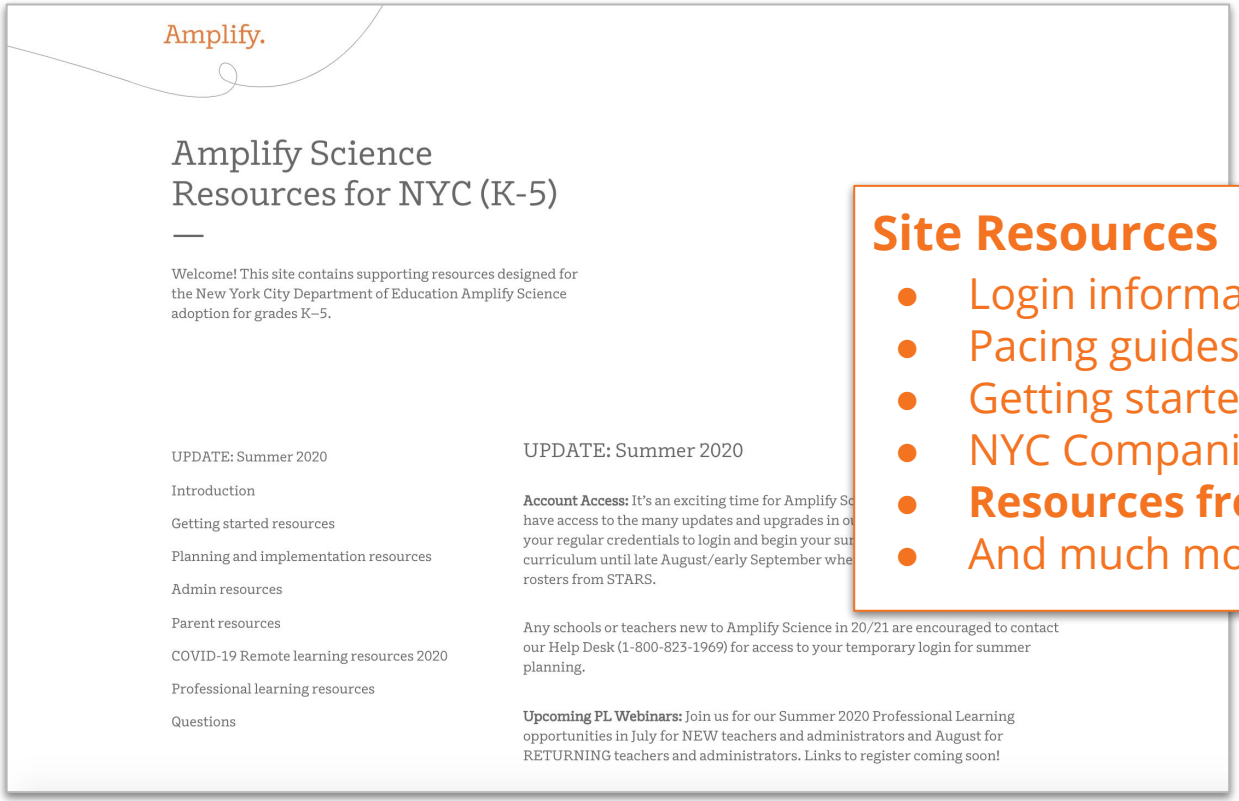
3- I have some good ideas but still have some questions.

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/



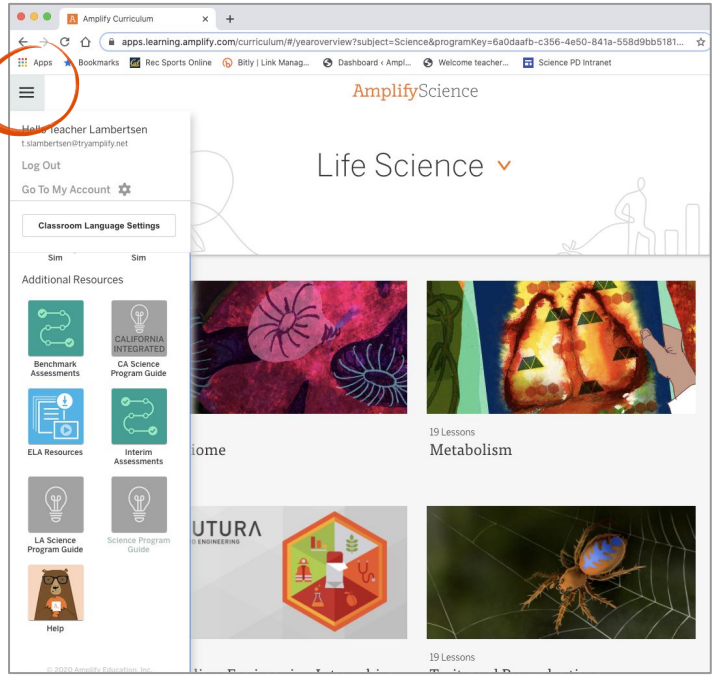
Site Resources

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

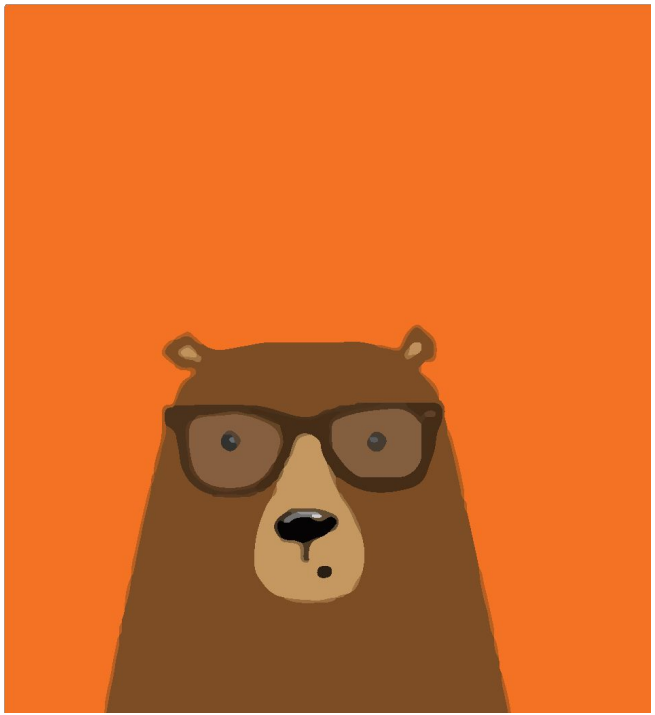
Amplify Science Program Hub

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.

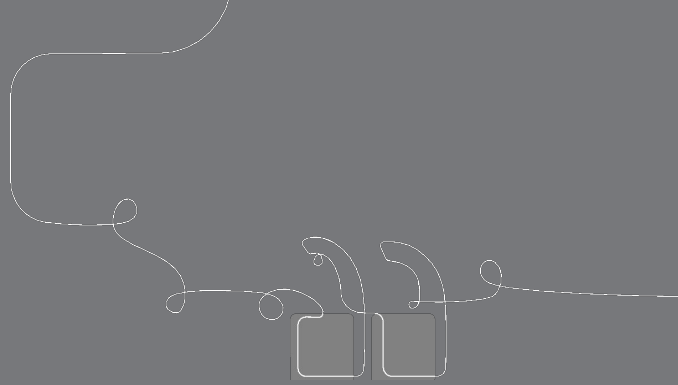
scihelp@amplify.com

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.

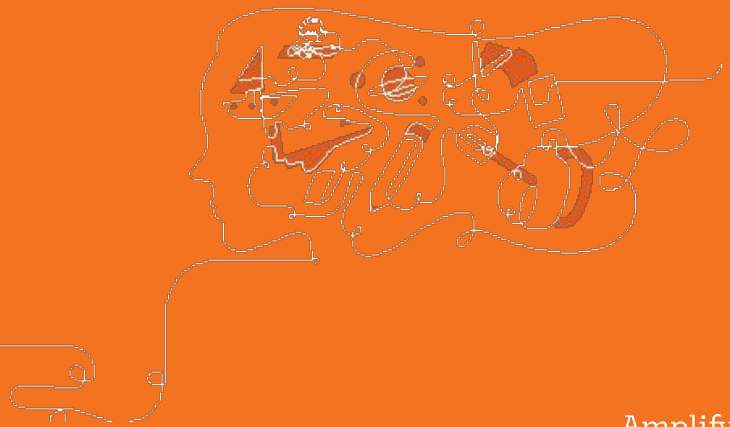


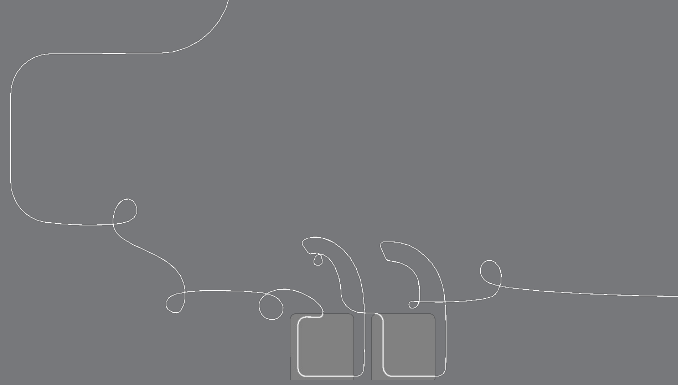
Final Questions?

Please provide us feedback!

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

Presenter name: XXX





30 minute open office hours to follow...