Welcome to Amplify Science!
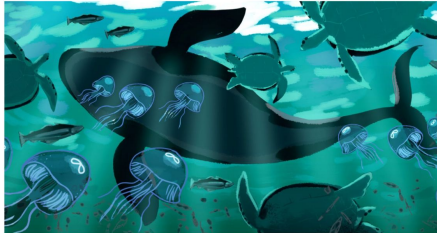
Do Now: Open auto-login site & explore as we wait to begin

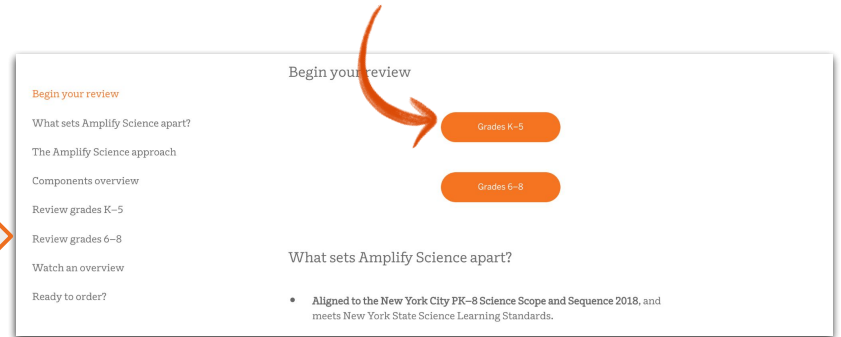Go to **https://amplify.com/amplify-science-nyc-doe-review/**

Click your grade band & then follow prompts

Amplify Science
New York City

Exploring the Amplify Science Curriculum
Grades K-2
Part 3

Date xx
Presented by xx

Amplify's Purpose Statement

Dear teachers,

You do a job that is nearly impossible and **utterly essential.**

We are in your corner – extending your reach, saving you time, and enhancing your understanding of each student.

Thank you for working with us to craft rigorous and riveting learning experiences for your classroom.

We share your goal of **inspiring all students to think deeply, creatively, and for themselves.**

Sincerely,
Amplify

Goals for Part 3 session

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

❏ Understand the Amplify Science assessment system.

❏ Plan how formative assessment data can be used to inform instruction.

❏ Begin planning for instruction.
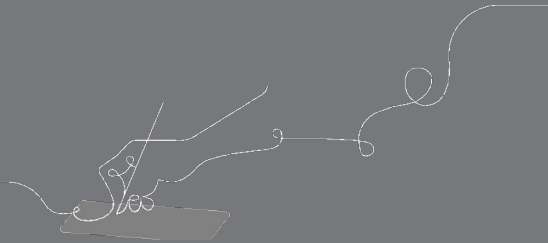
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Plan for part 3

- **Framing the day**
  - Welcome
- **The Amplify Science Assessment System**
  - Formative assessment data tracking
- **Collaborative Planning**
  - Planning time
  - Share out
- **Closing**
  - Final Questions & Feedback

Ice Breaker!

How's everyone today?

- **Prompt 1:** Drop a word or phrase in the chat that describes how you're feeling today.

- **Prompt 2:** What can we do to energize & excite you about Amplify Science today?

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.
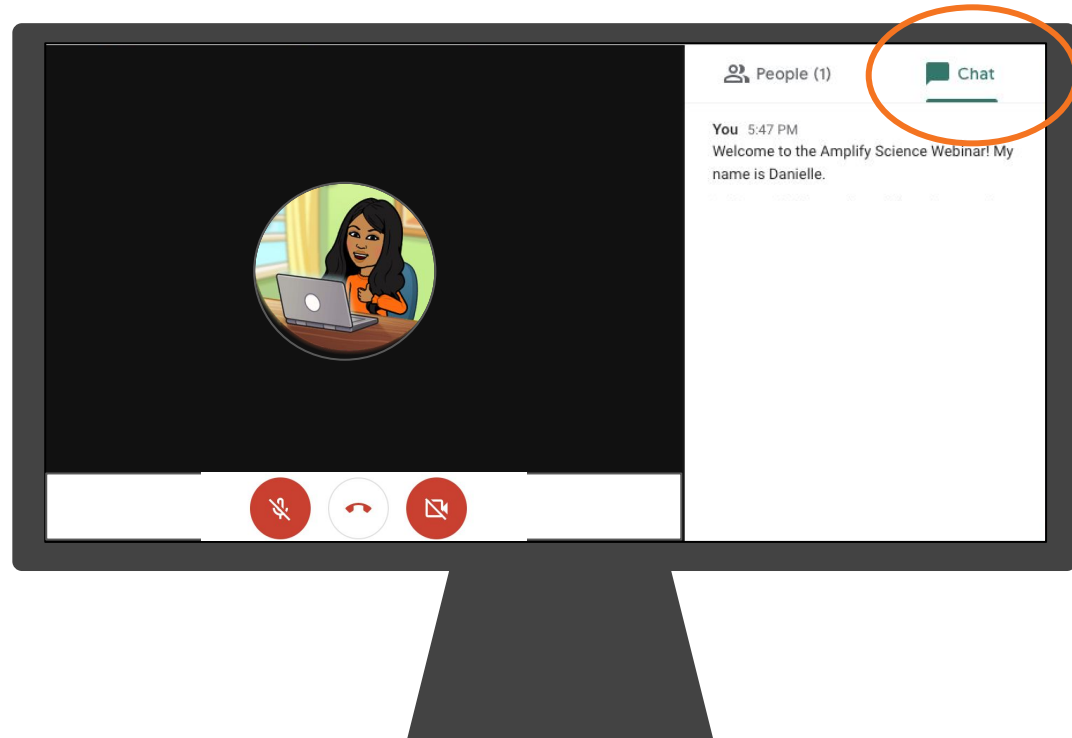- **Physical needs:** Stand up, get water, take breaks.

Plan for part 3

- **Framing the day**
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- **Closing**
  - Final Questions & Feedback

Connecting 3-D learning to deeper learning

Amplify Science Assessment System

How do we know students are learning 3-dimensionally?

How do we know students are learning deeply?
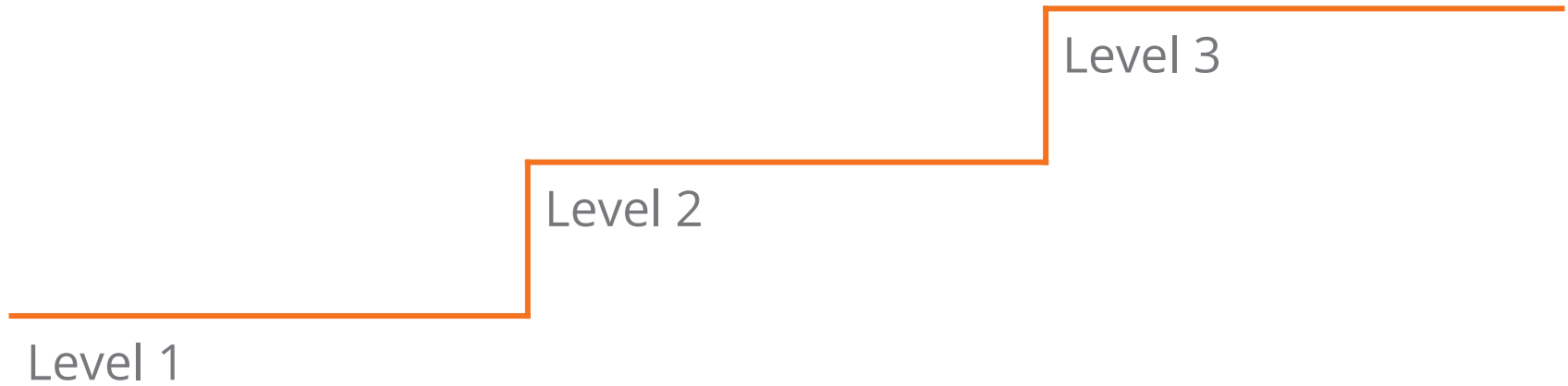
Assessment System

Opening reflection

How do you gather data about student learning in science?

Assessment System

Level 3

Level 2

Level 1

Prior knowledge →————————————————————→ Deep, causal understanding

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Pre- and End-of-Unit Assessments

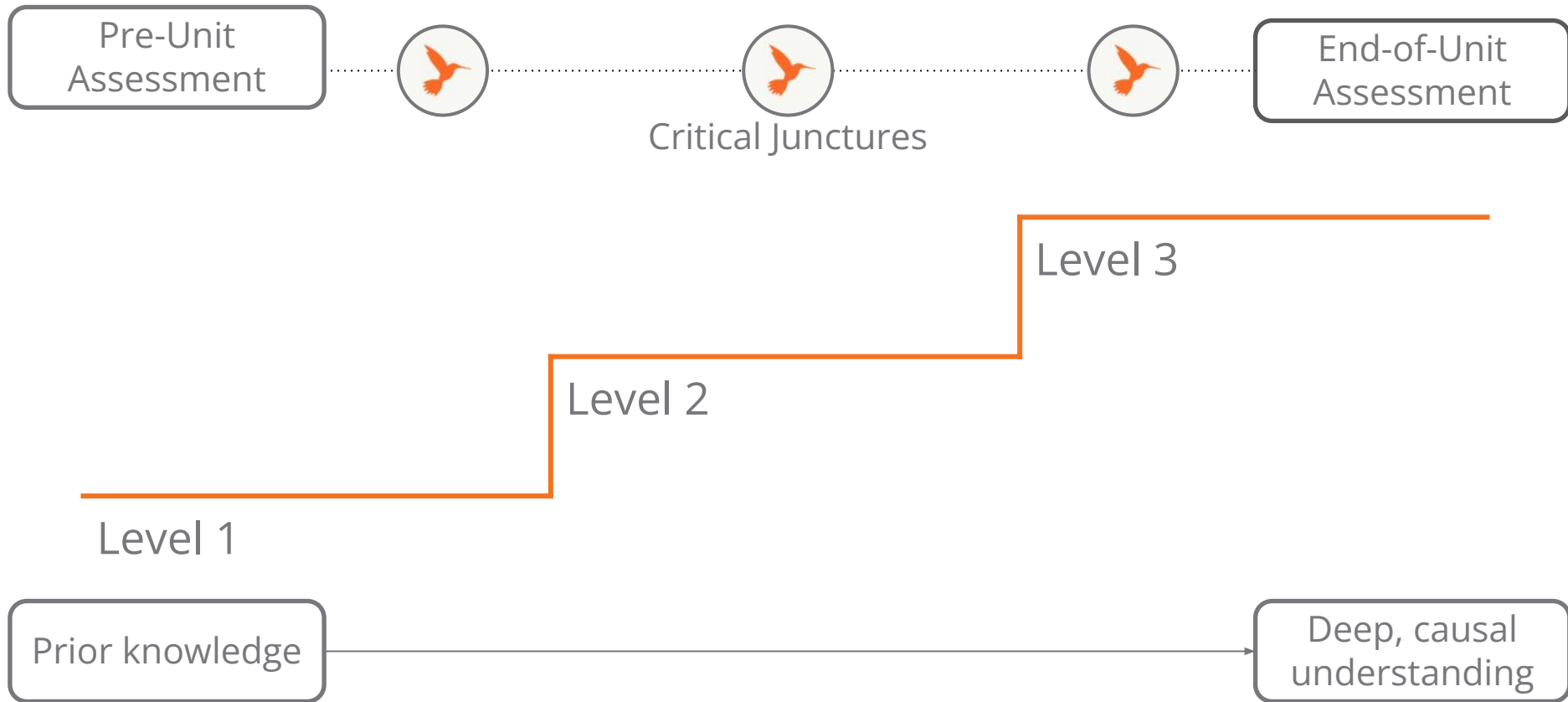Pre-Unit Assessment

End-of-Unit Assessment
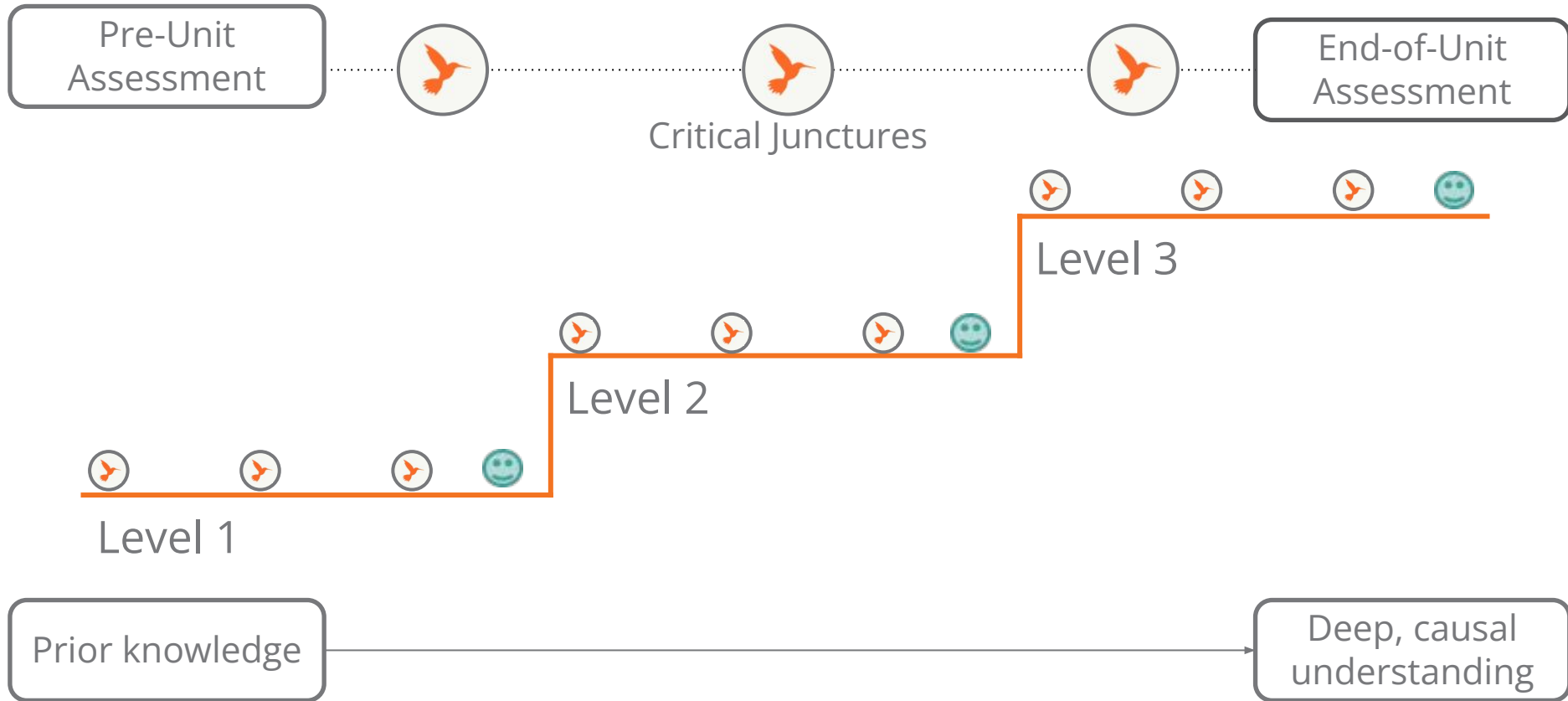
Level 3

Level 2

Level 1

Prior knowledge

Deep, causal understanding

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Critical Juncture Assessments

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On-the-Fly Assessments and Student Self-Assessments

Pre-Unit Assessment

Critical Junctures

End-of-Unit Assessment

Level 3

Level 2

Level 1

Prior knowledge

Deep, causal understanding

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Assessment System

Unit Guide resources

- **Assessment System:** Overview information and lists of all assessment opportunities

- **Embedded Formative Assessments**: Full-text of all On-the-Fly and Critical Juncture assessments

- **3-D Assessment Objectives:** Correlates unit assessments to NGSS Performance Expectations

Assessment System

Lesson-level resources

Full text of Critical Juncture and On-the-Fly Assessments (hummingbird icon):

- Instructional Guide
- Classroom Slides

Assessment Guides (in Digital Resources):

- Pre-Unit Assessment
- End-of-Unit Assessments

Hidden slide: Assessment System document

Planning for the Unit

- Unit Overview
- Unit Map
- Progress Build
- Getting Ready to Teach
- Materials and Preparation
- Science Background
- Standards at a Glance

Teacher References

- Lesson Overview Compilation
- Standards and Goals
- 3-D Statements
- **Assessment System**
- Embedded Formative Assessments
- Articles in This Unit
- Apps in This Unit
- Flextensions in This Unit

Printable Resources

- Article Compilation
- Coherence Flowchart
- Copymaster Compilation
- Flextension Compilation
- Investigation Notebook
- NGSS Information for Parents and Guardians
- Print Materials (8.5" x 11")
- Print Materials (11" x 17")

Offline Preparation

Teaching without reliable classroom internet? Prepare unit and lesson materials for offline access.

Offline Guide

Assessment System ⓘ

Metabolism
Teacher References

- **Rubrics:** Guidance is provided to gauge the level of student performance on the assessment task, with suggestions for student feedback and questioning strategies to advance learning, revise performance, or elicit and clarify student thinking. Rubrics are available in Digital Resources in the Lesson Brief for the lesson in which the task occurs.

- **Possible student responses:** Possible student responses are provided to model how evidence of understanding, or partial understanding, may be demonstrated by the student for the specific task. Possible student responses are provided in the Possible Responses tab for the activity indicated in the table.

- **Look for/Now what? notes:** Each On-the-Fly Assessment includes a two-part description of what evidence of understanding would look like for the task (Look for) and how instruction may be adjusted in response (Now what?). These are accessible by pressing the orange hummingbird icon in the activity in which they appear.

Assessment Opportunity	Next Generation Science Standards
Lesson 1.1, Activities 1-3: Multiple-Choice and Written-Response Questions **Assessment Type:** Pre-Unit Assessment **Evaluation Guidance:** • Auto-Scored Through *Reporting* (Selected-Response Items) • Rubrics & Possible Student Responses for DCIs & CCCs (Constructed-Response Items)	**DCIs:** • LS1.A: Structure and Function • LS1.C: Organization for Matter and Energy Flow in Organisms • PS3.D: Energy in Chemical Processes and Everyday Life **SEPs:** • Practice 4: Analyzing and Interpreting Data • Practice 6: Constructing Explanations and Designing Solutions • Practice 8: Obtaining, Evaluating, and Communicating Information **CCC:** • Systems and System Models
Lesson 1.3, Activity 3: 3-D Performance Task: Modeling Molecules in a Healthy Cell **Assessment Type:** On-the-Fly Assessment: End-of-Chapter Modeling **Evaluation Guidance:** • Look For/Now What? Notes • Possible Student Responses	**DCIs:** • LS1.A: Structure and Function • LS1.C: Organization for Matter and Energy Flow in Organisms • PS3.D: Energy in Chemical Processes and Everyday Life **SEPs:** • Practice 1: Asking Questions and Defining Problems • Practice 2: Developing and Using Models • Practice 8: Obtaining, Evaluating, and Communicating Information **CCCs:** • Scale, Proportion, and Quantity • Systems and System Models

Hidden slide: Navigate to the Assessment

Assessment System

Exploration time

Open the Assessment System document in the Unit Guide for a list of all assessments.

Pick a few assessments and navigate to the lessons when they occur.

Read through the assessments to build your familiarity with the Assessment System.

Pre-unit assessment

Critical Junctures

End-of-Unit Assessment

Level 3

Level 2

Level 1

Prior knowledge

Deep, causal understanding
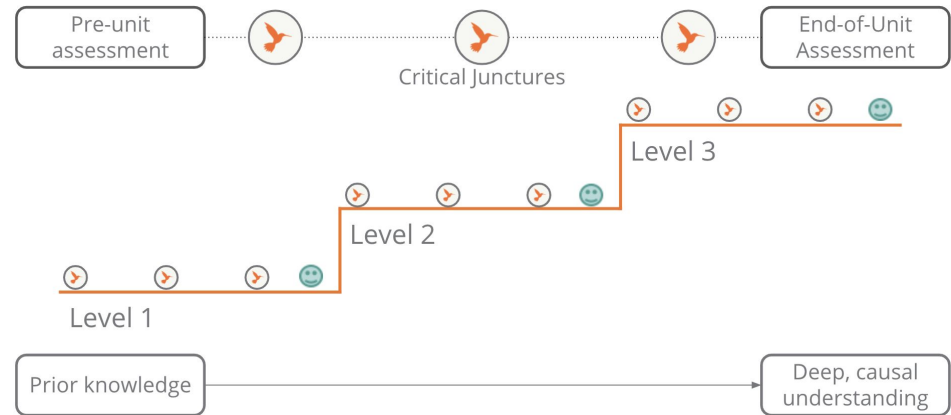
What is formative assessment?

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

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Design Principles of Formative Assessment

- **Credible:** information from the assessment is trustworthy
- **Actionable:** information is at a level of specificity such that a teacher can use it to bolster instruction
- **Timely:** information comes at a time when a teacher is able to take action and when a student can productively leverage feedback

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Assessment as a Three Dimensional System
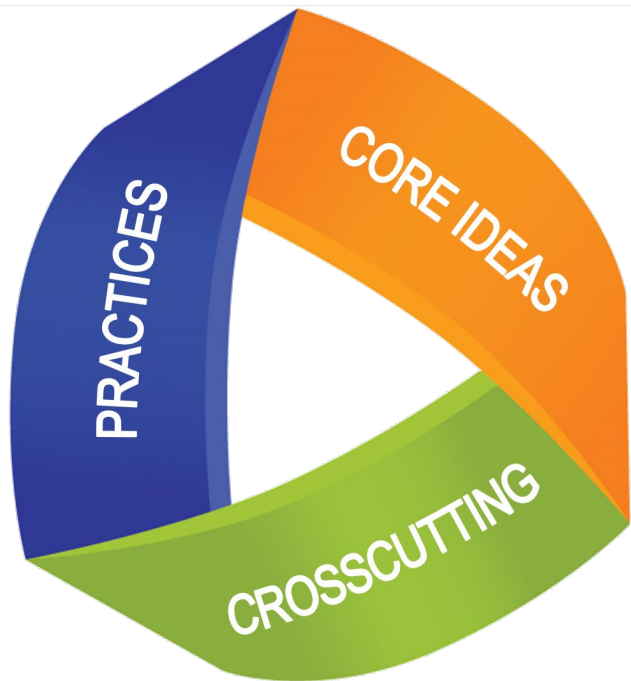
Lesson 2.1, Activity 4:
Student Drawing and Discussion: The Function of Plant Parts

Assessment Type:
On-the-Fly Assessment

Evaluation Guidance:

- Look For/Now What? Notes

DCI:

- LS2.A: Interdependent Relationships in Ecosystems

SEPs:

- Practice 2: Developing and Using Models

- Practice 4: Analyzing and Interpreting Data

- Practice 7: Engaging in Argument from Evidence

- Practice 8: Obtaining, Evaluating, and Communicating Information

CCCs:

- Systems and System Models

- Structure and Function

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Animal & Plant Defenses Progress Build

Level 3

Animals' and plants' offspring have similar, though not identical, structures to their parents that work in the same ways.

Level 2

Many animals and plants have body structures with qualities that make them good for stopping animals from finding and/or eating them.

Level 1

To survive, animals and plants must not be eaten by animals that try to eat them for food.

Pre-unit assessment

Critical Junctures

End-of-Unit Assessment

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Situating an Assessment

Lesson 1.2 Purpose: The purpose of this lesson is to lay the foundation for students to understand that living things have body parts that help them meet their survival needs.

Progress Build Level 1:
To survive, animals and plants must not be eaten by animals

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Lesson 1.2 Overview: Activity 1

1: Reading: Tortoise Parts (20 min.) ✈

The teacher introduces the Investigation Question that frames the work students will do in the next few lessons and leads a Shared Reading of Tortoise Parts. Students are introduced to the visualizing strategy to help them make sense of how tortoises do what they need to do to survive. Tortoise Parts introduces the idea that animals use specific body parts to meet their survival needs. Included in this activity is an On-the-Fly Assessment that provides an opportunity to assess students' initial use of the visualizing strategy.

2: Observing Structures Used to Eat (15 min.)

The teacher introduces the word observe to support students' understanding of the firsthand observations they make in this activity. Partners observe one another eating carrots to gather evidence about how animals use their structures to do what they need to do to survive.

3: Discussing Observations and Structures (10 min.)

Students share their observations from the Carrot Eating activity to identify the structures that humans use to get and eat the food they need to survive. The teacher introduces the What Scientists Do chart to help students understand the various things they are doing to answer questions in their work as scientists.

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Lesson 1.2, Activity 1

On-the-Fly Assessment 1: Visualizing Tortoise Structures in Use

Look for: Students' descriptions of their visualizations of the tortoise using its various structures presents an opportunity to informally assess their initial ability to visualize based on what they see and read. Visualizing information read or seen in books is the focal sense-making strategy for this unit. In general, students should describe visualizations that reflect the elements in the image and text. For example, a student might say something like *I saw the big toenails ripping and pushing the dirt behind the tortoise.*

Look-for

Now what? As students share what they visualized, take time to repeat one or two examples of visualizing that drew on the text and images, and emphasize those connections. For example, you might say something like *We read about the tortoise's big toenails and can see its feet in the dirt in this picture. You visualized those big toenails pushing that dirt backward, behind the tortoise. Good visualizing starts with the things we see and read, and uses them to imagine something more.*

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Collecting Data

How do you typically collect and record student data?

What strategies have you successfully used for collecting data in a remote learning setting ?

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Data Collection Tool Sample

Unit Name:
Lesson & Activity #:

Look for 1:
Look for 2: .

Student Name	Look for 1	Look for 2	Notes

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Model Analysis: 1.2 Activity 1

Analyzing student data: refer to the Look for section of the Lesson's assessment and refer to your observation notes.		Taking action based on student data: refer to the Now what section of the lesson's assessment and consider how you might adjust instruction in your classroom.	
Which misconception?	**Which students?**	**When?**	**How?**
☑ Key Concept ☑ Practice ☐ Crosscutting Concept Notes: Students should be able to visualize based on what they see & read.	Tristian Trent Wanda Zena	☑ In the moment ☐ In upcoming activity ☐ Outside of lesson Notes: During the activity itself.	☑ Keep an eye on certain students ☑ Provide additional instruction ☐ Revisit an activity Notes: Coach students listed as they continue to practice & hear other visualizations drawing on both text & images.

Planning for an Upcoming Assessment

1. Choose an upcoming assessment for your unit.

2. Plan using the template or your note catcher.

Unit: Lesson:			
Analyzing student data: refer to the Look for section of the Lesson ____ assessment. *(If using the @Home Units refer to the chapter assessment considerations).*		**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.	
How will I collect data?	**Which misconception?**	**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:

Assessment System

Key takeaways: On-the-Fly and Critical Juncture Assessments

- Gather data about conceptual understanding, 3-D learning, literacy skills, and collaboration

- Embedded into instruction

- "Look for" defines what's being assessed

- "Now what?" suggestions for providing differentiated support

Questions?
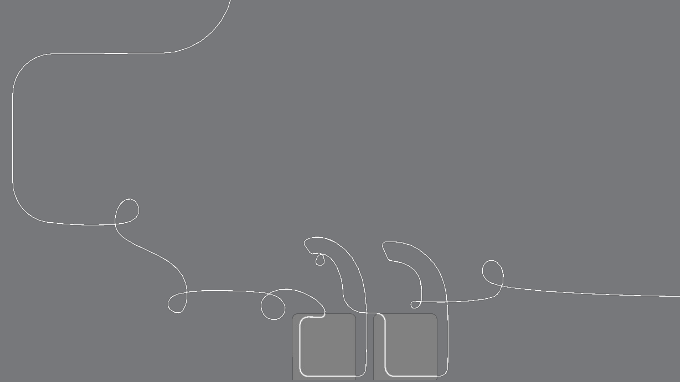
Reflection

How do you plan to use the assessments in the Assessment System?

How can the Assessment System be a tool for deeper learning?

Synthesizing our reflections

The Assessment System provides insight into students' conceptual understanding and their work as scientists at just-right points throughout the unit.

Instructional suggestions help you provide support so students' learning can continue to deepen.

✎ _Tools for Deeper Learning_

- Progress Build
- 3-D learning
- Coherence Flowchart
- Assessment System

Break

Plan for part 3

- **Framing the day**
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- **Closing**
  - Final Questions & Feedback

Unit, chapter, or lesson-level collaborative planning

Choose the option that best supports you in **planning to teach:**

1. Complete the Unit Level Planning & Internalization on **pages 35-38.**

2. Complete Lesson plans on **pages 39-41.**

3. Complete Chapter level analysis on **pages 42-46**.

Debrief & reflection

- Share one **key-takeaway** from your breakout room planning work-time.

Plan for part 3

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Teaching science

"Science [is] both a body of knowledge and an evidence-based, model and theory building enterprise that continually extends, refines, and revises knowledge."

"Three Dimensional Learning." Three Dimensional Learning | Next Generation Science Standards, www.nextgenscience.org/three-dimensions.

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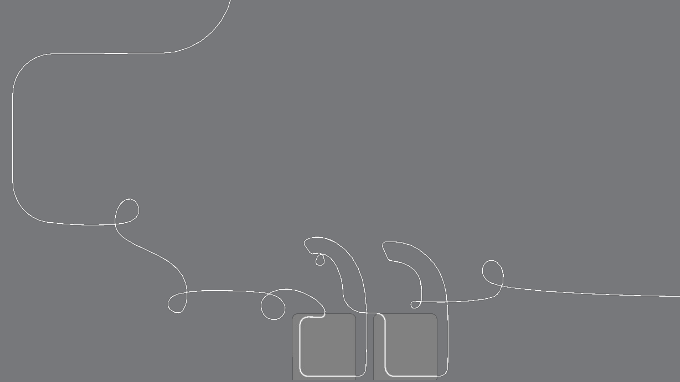
Self-assessment

Reflect upon and celebrate your work today by completing the self-assessment.

Self-assessment: Reflect on your learning

Use the self-assessment statements below to reflect upon and evaluate your learning from today's workshop.

	Strongly Disagree			Strongly Agree	
	1	2	3	4	5
I know the phenomenon students will figure out in my unit.	☐	☐	☐	☐	☐
I can navigate to and between lessons in the Amplify Science platform.	☐	☐	☐	☐	☐
I know how to access and edit Classroom Slides decks.	☐	☐	☐	☐	☐
I can describe what learning is like for students in Amplify Science.	☐	☐	☐	☐	☐
I can explain how evidence sources work together in Chapter 1 of my unit.	☐	☐	☐	☐	☐
I can describe how Amplify Science supports students' literacy development (including reading, writing, speaking, and listening).	☐	☐	☐	☐	☐
6-8: I know how to access assessment resources including Classwork, Assign, and Reporting.	☐	☐	☐	☐	☐
I understand how to read a Coherence Flowchart.	☐	☐	☐	☐	☐
I know what types of resources I can find on the Program Hub.	☐	☐	☐	☐	☐
I'm comfortable using the Unit Guide as a resource when looking for a specific piece of information.	☐	☐	☐	☐	☐
I've internalized my unit's Progress Build and I understand the science concepts my students will learn.	☐	☐	☐	☐	☐
I can describe how learning is 3-dimensional in my unit.	☐	☐	☐	☐	☐
I understand how I can use the Coherence Flowchart as a planning tool.	☐	☐	☐	☐	☐
I can describe the purpose of different types of assessments in the Assessment System and supports available to me.	☐	☐	☐	☐	☐
I can visualize how teaching Amplify Science will lead my students to deeper learning.	☐	☐	☐	☐	☐
I know how to access support from Amplify if I need it.	☐	☐	☐	☐	☐

Closing reflection

Based on our work today, share:

Head: something you'll keep in mind

Heart: something you're feeling

Feet: something you're planning to do

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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Additional resources and ongoing support

Customer Care

Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-10PM EST and weekends 10AM-6PM EST.

help@amplify.com

800-823-1969

Amplify Chat

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Final Questions?

Please provide us feedback!

URL: https://www.surveymonkey.com/r/5DQW2T6

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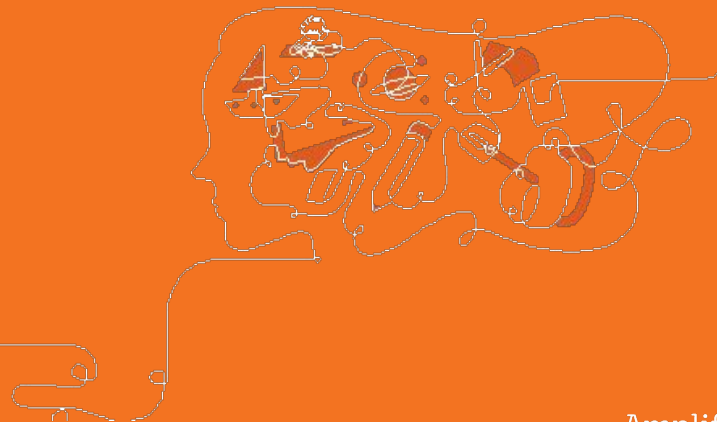
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Thank you & be well!