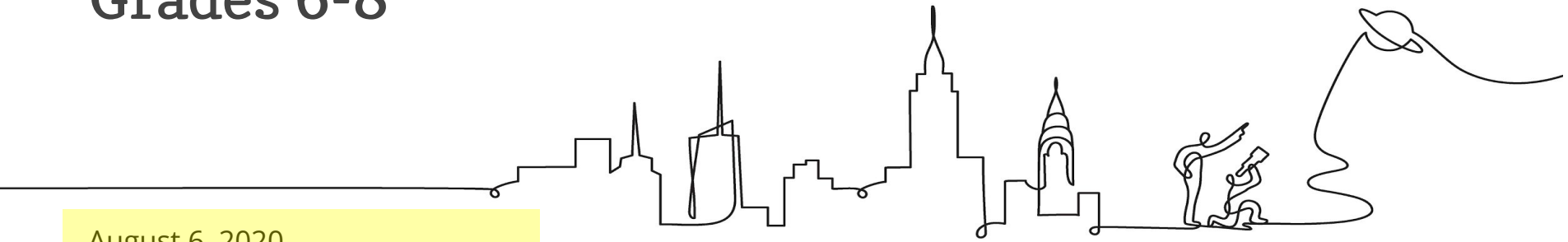
Amplify Science
New York City

New Administrators' Orientation
Grades 6-8

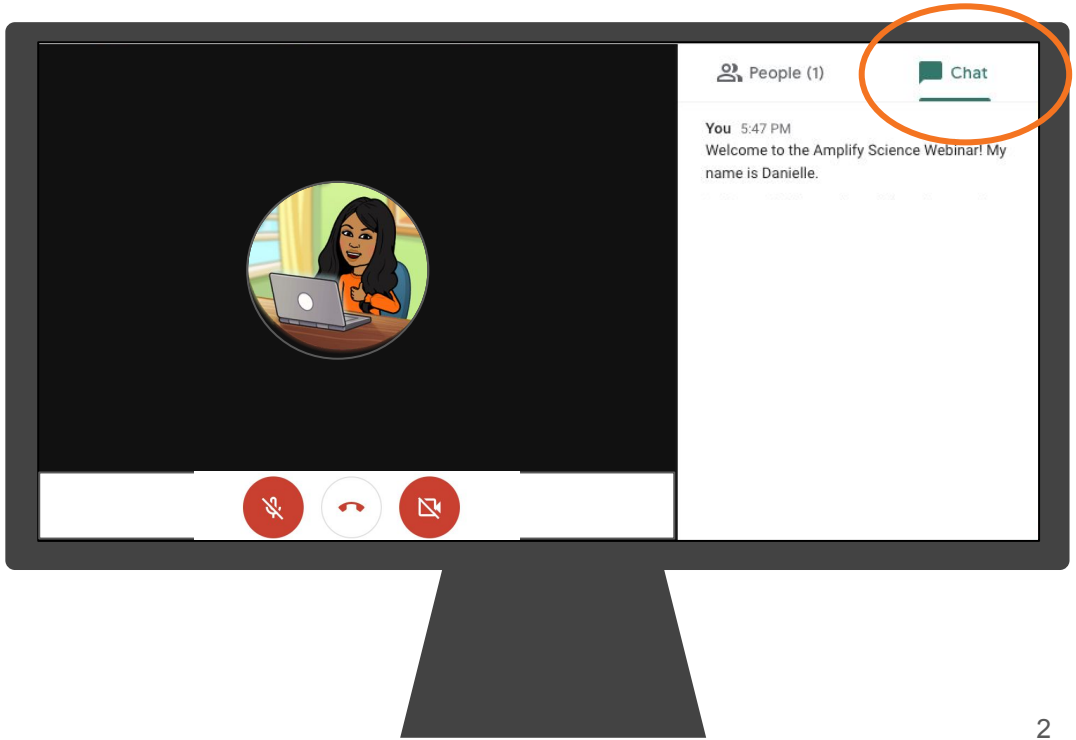


August 6, 2020
Presented by Your Name

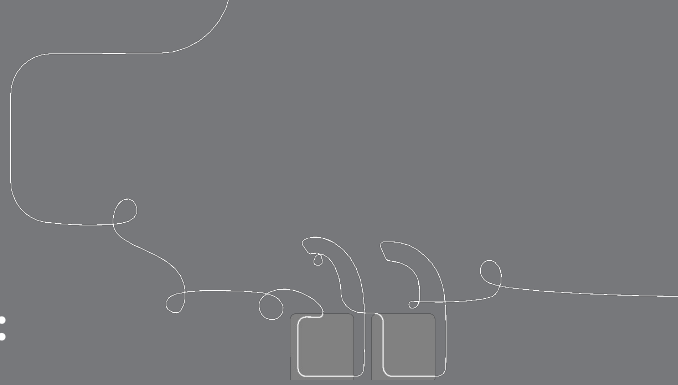
Introductions! Who do we have in the room?

Think-Type-Chat!

- Please share:
  - Your name
  - Your DBN
  - Something you're excited about with implementing Amplify Science.



Overarching goals



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

- Recognize how lessons engage students in three-dimensional learning.
- Understand how the program's multimodal approach supports students in figuring out the unit phenomenon.
- Become familiar with "look fors" that administrators should see in an effective three dimensional science instruction.
- Discuss ways in which administrators can support the teaching of science in the coming school year.
- Make an informed decision about which of the Amplify Science Hybrid Learning Resources (@Home Unit and @Home Videos) will best support their teachers.

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

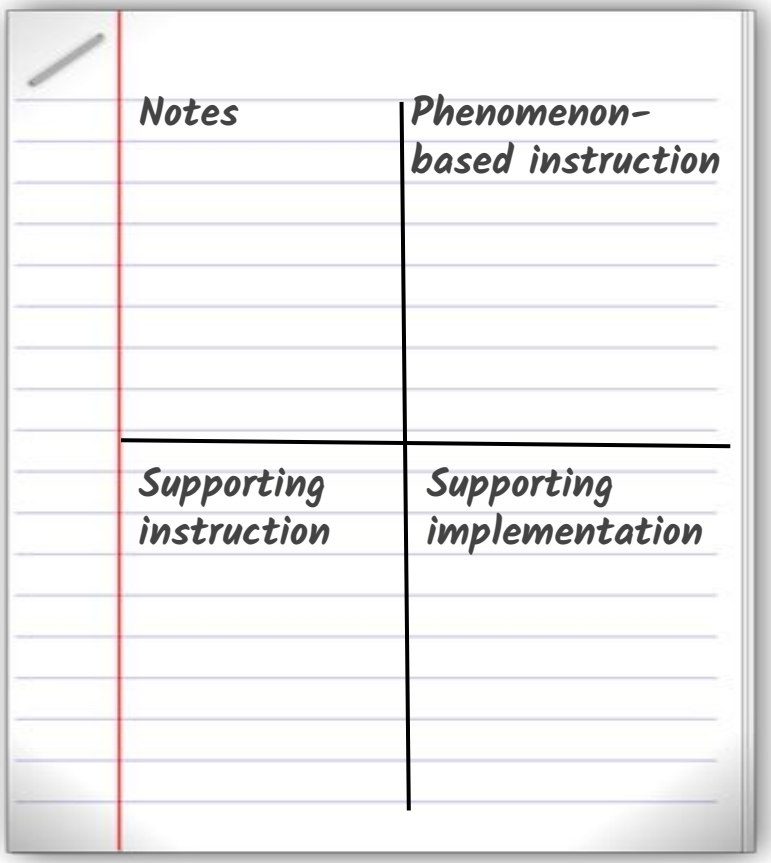
Make sure you have a note-catcher present

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

Plan for the day

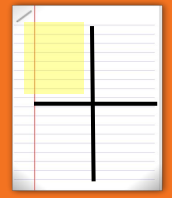
- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
  - What does this look like in Amplify Science?
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey

Capturing key takeaways!

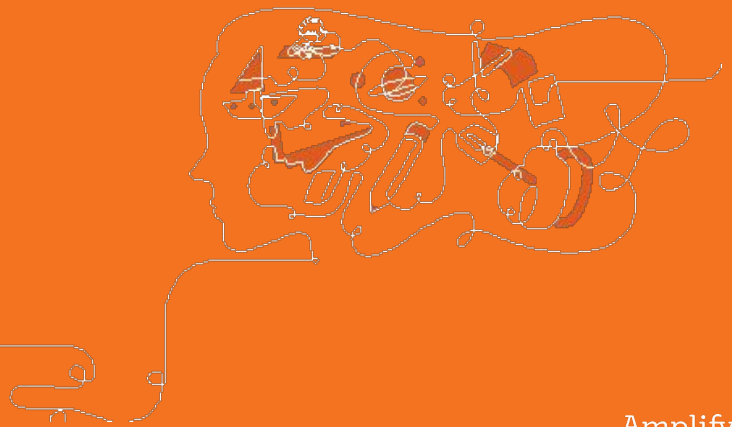


Plan for the day

- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
  - What does this look like in Amplify Science?
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey



What is Amplify Science?



THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

+ Amplify.

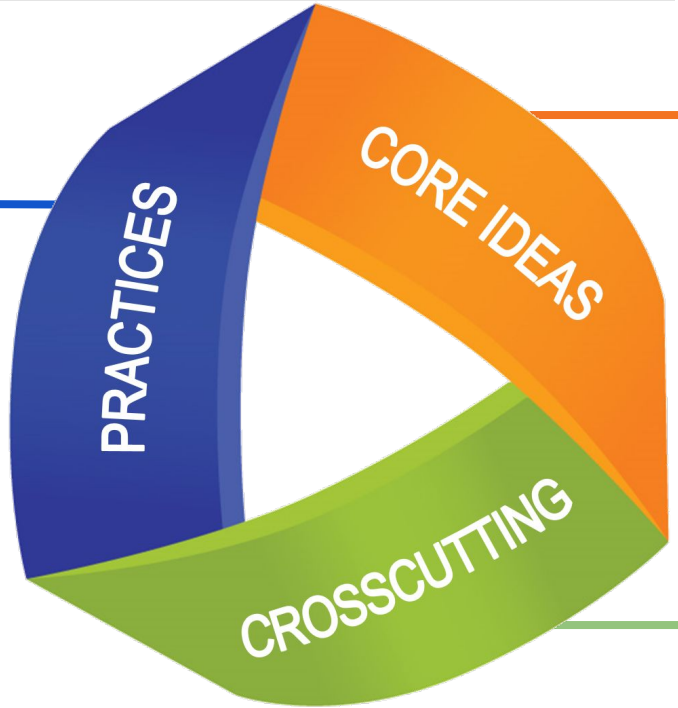
Amplify Science

Next Generation Science Standards

Designed to help students build a cohesive understanding of science

What scientists do

Science and Engineering Practices



What scientists want to know

Disciplinary Core Ideas

How scientists think

Crosscutting Concepts

© 2018 The Regents of the University of California

Partnership: Amplify-LHS-NYC DOE

AmplifyScience AmplifyScience NYC Edition

NGSS

+ Companion Lessons

NYSSLS

© 2018 The Regents of the University of California

Middle School Curriculum New York City Edition

Grade 6

- Launch: Harnessing Human Energy
- Thermal Energy
- Populations and Resources
- Matter and Energy in Ecosystems
- Weather Patterns
- Ocean, Atmosphere,and Climate
- Earth's Changing Climate

Grade 7

- Launch: Microbiome
- Metabolism
- Phase Change
- Chemical Reactions
- Plate Motion
- Engineering Internship: Plate Motion
- Rock Transformations
- Engineering Internship: Earth's Changing Climate

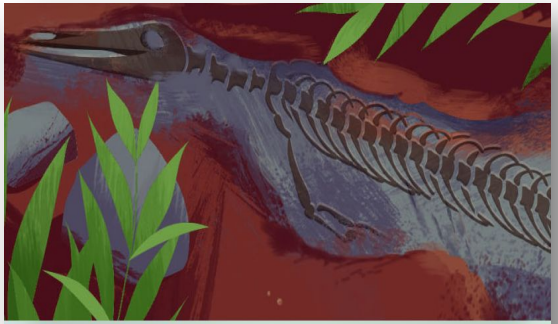
Grade 8

- Launch: Geology on Mars
- Earth, Moon, and Sun
- Force and Motion
- Engineering Internship: Force and Motion
- Magnetic Fields
- Light Waves
- Traits and Reproduction
- Natural Selection
- Evolutionary History

Middle School Unit Types: Launch, Core, & Internship

11 Lessons

Geology on Mars



19 Lessons

Plate Motion

10 Lessons

Plate Motion Engineering Internship

AmplifyScience

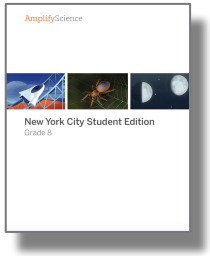
authored by THE LAWRENCE HALL OF SCIENCE UNIVERSITY OF CALIFORNIA, BERKELEY

All curriculum materials ©2016 The Regents of the University of California
© 2017 Amplify Education, Inc. All trademarks and copyrights are the property of Amplify or its licensors.

Amplify.

Middle School Unit Resources

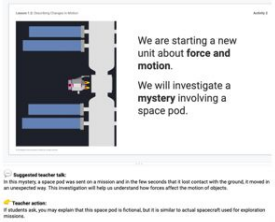
NYC Print student editions



Investigation Notebooks or digital student experience

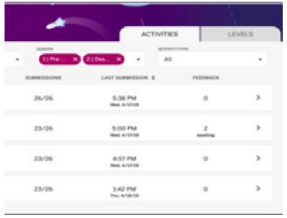
Articles (digital or print)

Simulations and other digital tools



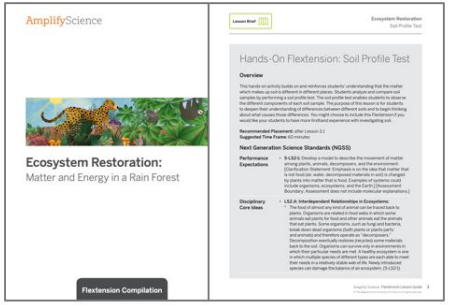
Classroom Slides

Teacher's Guide (digital or print)



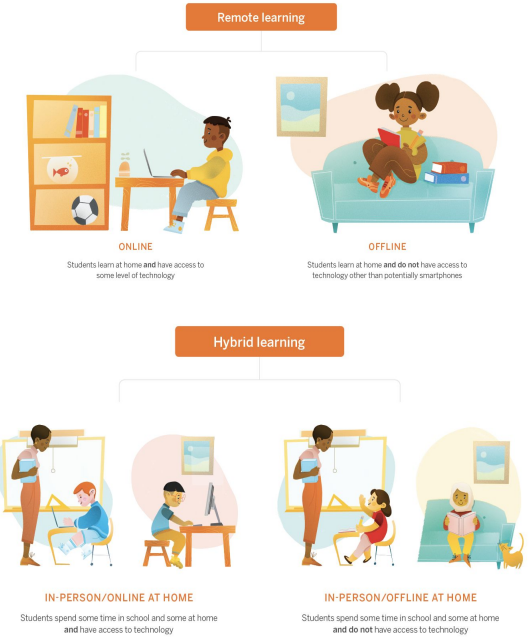
Assessments and Reporting

Hands-on and print materials

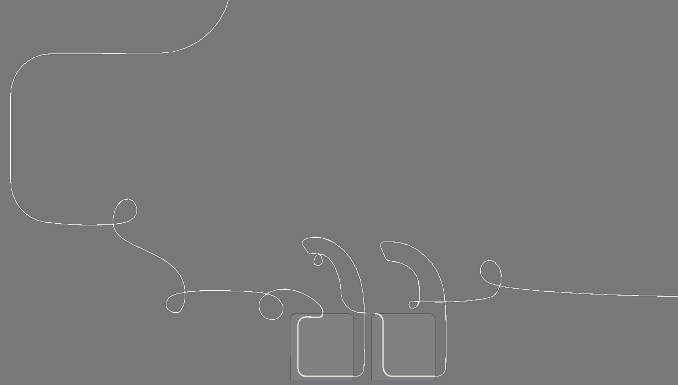


Hands-on Flextensions

Remote and hybrid



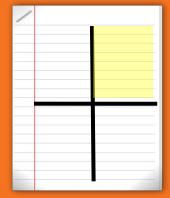
authored by THE LAWRENCE HALL OF SCIENCE UNIVERSITY OF CALIFORNIA, BERKELEY



Questions?

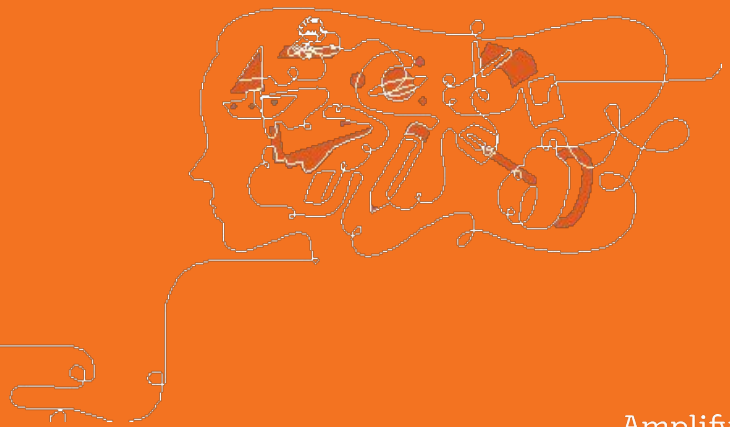
Plan for the day

- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
  - What does this look like in Amplify Science?
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey



What is phenomenon-based instruction?

A scientific **phenomenon** is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.



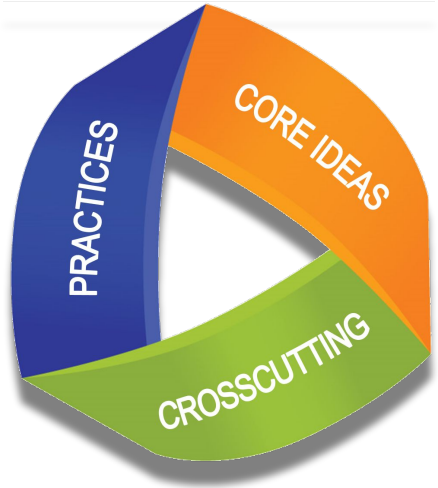
Next Generation Science Standards

Think-Type-Discuss: How might learning be different?

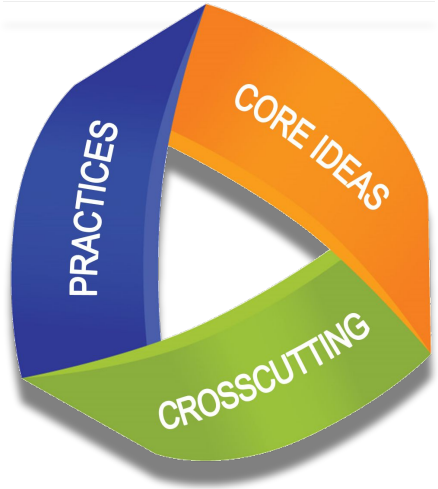
Topic-based	Phenomenon-based
What is the water cycle?	What caused the storms in this area to be severe?
What is an ecosystem?	Why are there suddenly so many moon jellies?
How does light energy interact with matter?	Why does Australia have an elevated skin cancer rate?

Figure out not just learn about

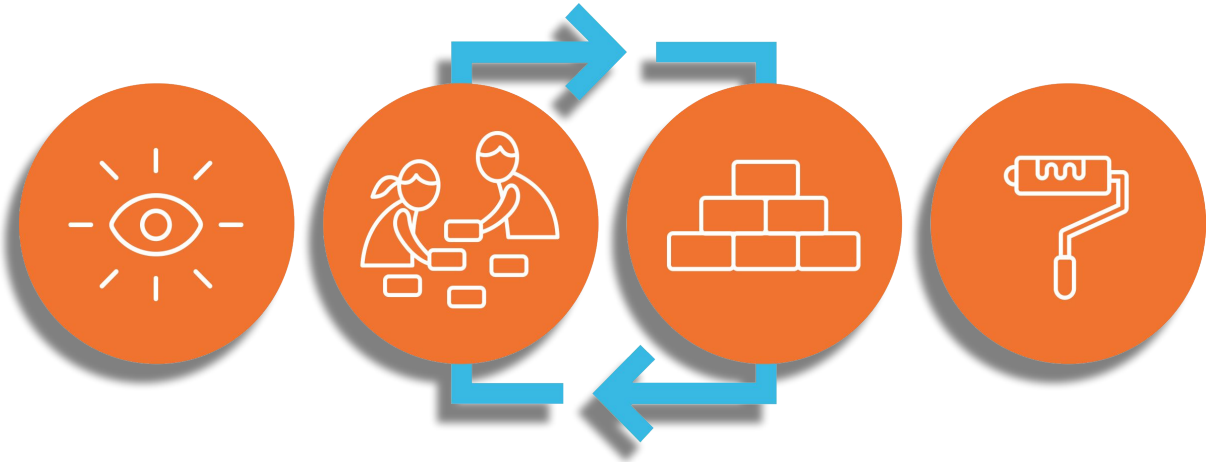
Using three dimensions to figure out **like a scientist**



...through the Amplify Science approach



The Amplify Science Approach



Unit

19 Lessons
Metabolism

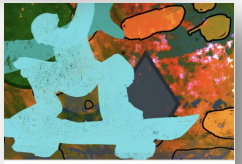
Chapters

Chapter 1: Molecules Needed by the Cells

3 Lessons

Chapter 2: Body Systems

7 Lessons



Chapter 3: Cellular Respiration

5 Lessons

Chapter 4: Metabolism and Athletic Performance

4 Lessons

Lessons

Lesson 3.1: Learning About Energy Release in the Body

Lesson 3.2: Exploring Chemical Reactions

Lesson 3.3: Cellular Respiration, Growth, and Repair

Lesson 3.4: "Blood Doping: Messing with Metabolism to Win Races"

Lesson 3.5: Modeling Cellular Respiration in an Athlete's Body

Activities

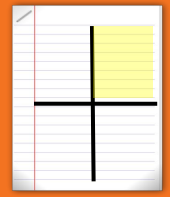
1 WARM-UP
Warm-Up

2 READING
Examining Evidence About Jordan Jones's...

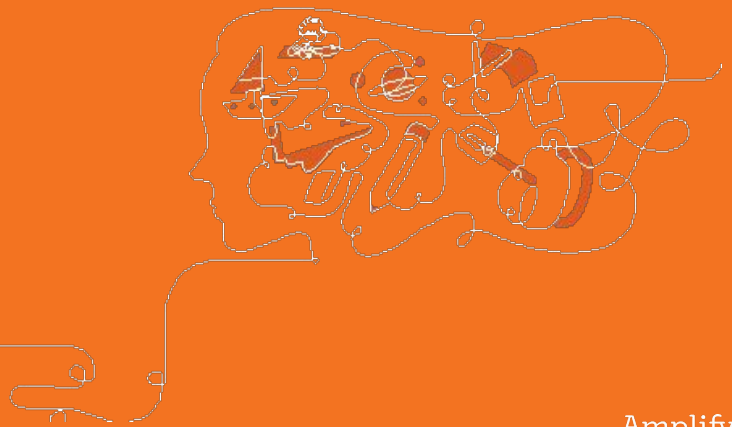
3 STUDENT-TO-STUDENT DISCUSSION
Discussing Evidence About Jordan Jones's...

4 TEACHER-LED DISCUSSION
Considering Claim 2

© 2018 The Regents of the University of California



What does phenomenon-based instruction look like in Amplify Science?



19 Lessons

Metabolism

Introducing the phenomenon and setting the purpose for investigating

Pay attention to the student role and the phenomenon that students are asked to figure out.

Metabolism

Lesson 1.2: Welcome to Medical School

AmplifyScience

15 MIN

Activity 1

Warm-Up

Today, we will begin a new unit called ***Metabolism*.**

We will start with a Warm-Up each day to get us thinking about science ideas. For today's Warm-Up, you will watch and respond to a video that introduces your new role as **medical students.**

© The Regents of the University of California. All rights reserved.

Warm-Up

Why do you think your new patient, Elisa, is feeling tired all the time? Explain your ideas.

© The Regents of the University of California. All rights reserved.

Not getting enough sleep
Eating the right foods
Medical condition

Why do you think your new patient, Elisa, is feeling tired all the time?

Explain your ideas.

© The Regents of the University of California. All rights reserved.

Claims

Elisa is feeling tired because she:

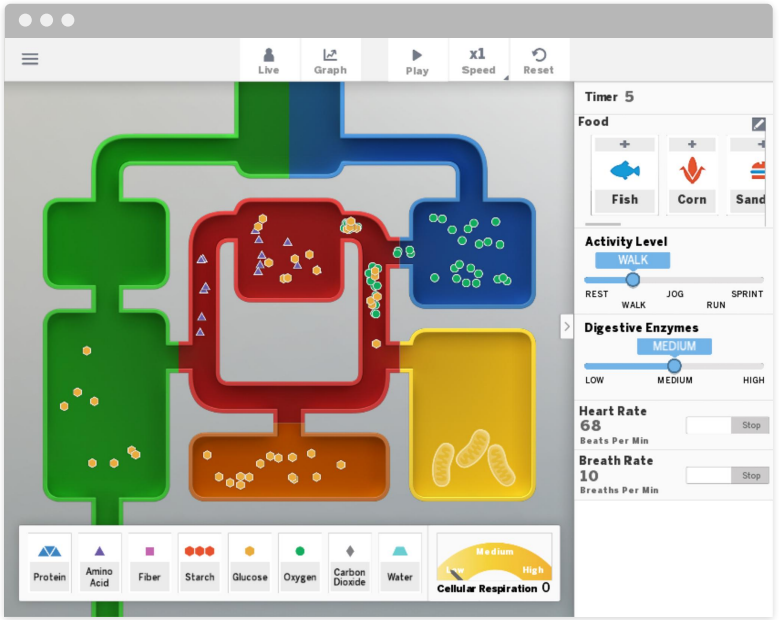
You have a lot of **good ideas**. I think we can group these into several "umbrella" **claims** that we can try to **investigate** further. I will write them on the board.

© The Regents of the University of California. All rights reserved.

20 MIN

Activity 2

Introducing the Metabolism Simulation

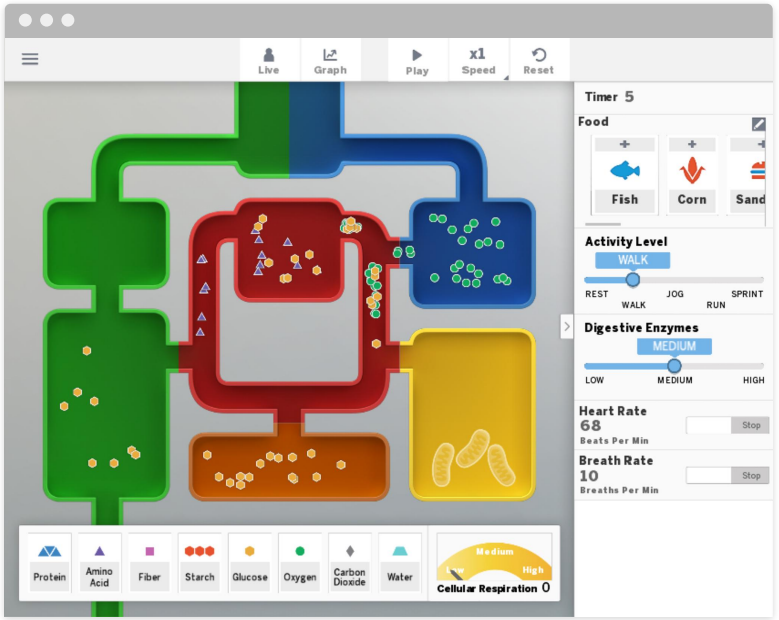


This simulation is called the *Metabolism* Simulation. It's a **scientific model** of the human body that simulates many things that happen inside the human body.

© The Regents of the University of California. All rights reserved.

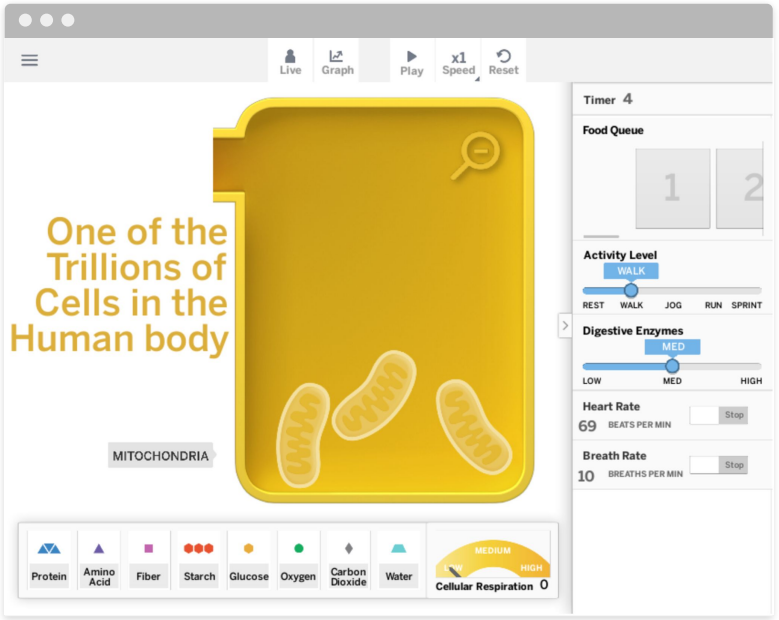
This **key** identifies the different types of **molecules** entering the system.

By pressing them, you can also turn the molecule visibility **off and back on**.



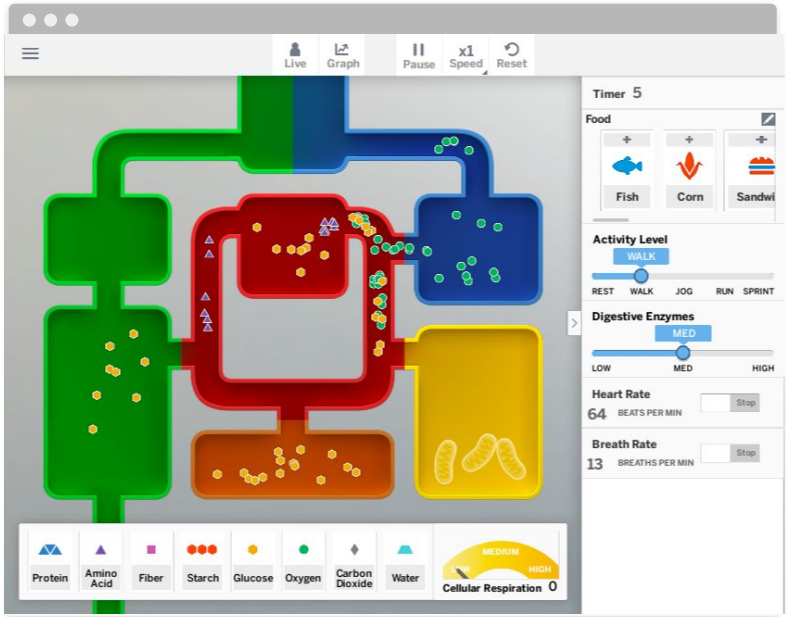
What did you **notice** about the Sim?

© The Regents of the University of California. All rights reserved.



The **trillions of cells** in the body have some **similarities** in the ways they function, so we can learn more about what all cells need by **observing one cell** in the Simulation.

© The Regents of the University of California. All rights reserved.



Observe the Sim a second time.

This time, watch what happens to the **food and air** that enter this healthy Simulation body.

© The Regents of the University of California. All rights reserved.

5 MIN

Activity 3

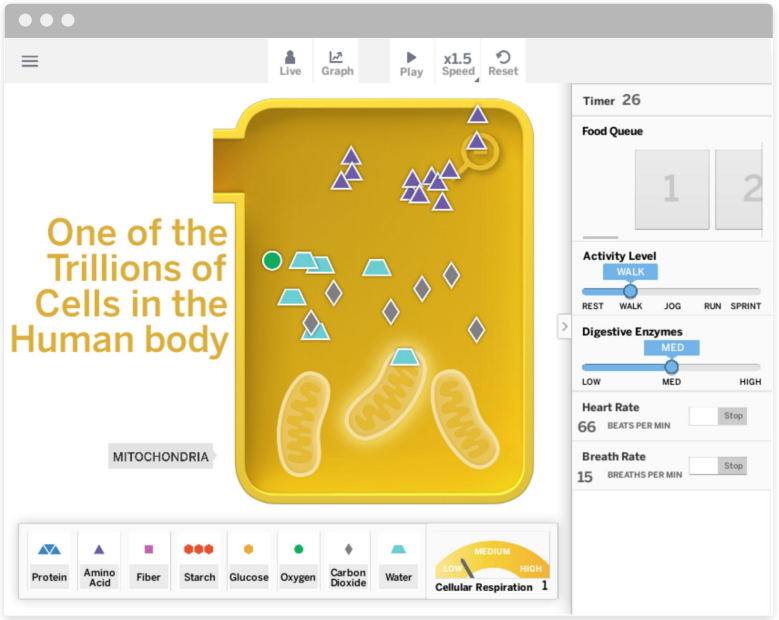
Returning to the Patient

Vocabulary

metabolism

the body’s use of molecules for energy and growth

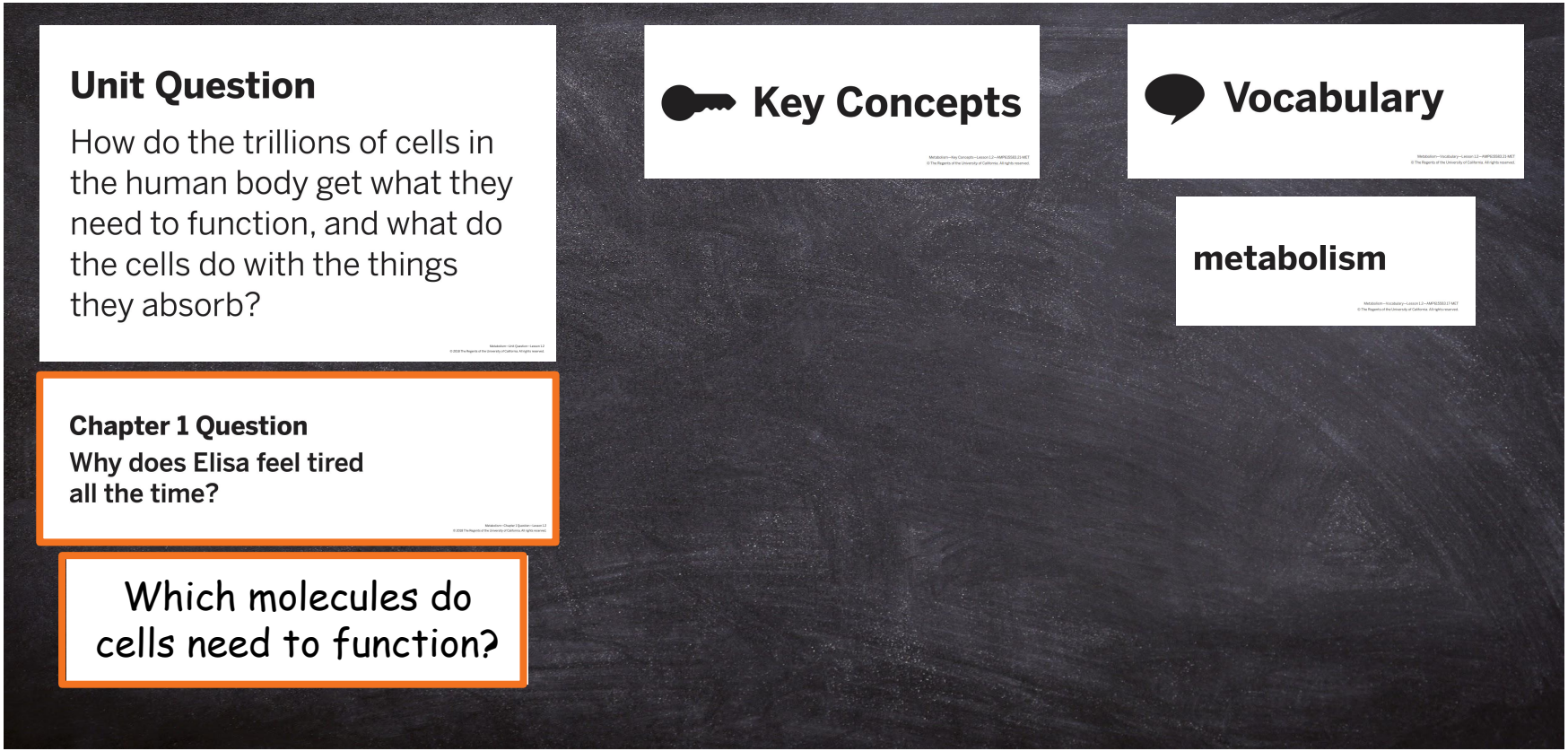
© The Regents of the University of California. All rights reserved.



In the Sim, you observed that in a functioning, healthy body, certain **molecules that come from food and air** are transported into the body's **cells.**

© The Regents of the University of California. All rights reserved.

Digital classroom wall



Activity 4

Homework

Homework

Testing Diets in the Sim

In this homework, you will experiment with different diets in the Simulation to see how the diet affects the number of molecules getting to the cells.

1. Launch the *Metabolism* Simulation.
2. Select HEALTHY BODY and then select TEST.
    - In Test Mode, you set up a pre-planned diet by pressing on items under Add Food Source. Then you press Play and observe the Simulation. The diet you selected is fed to the body automatically, and the test runs until the Timer reaches 200. During the test, you can observe the *Metabolism* Sim in the Live View or switch to the Graph View. In the Graph View, you can see the final results for Total Molecules Absorbed by Cells, which is the data you will record below.
3. Plan at least three different tests of the diet for the healthy body. Record your plan in the Diet Plan tables below.
4. Run your tests and record your results: the number of molecules absorbed by the cells.

© The Regents of the University of California. All rights reserved.

End of Lesson

THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

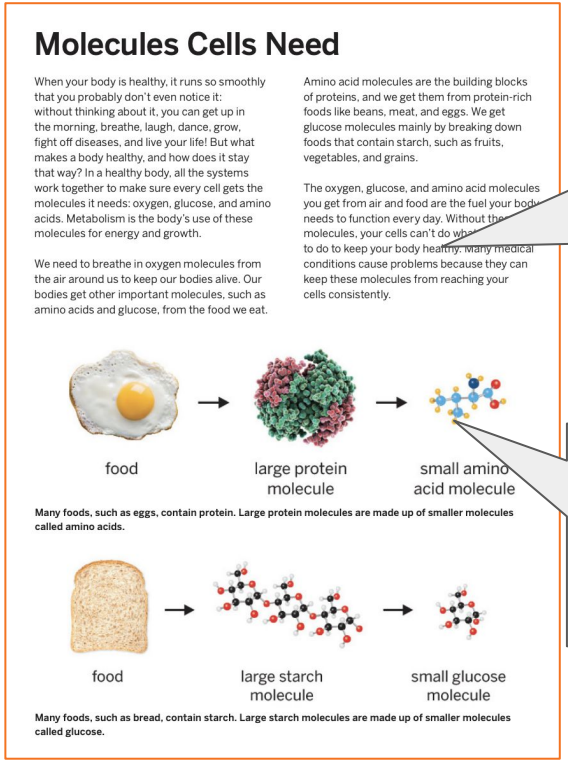
Amplify.

Published and Distributed by Amplify. www.amplify.com

© The Regents of the University of California. All rights reserved.

Active reading: student articles

- Articles provide a valuable source of evidence to figure out phenomena.
- Explicit instruction in reading like a scientist.
- Multiple reads of the same text each with a different purpose.



Molecules Cells Need

When your body is healthy, it runs so smoothly that you probably don't even notice it: without thinking about it, you can get up in the morning, breathe, laugh, dance, grow, fight off diseases, and live your life! But what makes a body healthy, and how does it stay that way? In a healthy body, all the systems work together to make sure every cell gets the molecules it needs: oxygen, glucose, and amino acids. Metabolism is the body's use of these molecules for energy and growth.

We need to breathe in oxygen molecules from the air around us to keep our bodies alive. Our bodies get other important molecules, such as amino acids and glucose, from the food we eat.

Amino acid molecules are the building blocks of proteins, and we get them from protein-rich foods like beans, meat, and eggs. We get glucose molecules mainly by breaking down foods that contain starch, such as fruits, vegetables, and grains.

The oxygen, glucose, and amino acid molecules you get from air and food are the fuel your body needs to function every day. Without these molecules, your cells can't do what they need to do to keep your body healthy. Many medical conditions cause problems because they can keep these molecules from reaching your cells consistently.

food → large protein molecule → small amino acid molecule

Many foods, such as eggs, contain protein. Large protein molecules are made up of smaller molecules called amino acids.

food → large starch molecule → small glucose molecule

Many foods, such as bread, contain starch. Large starch molecules are made up of smaller molecules called glucose.

Where does the body get glucose, amino acids, and oxygen molecules?

What might happen if the body doesn't take in one or all of these molecules?

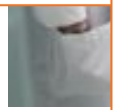
Returning to Elisa's problem

Claims:

- ~~Elisa isn't getting enough sleep.~~
- ~~Elisa is not eating enough food or not eating the right foods.~~
- Elisa has a medical condition.

Healthy Sleep Comparison

Average Teenage Sleep Patterns	Elisa's Sleep Pattern
Many scientific studies of teenagers show that most healthy teenagers get between 8 and 10 hours of sleep each night.	Elisa's sleep journal shows that she is getting about 9 hours of sleep every night.

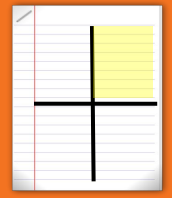


Healthy Eating Comparison

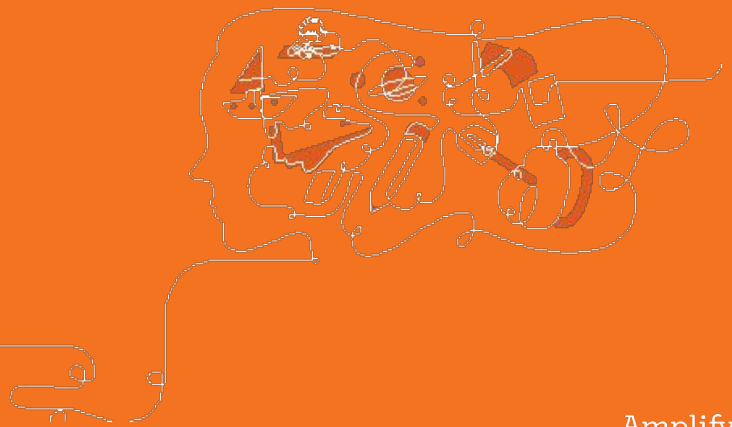
Average Teenage Eating Habits	Elisa's Eating Habits
A scientific study done on 1,000 healthy 14-year-olds found that they ate between 5 and 8 servings of starch per day and between 1 and 4 servings of protein per day.	Elisa's food journal shows that she ate between 6 and 8 servings of food that contained starch every day. She ate between 2 and 4 servings of food that contained protein every day.

Advanced Literacies for Academic Success

- **Hallmark 1:** Work with a variety of texts that feature big ideas and rich content
- **Hallmark 2:** Engage in talk and discussion to build both conversational and academic language and knowledge
- **Hallmark 3:** Write to build language and knowledge
- **Hallmark 4:** Study a small set of high-utility vocabulary words and academic language structures to build breadth and depth of knowledge
- **Hallmark 5:** Use Schoolwide protocols to support reading, writing, speaking and Listening



Reflecting on phenomenon-based learning



Example lesson reflection

Think-Type-Discuss

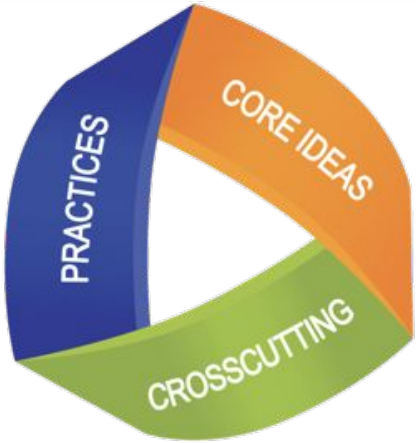
What new insights do you have about phenomenon-based learning?

What connections did you notice to Advanced Literacies?

- **Hallmark 1:** Work with a variety of texts that feature big ideas and rich content
- **Hallmark 2:** Engage in talk and discussion to build both conversational and academic language and knowledge
- **Hallmark 3:** Write to build language and knowledge
- **Hallmark 4:** Study a small set of high-utility vocabulary words and academic language structures to build breadth and depth of knowledge
- **Hallmark 5:** Use Schoolwide protocols to support reading, writing, speaking and Listening

3-D Statement

Metabolism Lesson 1.3



Three dimensions of NGSS reference

3-D learning engages students in using scientific and engineering practices and applying crosscutting concepts as tools to develop understanding of and solve challenging problems related to disciplinary core ideas.

Science and Engineering Practices

1. Asking Questions and Defining Problems
2. Developing and Using Models
3. Planning and Carrying Out Investigations
4. Analyzing and Interpreting Data
5. Using Mathematics and Computational Thinking
6. Constructing Explanations and Designing Solutions
7. Engaging in Argument from Evidence
8. Obtaining, Evaluating, and Communicating Information

Disciplinary Core Ideas

Earth and Space Sciences:
ESS1: Earth's Place in the Universe
ESS2: Earth's Systems
ESS3: Earth and Human Activity

Life Sciences:
LS1: From Molecules to Organisms
LS2: Ecosystems
LS3: Heredity
LS4: Biological Evolution

Physical Sciences:
PS1: Matter and its Interactions
PS2: Motion and Stability
PS3: Energy
PS4: Waves and their Applications

Engineering, Technology and the Applications of Science:
ETS1: Engineering Design
ETS2: Links among Engineering Technology, Science and Society

Crosscutting Concepts

1. Patterns
2. Cause and Effect
3. Scale, Proportion, and Quantity
4. Systems and System Models
5. Energy and Matter
6. Structure and Function
7. Stability and Change

Lesson 1.3: Evaluating Initial Claims About Elisa

Students obtain information from a digital model and an article in order to determine the molecules that cells need to function in a healthy body (scale, proportion, and quantity).

Multimodal Instruction

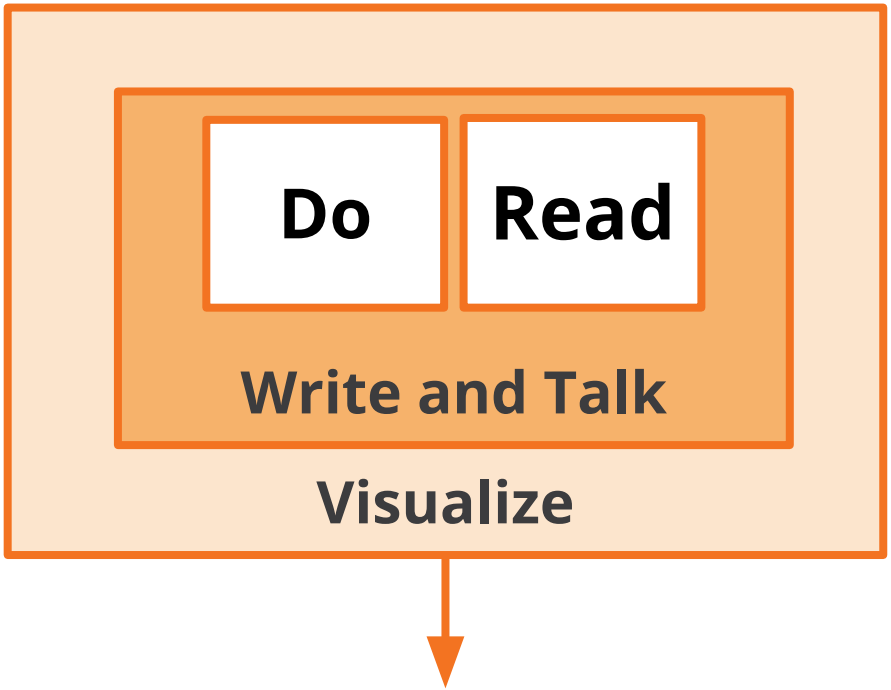
Do

Talk

Read

Write

Visualize

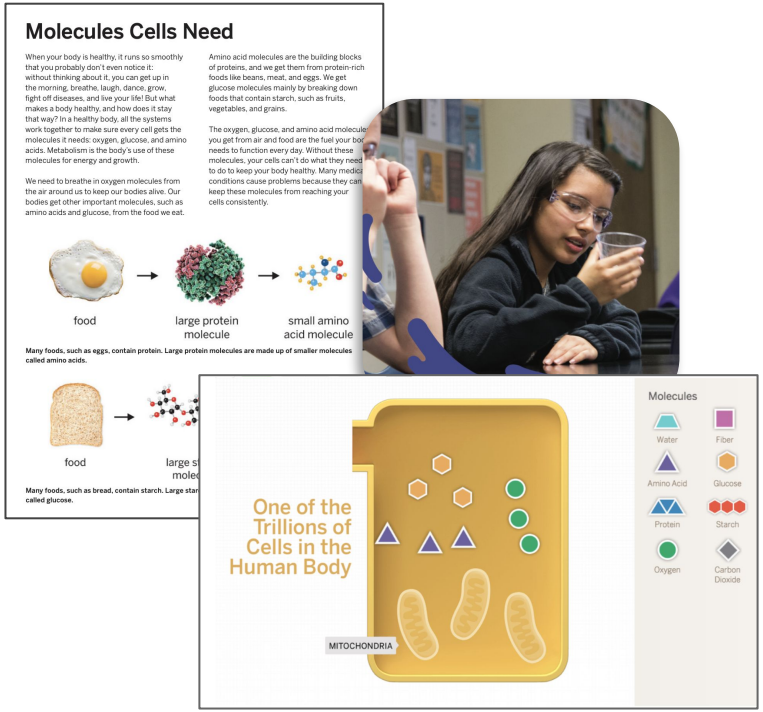


© 2018 The Regents of the University of California

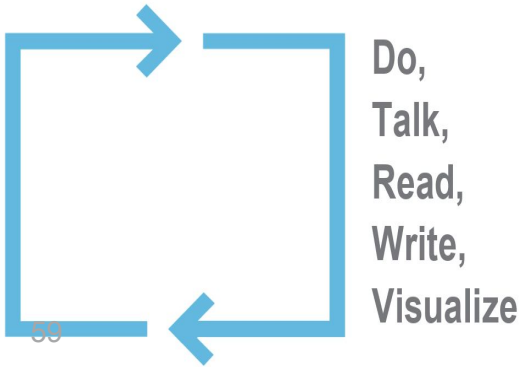
Evidence sources work together

Teaching tip

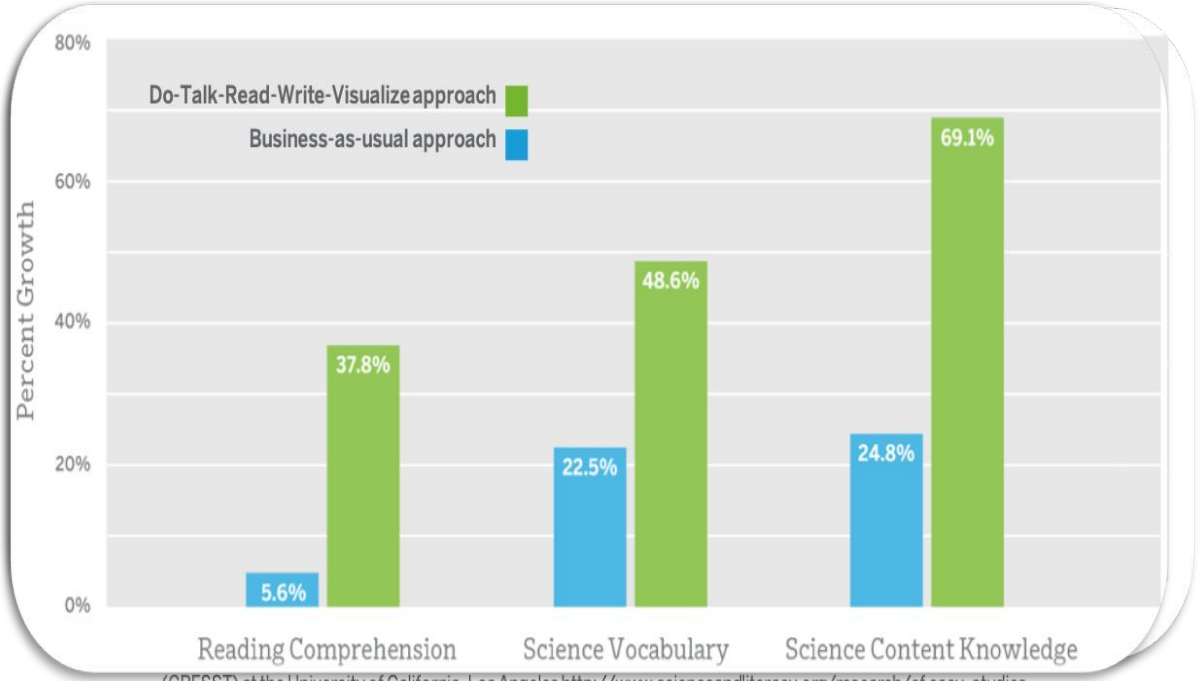
- Every evidence source plays an important role in student learning.
- Be sure to teach every activity in order!



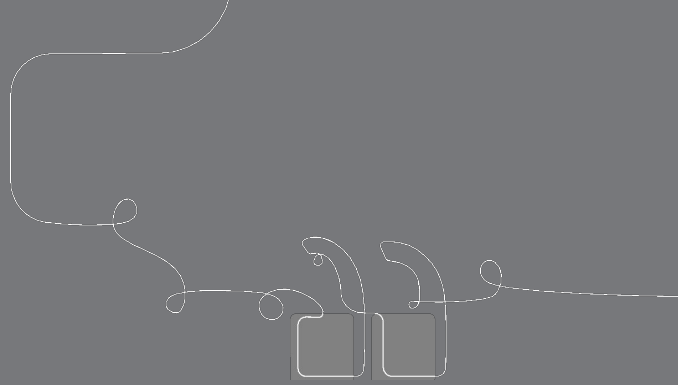
The approach: Multimodal instruction



Students [illegible] literacy



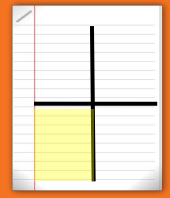
(CRESST) at the University of California, Los Angeles http://www.scienceandliteracy.org/research/efcacy_studies



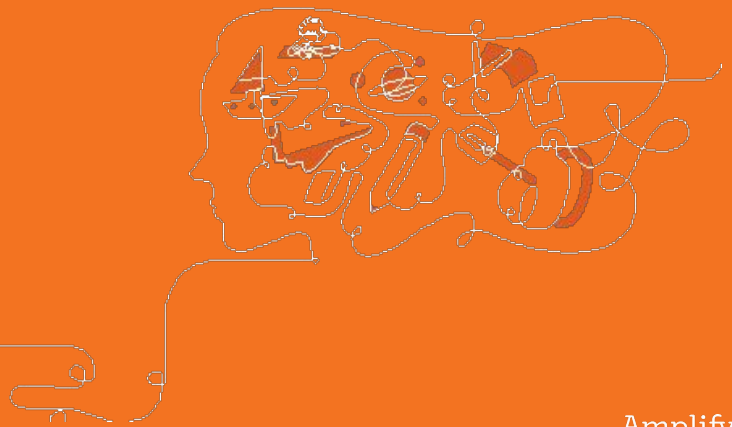
Questions?

Plan for the day

- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
  - What does this look like in Amplify Science?
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey



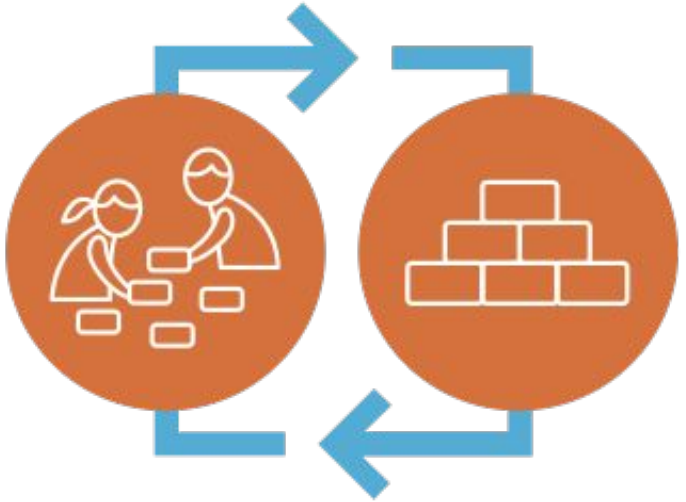
Supporting Instruction: Progress Build and Assessment



Anchoring phenomena

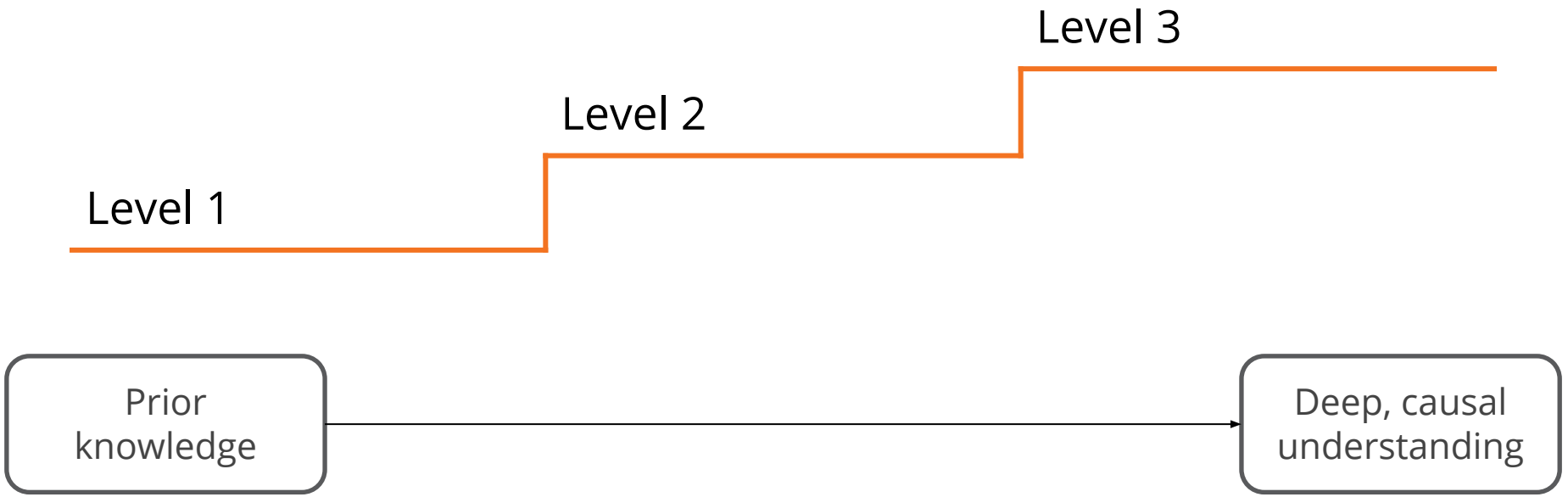
Driving instruction through a whole unit

Students gather evidence and use it to build **increasingly complex explanations** about a rich, real-world anchoring phenomenon.



Progress Build

A unit-specific learning progression



© 2020 The Regents of the University of California

Metabolism Progress Build

Level 1

Cells in the body need molecules from outside to function.

Level 2

Systems in the body work together to take in, break down, and deliver needed molecules to the cells.

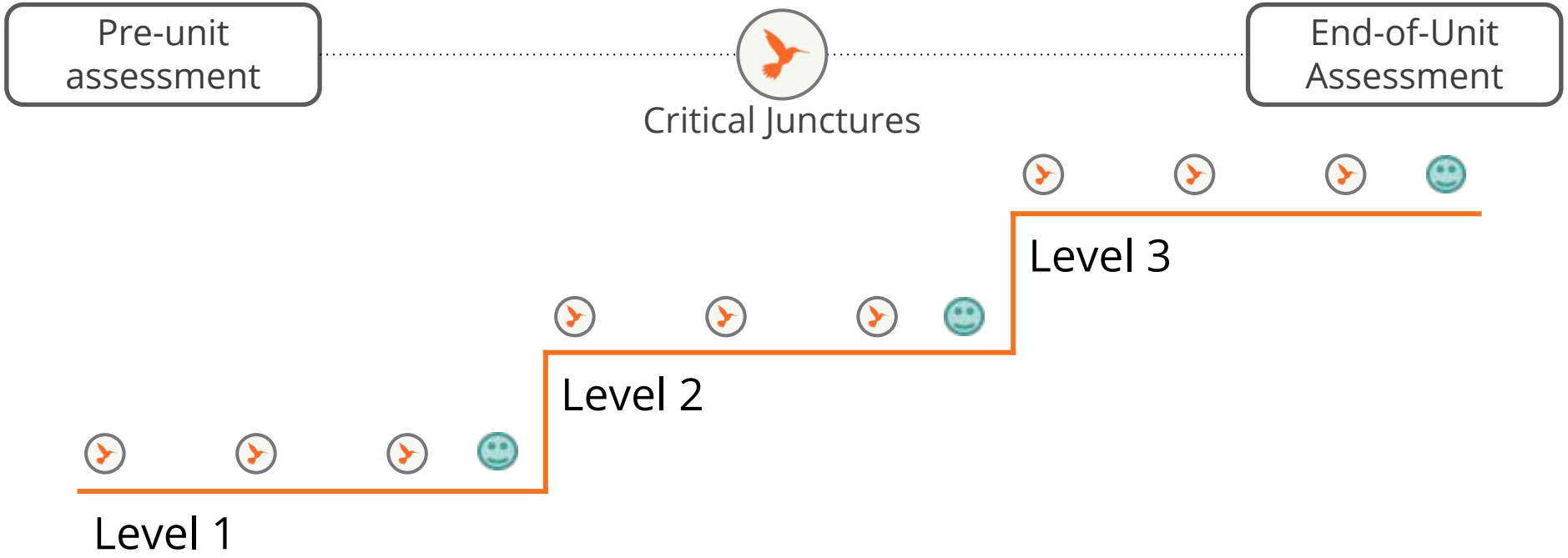
Level 3

Cells can use these molecules to release energy for the body to function.

Prior knowledge → Deep, causal understanding

© 2020 The Regents of the University of California

6-8 Assessment System



© 2020 The Regents of the University of California

Assessment System reference

Assessment System reference

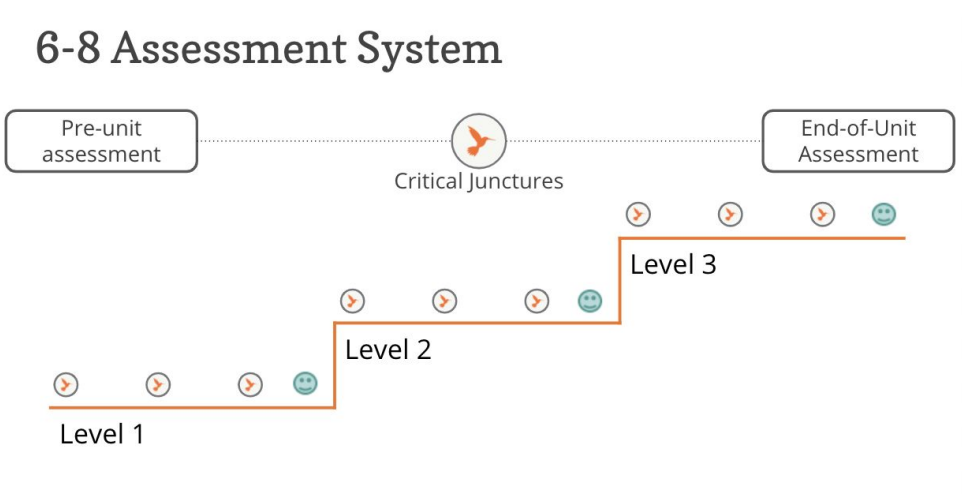
Assessment type	Description	Student experience	Teacher resources
Pre-Unit Assessment	Formative, 3-D assessment meant to gauge students' initial understanding and pre-conceptions about core ideas in the unit, including the unit's focal crosscutting concept	• Multiple choice questions • Two written response questions	• Pre-Unit Assessment Answer Key and Scoring Guide (available in Digital Resources), includes rubrics for both disciplinary core ideas and crosscutting concepts • Reporting Function provides analysis of results, places students along the Progress Build, and provides information to the teacher about specific preconceptions students may hold
End-of-Unit Assessment	Summative, 3-D assessment to evaluate students' growth in understanding about core ideas in the unit, including the unit's focal crosscutting concept	• Multiple choice questions • Two written response questions	• End-of-Unit Assessment Answer Key and Scoring Guide (available in Digital Resources), includes rubrics for both disciplinary core ideas and crosscutting concepts • Reporting Function provides analysis of results, places students along the Progress Build, and provides information to the teacher about specific preconceptions students may hold
Critical Juncture Assessment	Formative, 3-D assessment meant to gauge student's growing understanding and pre-conceptions about core ideas in the unit, including the unit's focal crosscutting concept, in order to inform a differentiated lesson to bring all students to a point where they can move on together	• Multiple choice questions • Two written response questions • Following lesson is differentiated based on the results to help students review and construct needed concepts	• Critical Juncture Assessment Answer Key and Scoring Guide (available in Digital Resources), includes rubrics for both disciplinary core ideas and crosscutting concepts • Reporting Function provides analysis of results, places students along the Progress Build, provides information to the teacher about specific preconceptions students may hold, and recommends grouping for following differentiated lesson
On-the-Fly Assessments	Embedded formative assessments for noting students' progress with one or more of the following: disciplinary core ideas, science and engineering practices, and crosscutting concepts	• Activities are embedded into existing instructional activities, leveraged for assessment opportunities. Artifacts can include discussion, use of a digital tool, notebook pages, etc.	• Full text of assessment includes "What to look for?" and "Now what?" instructional suggestions accessible in Instructional Guide by clicking the orange hummingbird icon • All On-the-Fly Assessments are included in: Embedded Formative Assessments (available in the Unit Guide)

Assessment System reference cont.

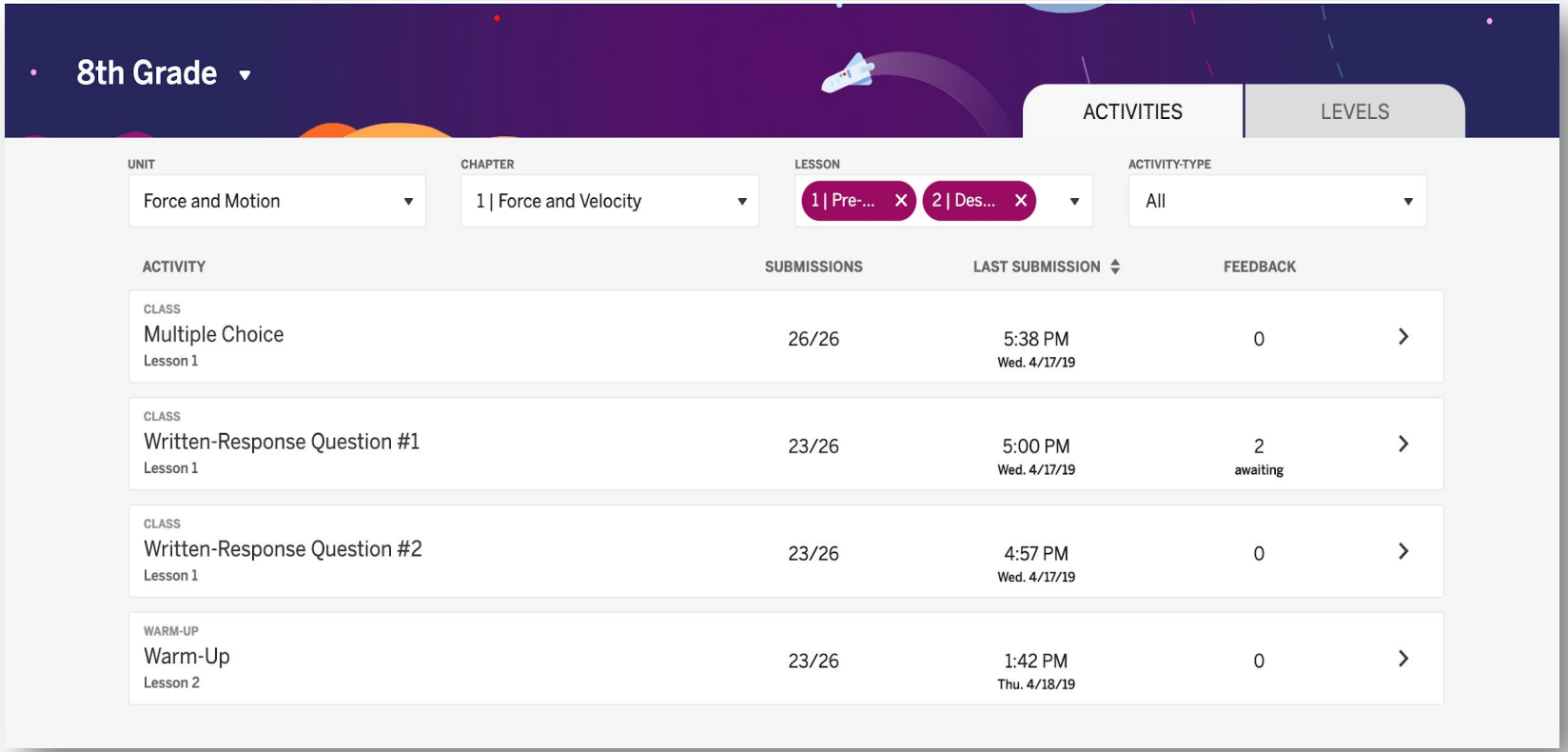
Assessment type	Description	Student experience	Teacher resources
Final Written Argument	Embedded summative assessment to gauge students' understanding of core ideas in the Progress Build, application of a crosscutting concept central to the unit, and their use of several science practices, including engaging in argument from evidence	• Written argument about the Chapter 4 Science Seminar question • Multiple embedded pedagogical supports	• Rubrics for Final Written Argument (available in Digital Resources)
Student Self-Assessments	Opportunity for students to reflect on whether they understand or don't yet understand about the core concepts from the unit and key nature of science ideas	• Reflection prompts • Provided at or near the end of each chapter	• Information about Student Self-Assessments in Assessment System (available in the Unit Guide) • Teacher Support notes accessible in Instructional Guide by clicking the Teacher Support tab
Investigation Assessments (1 or 2 per year)	Summative, 3-D performance assessment to evaluate students' performance of the science and engineering practices of Planning and Conducting Investigations and Analyzing and Interpreting Data, as well as their application of disciplinary core ideas and crosscutting concepts	• Prompts for planning investigation and recording results in the Investigation Notebook or copymaster (available in Digital Resources) • Materials (physical or digital) for conducting investigation	• Rubrics and Possible Responses • Possible Responses also accessible in Instructional Guide by clicking the Possible Responses tab
Portfolio Assessments	Opportunity for students to compile and reflect on key work products, collected at the end of each unit. Final portfolio compilation occurs at the end of the school year and allows students to select and reflect on work products which they feel best demonstrate their growth in understanding throughout the year.	• Compilation of work products (written explanations and/or arguments, models) that show growth over the course of the year • Reflection on chosen work products • Rubrics for evaluating work products (available in Program Guide → *Assessments → Additional Assessment Resources*)	• Assessment rubrics (available in Program Guide → *Assessments → Additional Assessment Resources*) • Guidance for communicating to parents about student progress (available in Program Guide → *Assessments → Additional Assessment Resources*)

Capture your thinking!

- How can you support teachers in successfully implementing the embedded assessment opportunities?

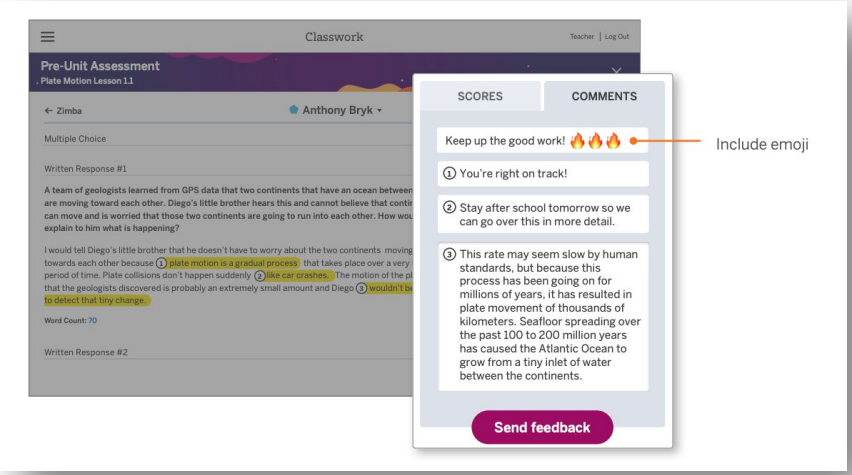


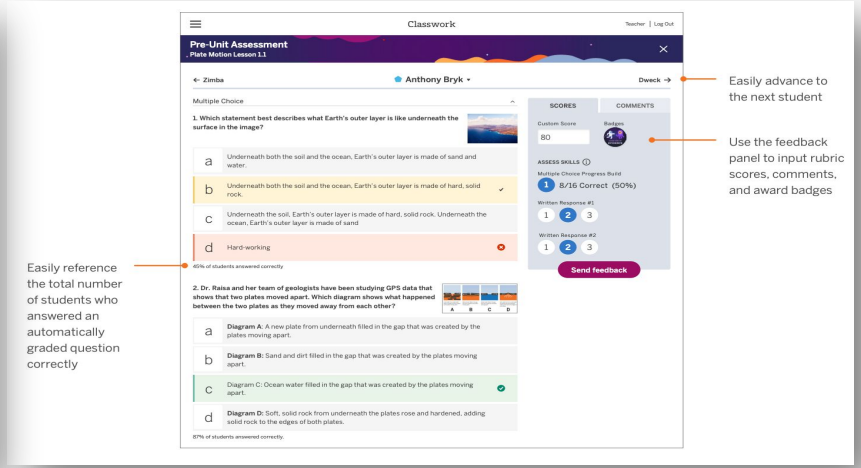
Classwork



©2018 The Regents of the University of California

Classwork





©2020 The Regents of the University of California

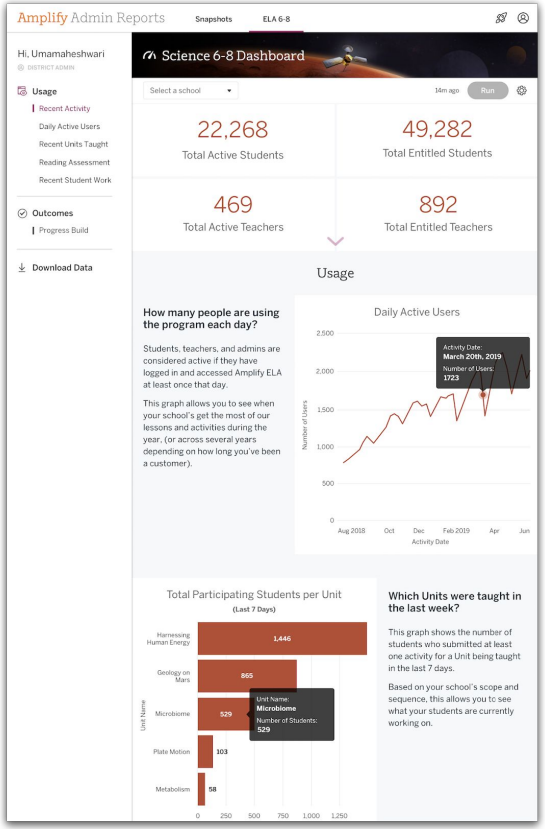
Amplify.

Administrator reports: Grades 6-8

Coming soon!

- Available for both building and district administrators, reports will include usage and assessment data including:
  - daily active users
  - recent units taught
  - recent assessments
  - Progress Build outcomes

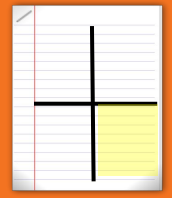
- Reports can be easily exported for integration with school and district learning management systems.



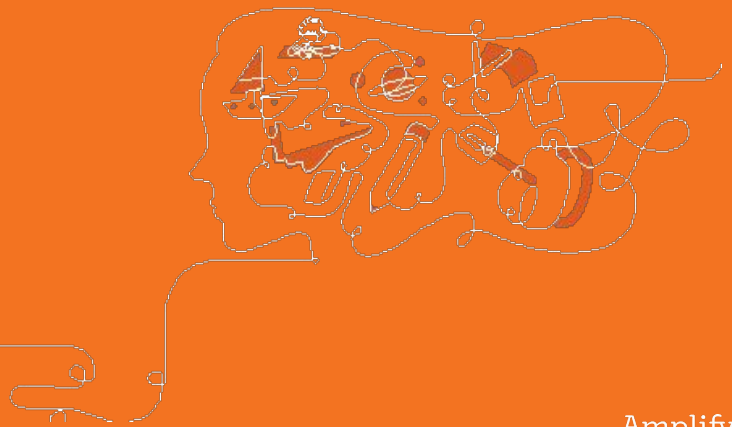
Amplify.

Plan for the day

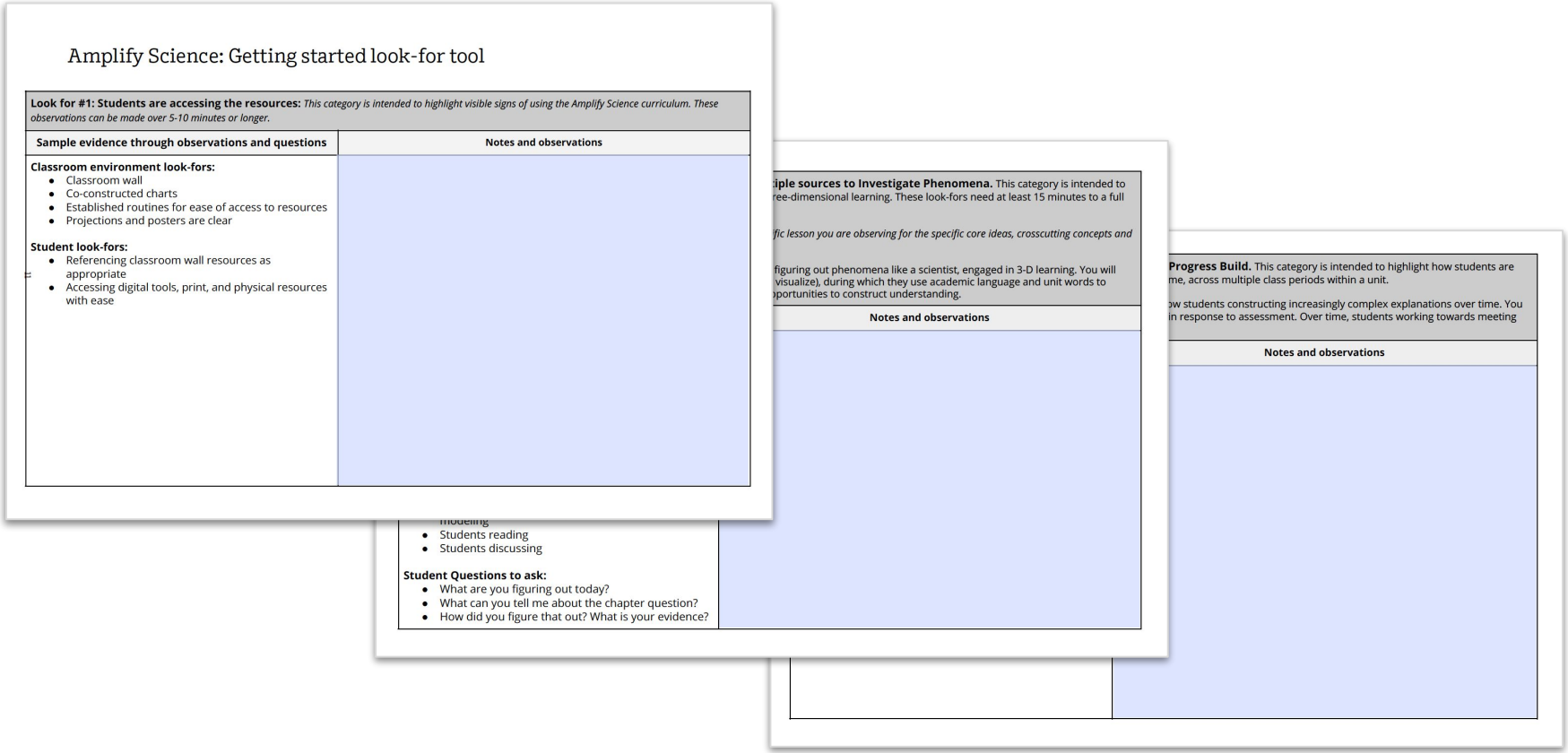
- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
    - coherent activity sequence
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey



Administrator Resources



Getting Started Look-For Tool



Amplify Science: Getting started look-for tool

Look for #1: Students are accessing the resources: *This category is intended to highlight visible signs of using the Amplify Science curriculum. These observations can be made over 5-10 minutes or longer.*

Sample evidence through observations and questions	Notes and observations
Classroom environment look-fors: • Classroom wall • Co-constructed charts • Established routines for ease of access to resources • Projections and posters are clear **Student look-fors:** • Referencing classroom wall resources as appropriate • Accessing digital tools, print, and physical resources with ease	

iple sources to Investigate Phenomena. This category is intended to ree-dimensional learning. These look-fors need at least 15 minutes to a full

fic lesson you are observing for the specific core ideas, crosscutting concepts and

figuring out phenomena like a scientist, engaged in 3-D learning. You will visualize), during which they use academic language and unit words to portunities to construct understanding.

Notes and observations

modeling
• Students reading
• Students discussing

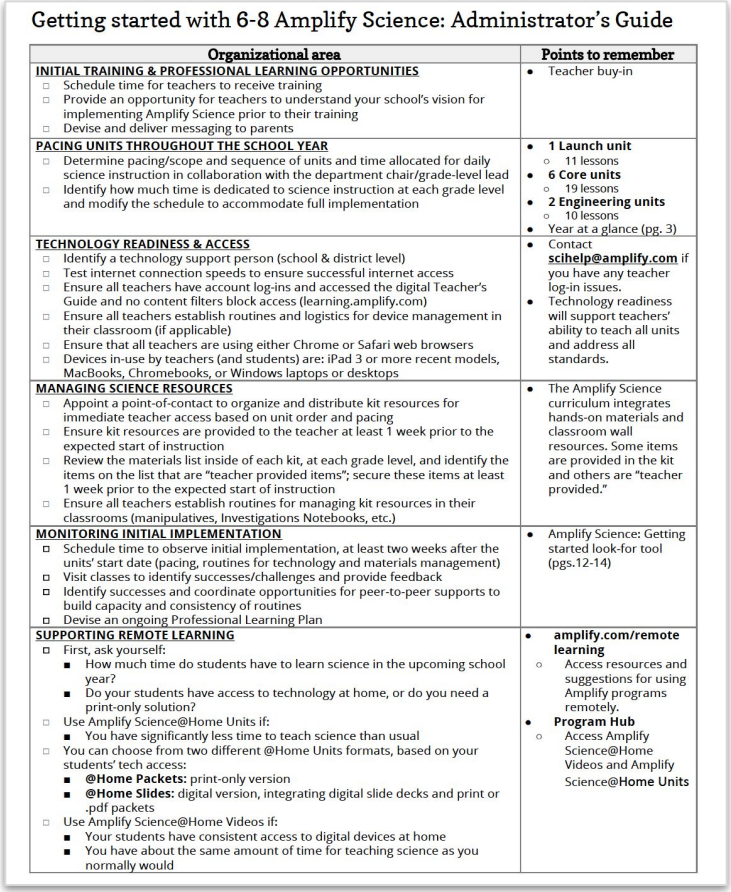
Student Questions to ask:
• What are you figuring out today?
• What can you tell me about the chapter question?
• How did you figure that out? What is your evidence?

Progress Build. This category is intended to highlight how students are me, across multiple class periods within a unit.

ow students constructing increasingly complex explanations over time. You in response to assessment. Over time, students working towards meeting

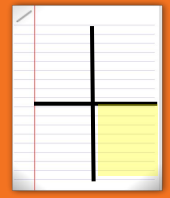
Notes and observations

Getting Started Checklist

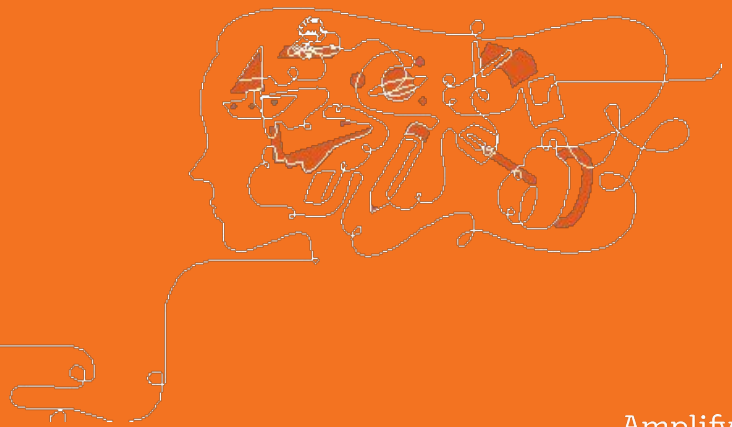


Getting started with 6-8 Amplify Science: Administrator's Guide

Organizational area	Points to remember
INITIAL TRAINING & PROFESSIONAL LEARNING OPPORTUNITIES □ Schedule time for teachers to receive training □ Provide an opportunity for teachers to understand your school's vision for implementing Amplify Science prior to their training □ Devise and deliver messaging to parents	• Teacher buy-in
PACING UNITS THROUGHOUT THE SCHOOL YEAR □ Determine pacing/scope and sequence of units and time allocated for daily science instruction in collaboration with the department chair/grade-level lead □ Identify how much time is dedicated to science instruction at each grade level and modify the schedule to accommodate full implementation	• **1 Launch unit** ○ 11 lessons • **6 Core units** ○ 19 lessons • **2 Engineering units** ○ 10 lessons • Year at a glance (pg. 3)
TECHNOLOGY READINESS & ACCESS □ Identify a technology support person (school & district level) □ Test internet connection speeds to ensure successful internet access □ Ensure all teachers have account log-ins and accessed the digital Teacher's Guide and no content filters block access (learning.amplify.com) □ Ensure all teachers establish routines and logistics for device management in their classroom (if applicable) □ Ensure that all teachers are using either Chrome or Safari web browsers □ Devices in-use by teachers (and students) are: iPad 3 or more recent models, MacBooks, Chromebooks, or Windows laptops or desktops	• Contact **scihelp@amplify.com** if you have any teacher log-in issues. • Technology readiness will support teachers' ability to teach all units and address all standards.
MANAGING SCIENCE RESOURCES □ Appoint a point-of-contact to organize and distribute kit resources for immediate teacher access based on unit order and pacing □ Ensure kit resources are provided to the teacher at least 1 week prior to the expected start of instruction □ Review the materials list inside of each kit, at each grade level, and identify the items on the list that are "teacher provided items"; secure these items at least 1 week prior to the expected start of instruction □ Ensure all teachers establish routines for managing kit resources in their classrooms (manipulatives, Investigations Notebooks, etc.)	• The Amplify Science curriculum integrates hands-on materials and classroom wall resources. Some items are provided in the kit and others are "teacher provided."
MONITORING INITIAL IMPLEMENTATION □ Schedule time to observe initial implementation, at least two weeks after the units' start date (pacing, routines for technology and materials management) □ Visit classes to identify successes/challenges and provide feedback □ Identify successes and coordinate opportunities for peer-to-peer supports to build capacity and consistency of routines □ Devise an ongoing Professional Learning Plan	• Amplify Science: Getting started look-for tool (pgs.12-14)
SUPPORTING REMOTE LEARNING □ First, ask yourself: ■ How much time do students have to learn science in the upcoming school year? ■ Do your students have access to technology at home, or do you need a print-only solution? □ Use Amplify Science@Home Units if: ■ You have significantly less time to teach science than usual □ You can choose from two different @Home Units formats, based on your students' tech access: ■ **@Home Packets:** print-only version ■ **@Home Slides:** digital version, integrating digital slide decks and print or .pdf packets □ Use Amplify Science@Home Videos if: ■ Your students have consistent access to digital devices at home ■ You have about the same amount of time for teaching science as you normally would	• **amplify.com/remote learning** ○ Access resources and suggestions for using Amplify programs remotely. • **Program Hub** ○ Access Amplify Science@Home Videos and Amplify Science@Home Units



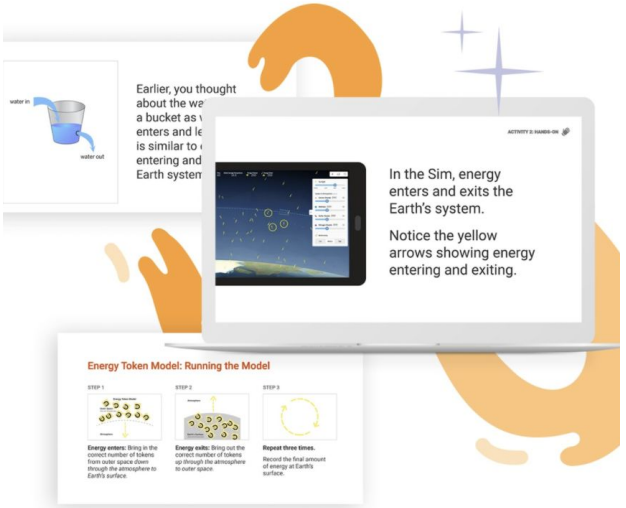
Hybrid learning resources



Amplify @home

amplify.com/science-coming-soon/

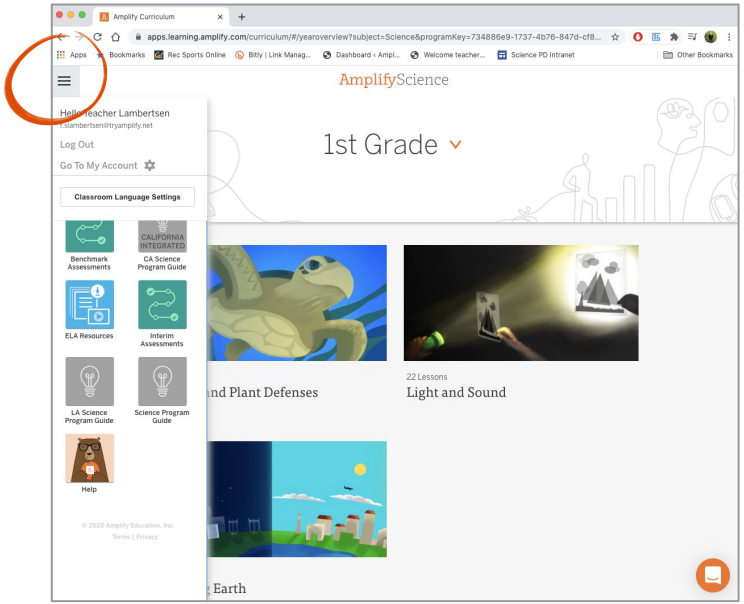
Amplify is launching several new and exciting features for Amplify Science that will save you time, extend your reach, and support your efforts to deliver the types of rigorous and riveting learning experiences in remote and hybrid settings.



Amplify Science Program Hub

A new hub for Amplify Science resources

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



science.amplify.com/programhub

Remote learning guidance: two options

Amplify Science@Home Units

- **Condensed** Amplify Science units
- Options for a **digital** student experience (@Home Slides) or a **print-only** student experience (@Home Packets)
- Suggestions for enhancing if you have **in-person** or **synchronous time**

Amplify Science@Home Videos

- Videos of Amplify Science lessons **adapted for remote learning**
- Taught by real **Amplify Science teachers**
- Option to **send to students** or **use as a model** to record your own videos

Selecting remote learning resources

First, ask yourself...

- How much **time** do students have to learn science in the upcoming school year?

- Do your students have **access to technology** at home, or do you need a **print-only solution**?

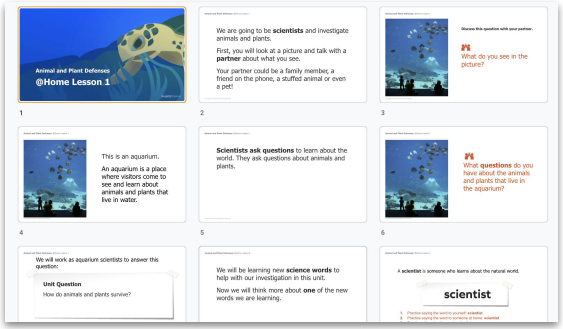
Selecting remote learning resources

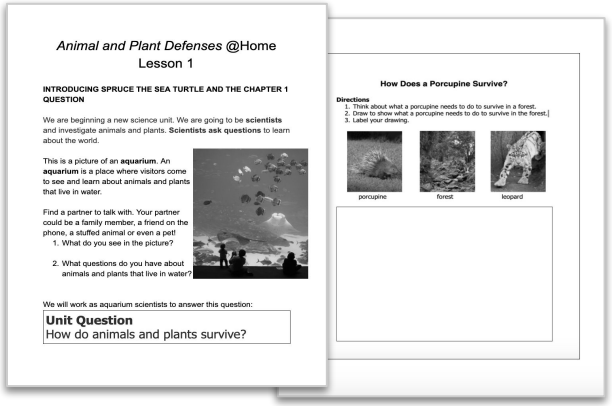
Use Amplify Science @Home Units if

- You have **significantly less time** to teach science than you usually do.

You can choose from two different @Home Units formats, based on your students' tech access:

- **@Home Packets:** print-only version
- **@Home Slides:** digital version, integrating digital slide decks and print or .pdf packets

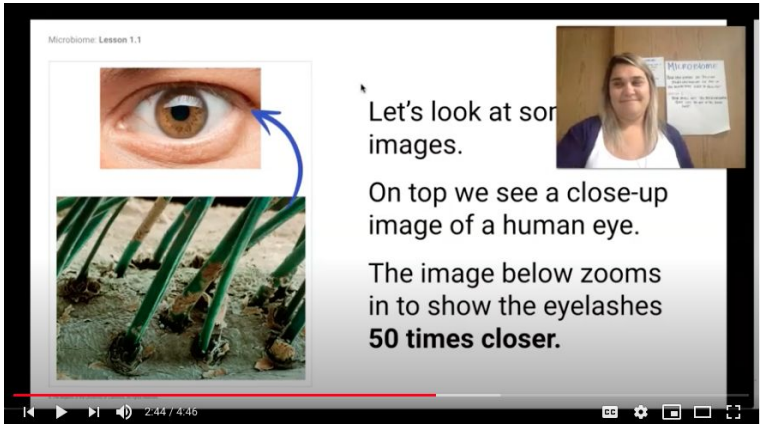




Selecting remote learning resources

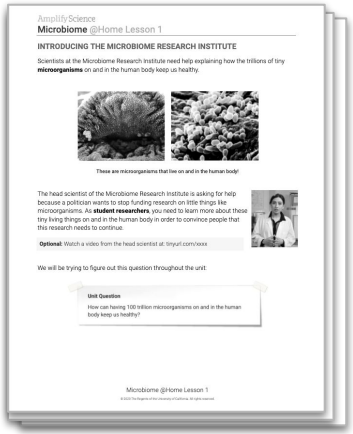
Use Amplify Science@Home Videos if

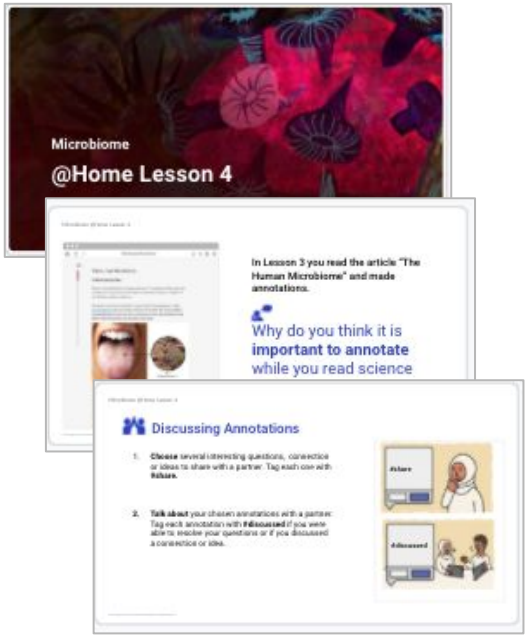
- Your students have **consistent access to digital devices** at home, and
- You have about the **same amount of time** for teaching science as you normally would



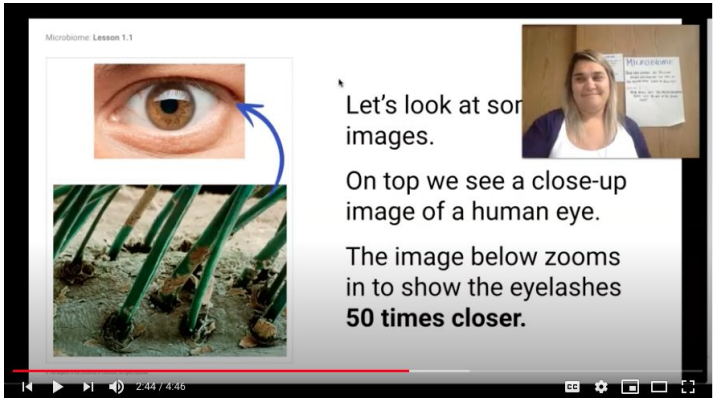
The @Home Resources can be used in tandem.

@Home Units
(packets or slides)


Amplify Science
Microbiome @Home Lesson 1
INTRODUCING THE MICROBIOME RESEARCH INSTITUTE
Scientists at the Microbiome Research Institute need help explaining how the trillions of tiny microorganisms on and in the human body keep us healthy.
These are microorganisms that live on and in the human body!
The head scientist of the Microbiome Research Institute is asking for help because a politician wants to stop funding research on little things like microorganisms. As student researchers, you need to learn more about these tiny living things on and in the human body in order to convince people that this research needs to continue.
Optional: Watch a video from the head scientist at: tinyurl.com/xxxx
We will be trying to figure out this question throughout the unit:
Unit Question
How can having 100 trillion microorganisms on and in the human body keep us healthy?
Microbiome @Home Lesson 1



@Home Videos



@Home Resources example use case

Hybrid Model: remote asynchronous and live in person teaching

Monday
Remote

Assign: @Home Lesson 1 (slides or packet)

Tuesday
In-person

Teach: @Home Lesson 2 using guidance for in-person instruction*

Wednesday
Remote

Assign: @Home Lesson 3 with @Home Video clips to support

Thursday
Remote

Assign: @Home Lesson 4 with @Home Video clips to support

Friday
In-person

Revisit @Home Lessons 3-4 using guidance for in-person instruction*

*Ideas for in-person instruction includes hands-on or discourse-based activities

@Home Resources example use case

Remote Model: with synchronous & asynchronous learning

Days 1 & 2

Asynchronous

Assign: @Home Lesson 1 (slides or packets) supplemented with @Home Videos.

Day 3

Synchronous

Teach: @Home Lesson 2 (slides or packet) using synchronous suggestions.

Day 4

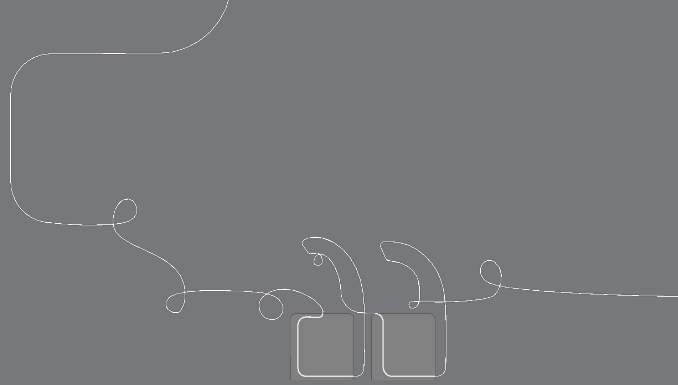
Asynchronous

Assign: @Home Lesson 3. Supplement with @Home Videos.

Day 5

Synchronous

Revisit @Home Lesson 3, using synchronous suggestions.

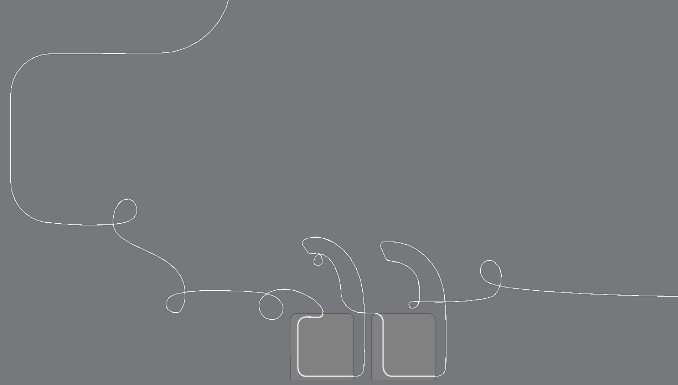


Questions?

Plan for the day

- **Framing the day**
  - What is Amplify Science?
- **Phenomenon-based learning**
  - What is phenomena-based instruction?
  - What does this look like in Amplify Science?
- **Supporting instruction**
  - Progress builds and assessments
- **Supporting implementation**
  - Administrator resources
  - Remote & hybrid resources
- **Closing**
  - Reflection & survey

Revisiting our goals



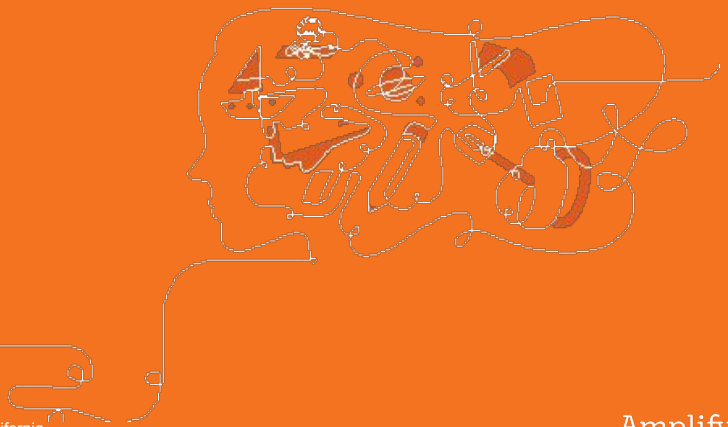
Are you able to:

- Recognize how lessons engage students in three-dimensional learning?
- Understand how the program's multimodal approach supports students in figuring out the unit phenomenon?
- Become familiar with "look fors" that administrators should see in an effective three dimensional science instruction?
- Discuss ways in which administrators can support the teaching of science in the coming school year?
- Make an informed decision about which of the Amplify Science Hybrid Learning Resources (@Home Unit and @Home Videos) will best support their teachers?

Reflection

After today's session, what are you newly excited about with Amplify Science?

What are the new challenges that you are now anticipating?



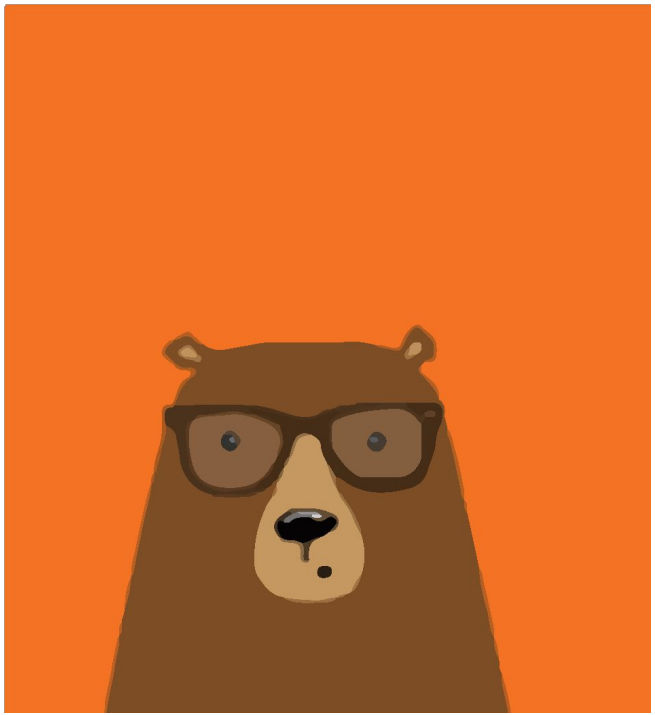
© 2018 The Regents of the University of California

NYC Resources site

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

© 2018 The Regents of the University of California

Additional Amplify resources



Program Guide

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

my.amplify.com/programguide

Amplify Help

Find lots of advice and answers from the Amplify team.

my.amplify.com/help

Additional Amplify Support

Customer Care

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

scihelp@amplify.com

800-823-1969

Amplify Chat

When contacting the customer care team:

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