Part of the Day	Timing (min)	*PLS use only* Plan for the day
Framing the Day **(Slides 1-31)**	25 min (9:00-9:25)	• Welcome and Introductions (5) • Reflection and Vision setting (10) • Revisiting the Amplify Approach (10)
Unit Internalization **(Slides 32-52)**	25 min (9:25-9:50)	• Resource review (10) • Traditional Amplify Science lesson walk through (15) • Live Navigation (if needed) **Change bullet traditional walk through to 10 min and allocate 10 for navigation if needed**
Break **(Slide 53)**	5 min (9:50-9:55)	
@Home Resources Internalization **(Slides 54-131)**	60 min (9:55-10:55)	• @Home Units (15 min) • @Home Videos (15 min) • Lesson Internalization (20min) • Resource Selection/Guidance (10 min)
Break **(Slide 132)**	5 min (10:55-11:00)	
Guided Planning **(Slides 133-145)**	55 min (11:00-11:55)	• Planning document walk through (10 min) • Lesson planning work time (45 min)
Closing **(Slides 146-156)**	5 min (11:55-12:00)	• Reflection/additional resources (3) • Survey (2)

Amplify Science

Grade 7: Metabolism

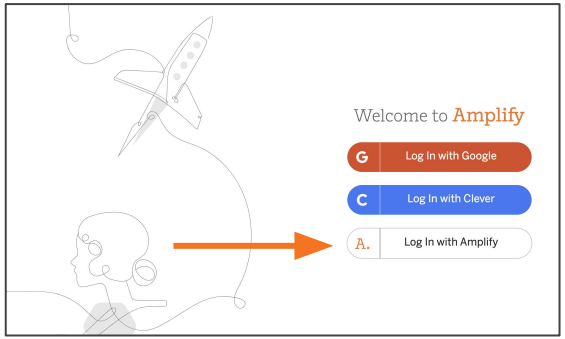
Guided Unit Internalization with @Home Resources

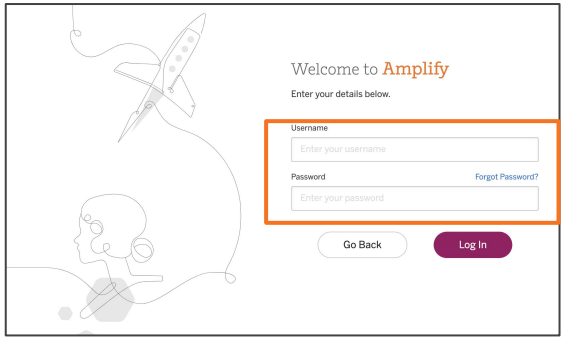
Deep-dive and strengthening workshop

School/District Name
Date
Presented by Your Name

Welcome to Amplify Science!

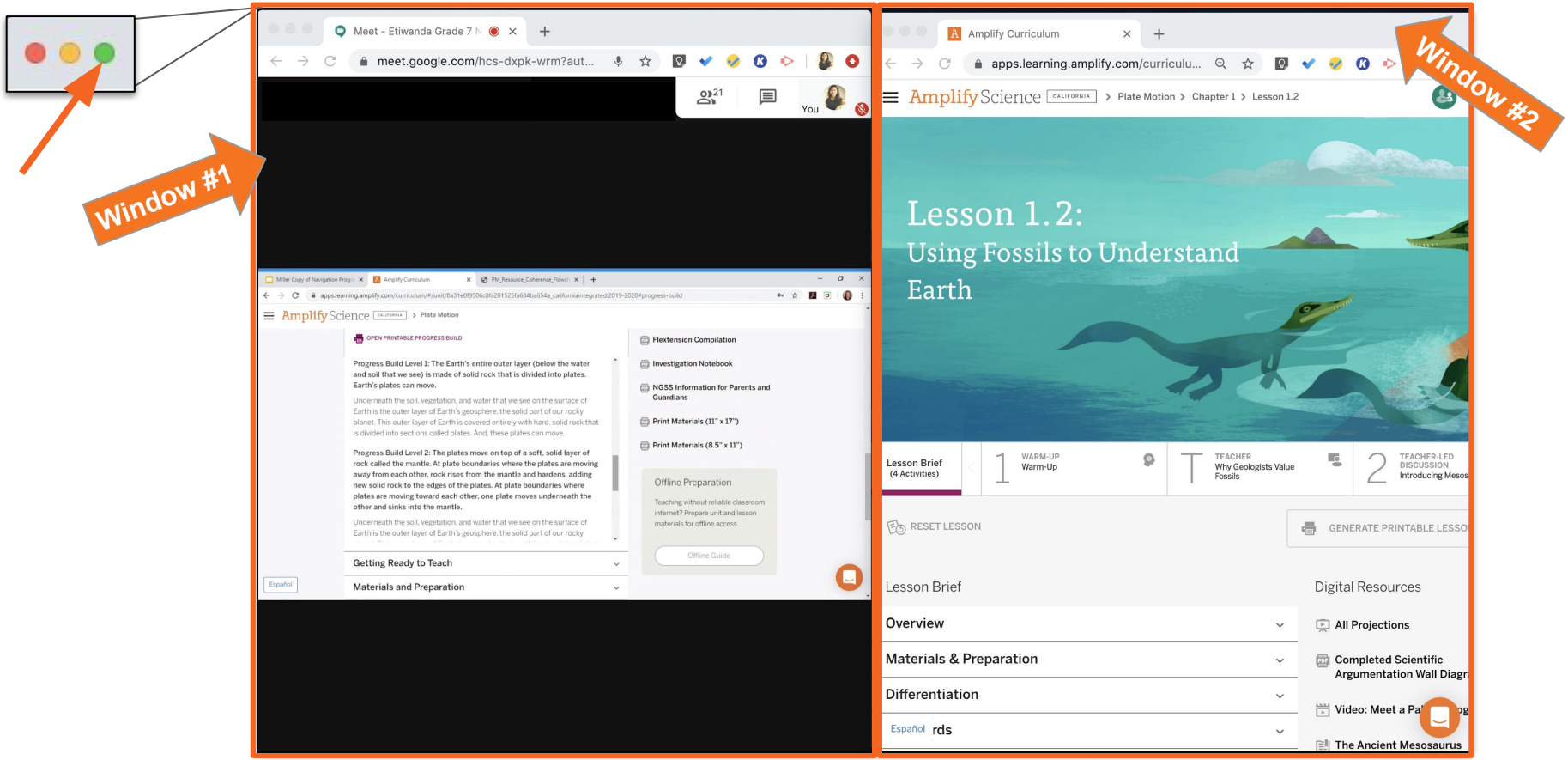
Do Now: Login





1. Go to **learning.amplify.com**
2. Select **Log in with Amplify**
3. Enter your credentials
4. Explore the curriculum

Use two windows for today's webinar



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

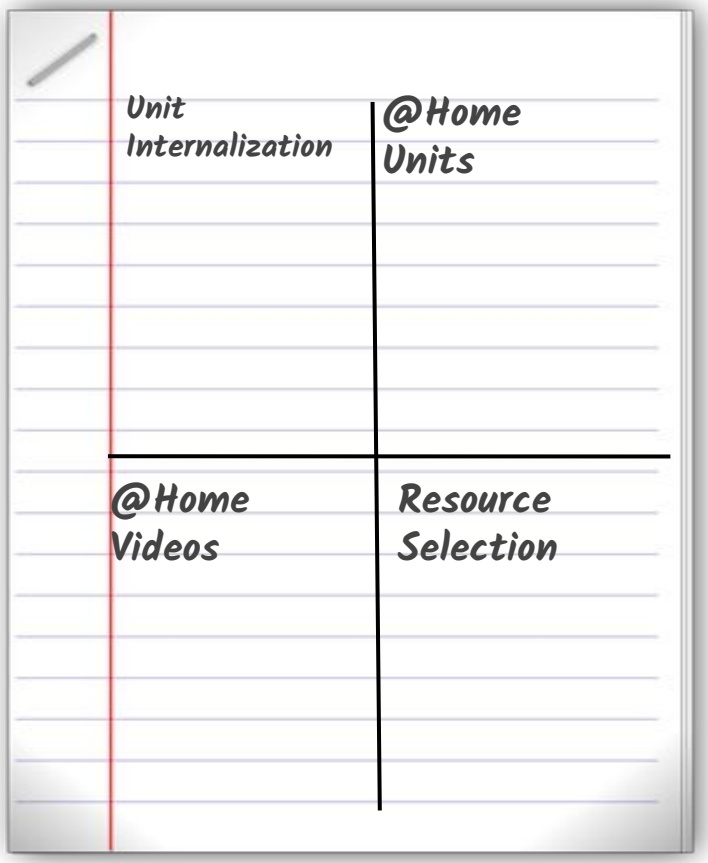
Engage at your comfort level - chat, ask questions, discuss, share!

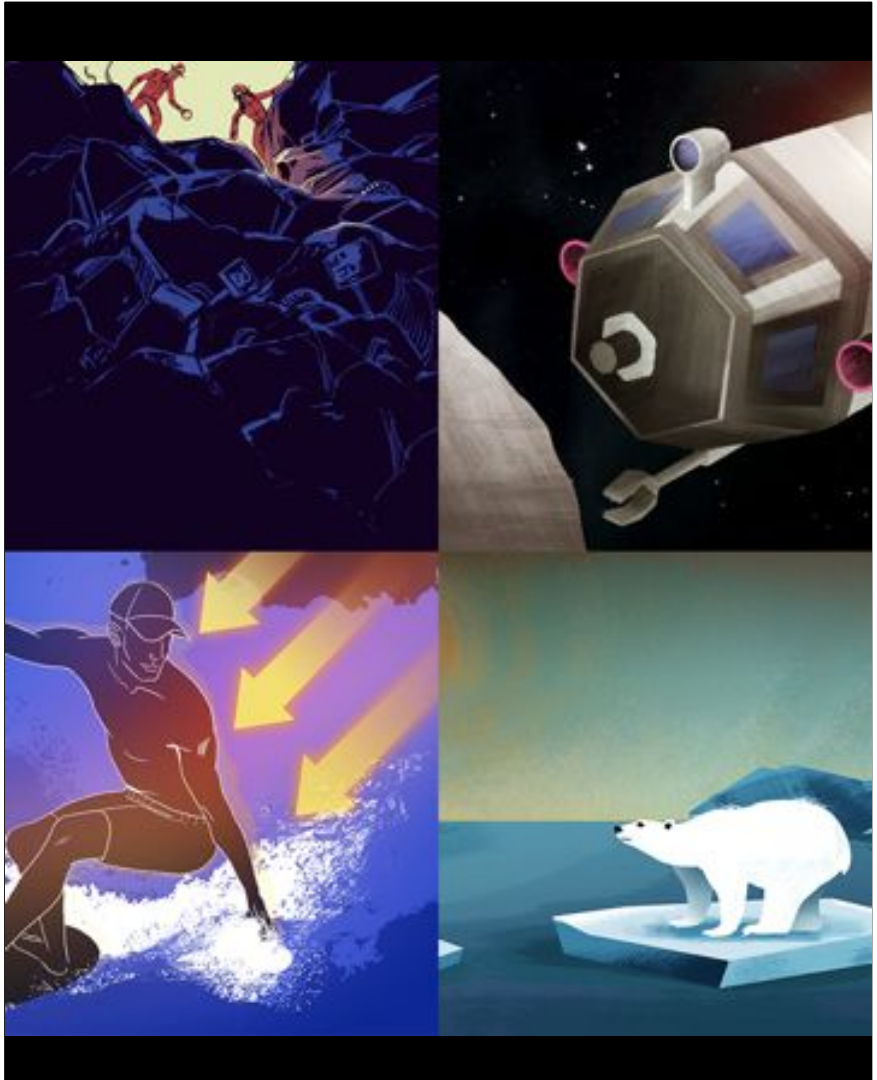
Objectives:

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

- Leverage your understanding of your upcoming unit to make instructional decisions about remote or hybrid learning using the Unit Guide and Amplify Science@Home resources.
- Apply new understanding of the unit to determine which @Home resources best meet the needs of students and give them the most robust experience in figuring out the phenomenon of the unit.
- Plan for the next week of instruction using the @Home resources, your class schedule, instructional format, and internalize the planning protocol to use for future planning.

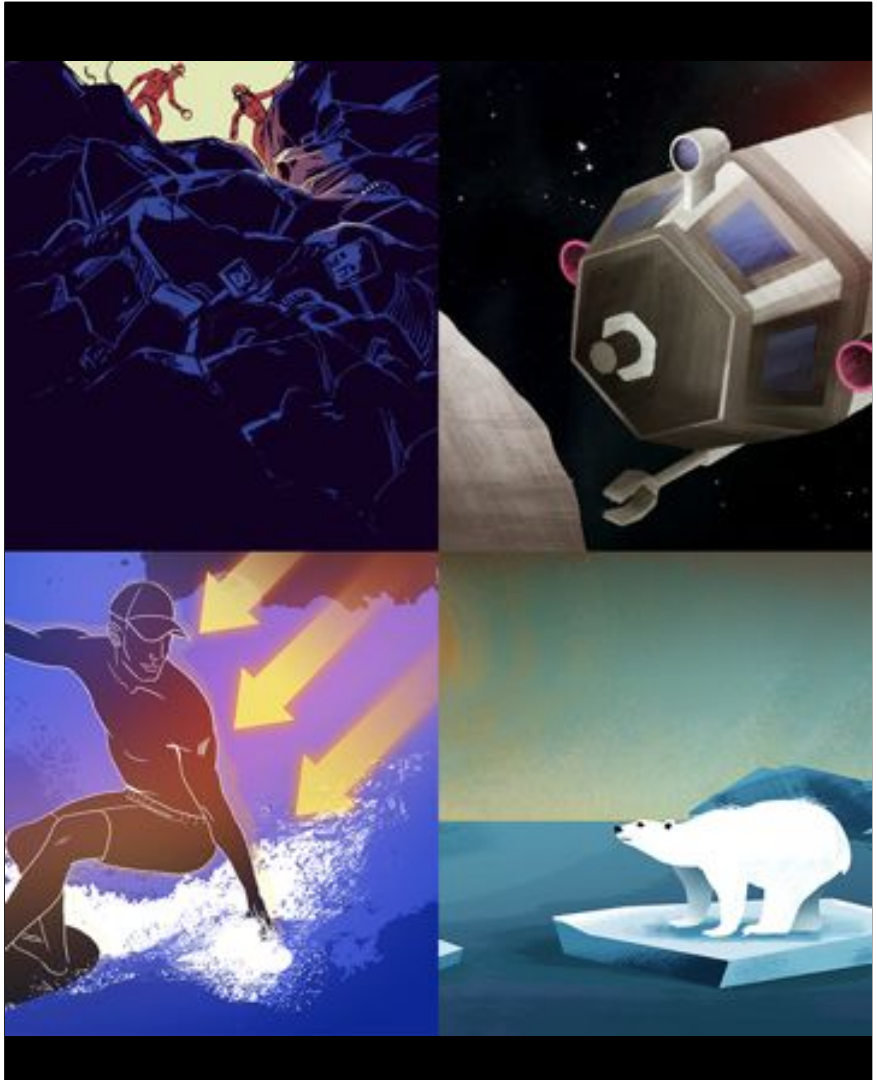
Capturing key takeaways!





Plan for the day

- Framing the day
  - Welcome and introductions
  - Reflection and vision setting
  - Revisiting the Amplify Approach
- Unit Internalization
- @Home Resources Internalization
  - @Home Units
  - @Home Videos
  - Lesson Level Internalization
  - Resource selection/Guidance
- Guided Planning
  - Planning to Teach using @Home
- Reflection and closing



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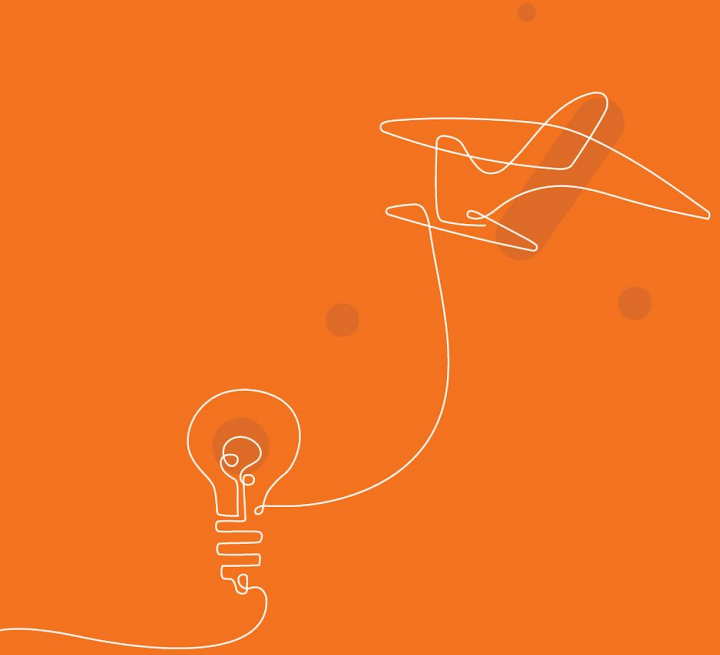


Welcome and Introductions

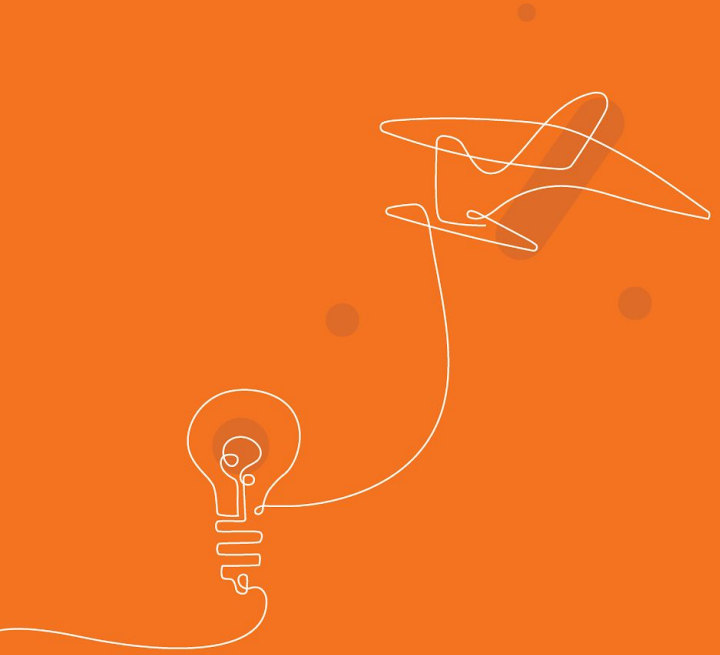
Who's in the Room?

Represent for your borough!

Share your **name, role, & borough**.

Example: Isis, Teacher, 1

1- Brooklyn North
2- Brooklyn South
3- Queens North
4- Queens South
5- The Bronx
6- Staten Island



Reflection and goal-setting

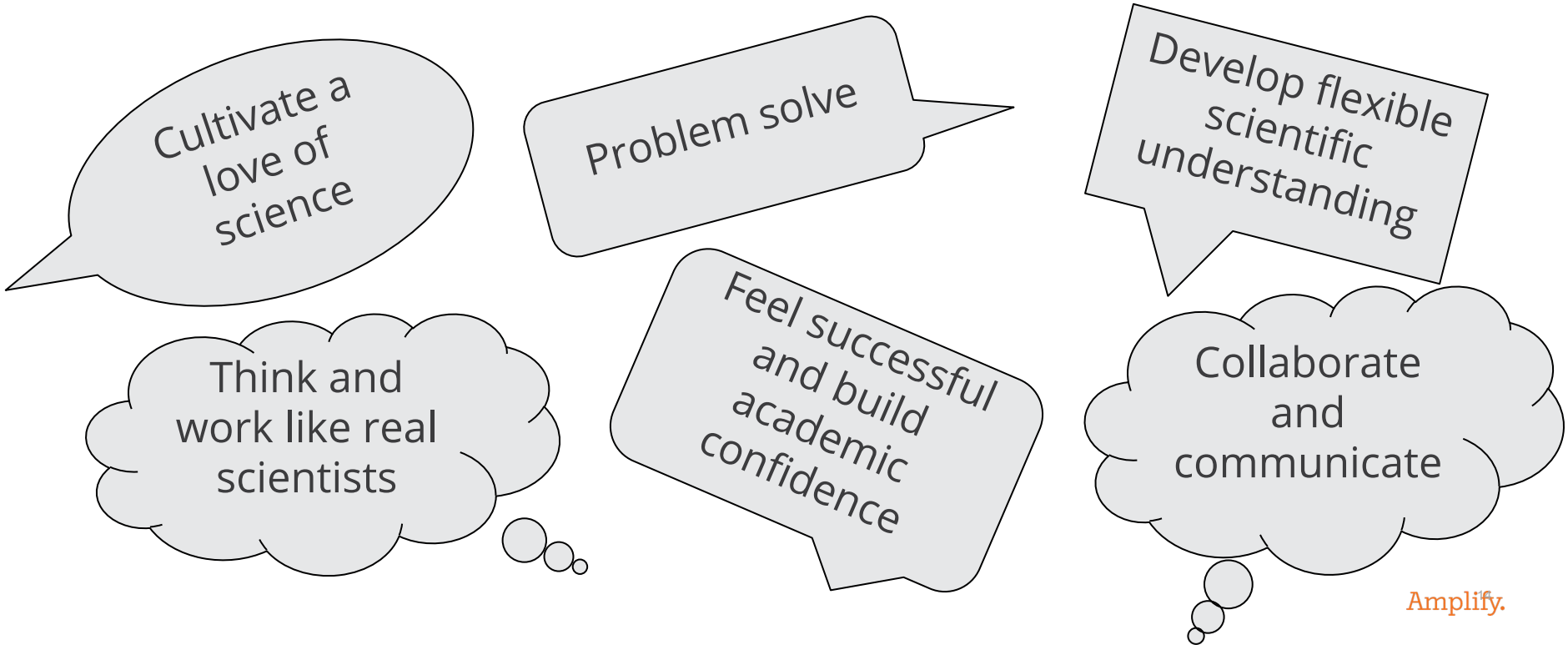
Reflection: what was last year like?

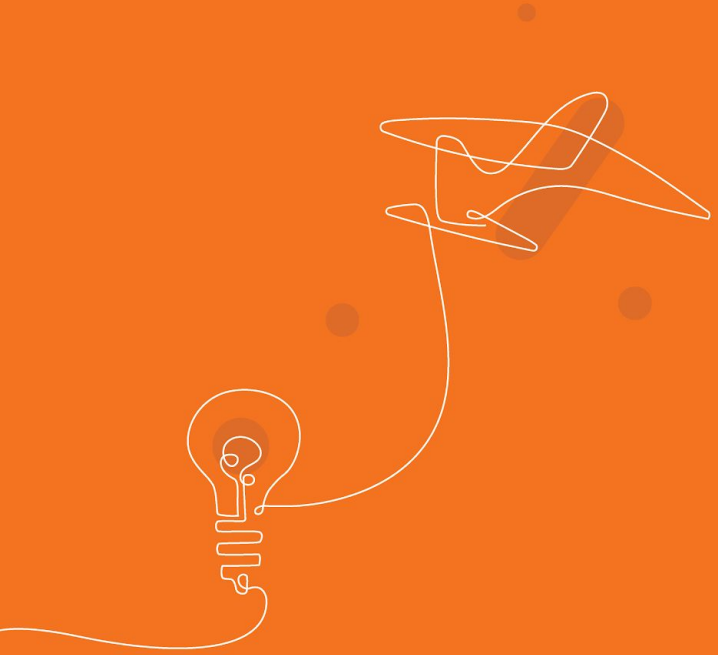
Stop and jot: **Choose One**: Last year, while teaching remotely...

- What was **one** challenge, problem, or roadblock you or your students experienced?
- What were **two** successes you or your students experienced?
- What are **three** new things you learned or new insights you gained?

Setting a vision

What are you hoping students at your school get out of science this year?





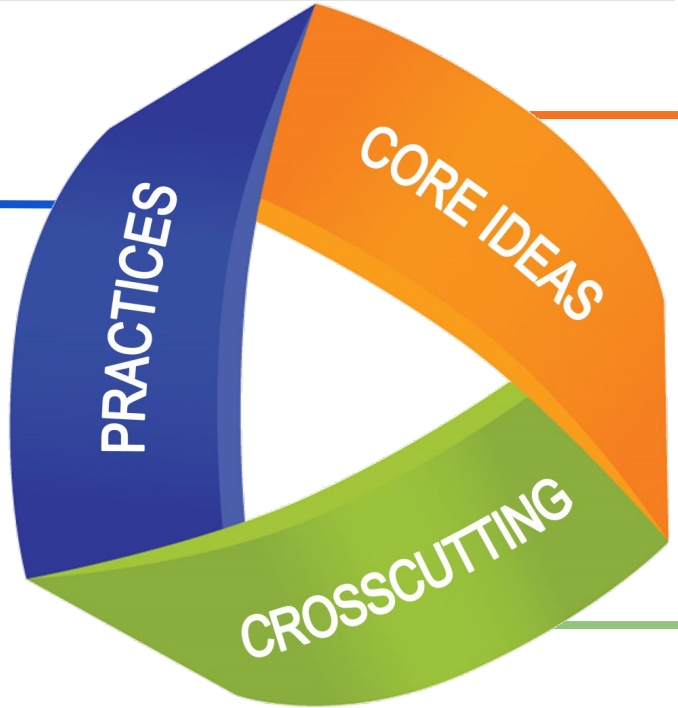
Revisiting the Amplify Science approach

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

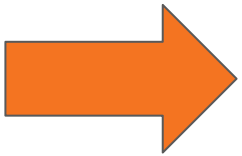
Crosscutting Concepts

Comparing topics and phenomena

A shift in science instruction

from learning about

(like a student)

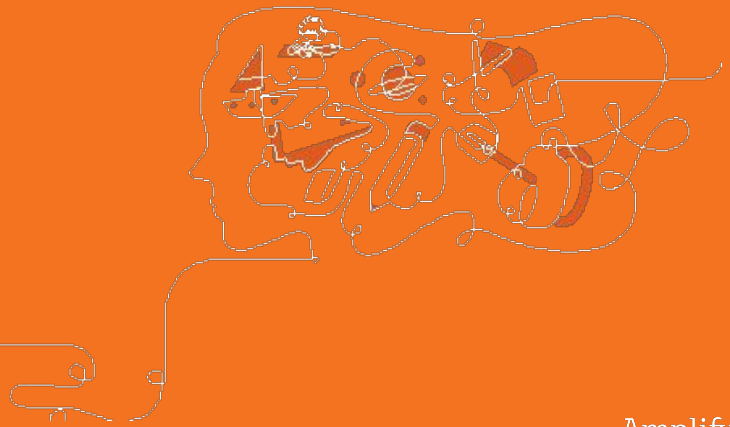


to figuring out

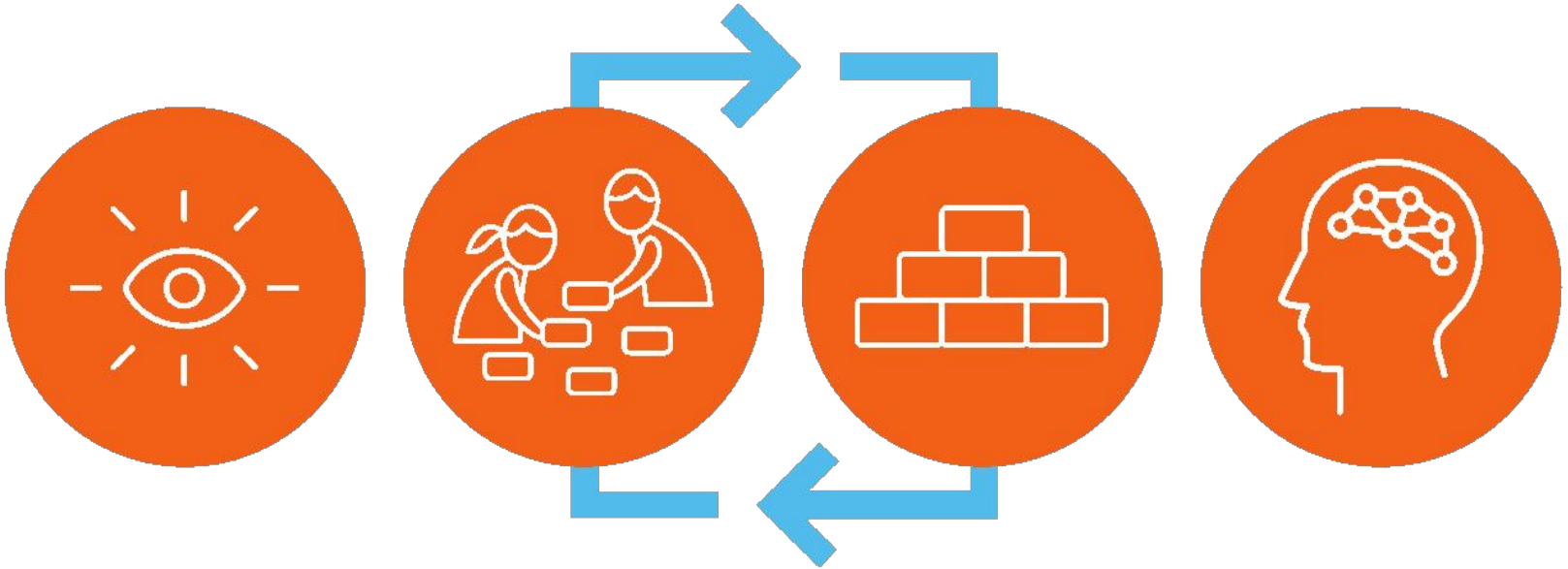
(like a scientist)

Problem-based deep dives

Students inhabit the role of scientists and engineers to explain or predict phenomena. They use what they figure out to solve real-world problems.



Amplify Science approach



Introduce a real world problem

Collect evidence from multiple sources

Build increasingly complex explanations

Apply knowledge to solve a different problem

What is the first step to the Amplify Science Approach?

A Collect evidence from multiple sources

B Introduce a Phenomenon and/or real world problem

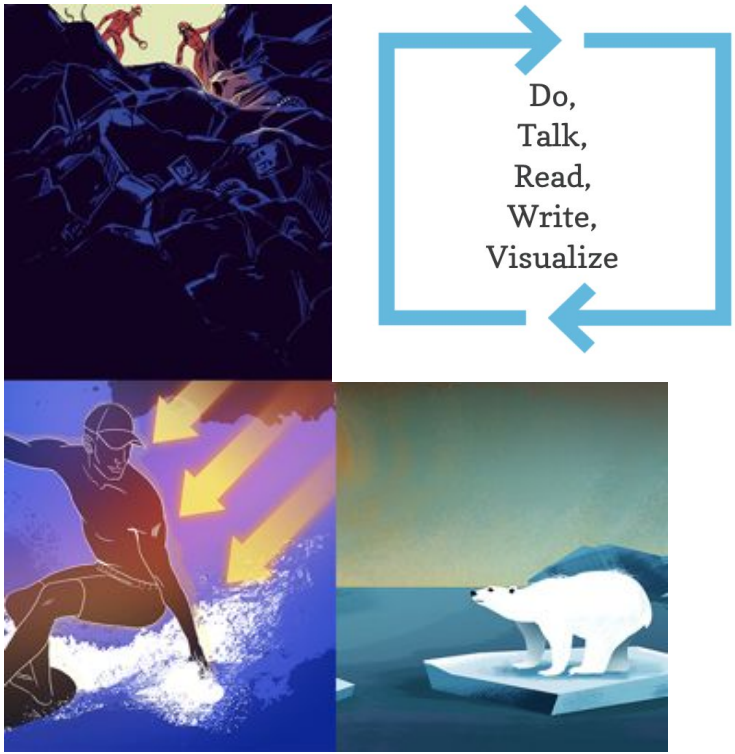
C Apply knowledge to solve different problem

D Build an increasingly complex explanation

Multimodal, phenomenon-based learning

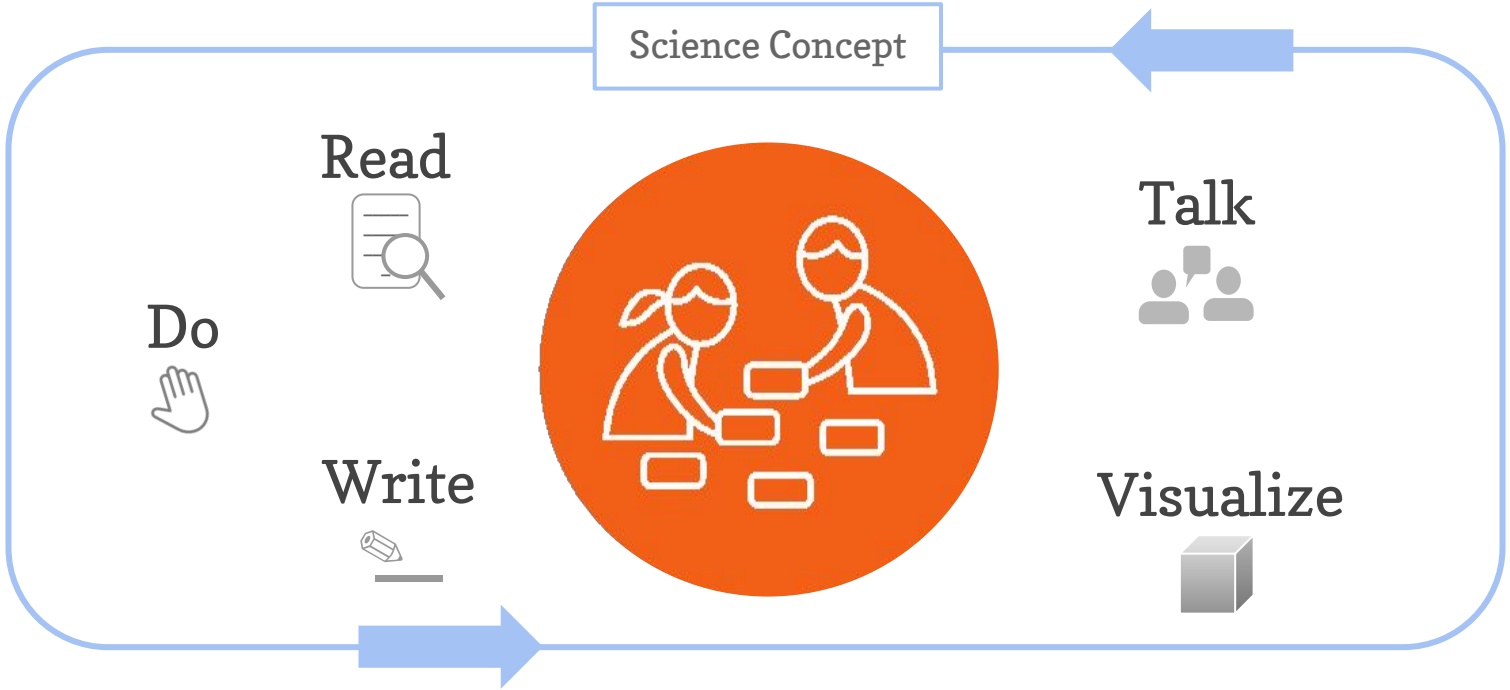
In each Amplify Science unit, students embody the role of a scientist or engineer to figure out phenomena.

They gather evidence from multiple sources, using multiple modalities.



Multimodal learning

Gathering evidence from different sources



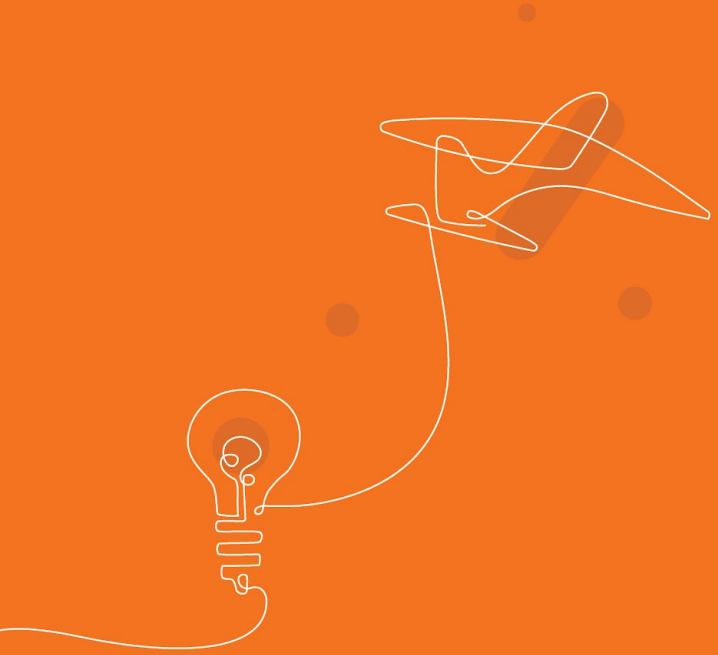
What are the multiple modalities?

A Do, talk, read, write, visualize

C Do, visualize, hands-on projects

B Read, write, google search

D Reading, writing, math



Revisiting Resources

Middle School Curriculum New York City Edition

*** Companion Lessons must be completed***

Grade 6

- Launch: * Harnessing Human Energy
- Thermal Energy
- Ocean, Atmosphere,and Climate
- Weather Patterns
- Populations and Resources
- Matter and Energy in Ecosystems
- 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
- Force and Motion
- Engineering Internship: Force and Motion
- Earth, Moon, and Sun
- Magnetic Fields
- Light Waves
- Traits and Reproduction
- Natural Selection
- Evolutionary History

AmplifyScience

Amplify.

Middle School curriculum: Unit types

Launch Units

11 Lessons

Microbiome

Core Units

19 Lessons

Metabolism

Engineering Internships

10 Lessons

Metabolism Engineering Internship

Middle School curriculum: Unit types

Launch Units

11 Lessons

Geology on Mars

11 Lessons

Harnessing Human Energy

11 Lessons

Microbiome

Middle School curriculum: Unit types

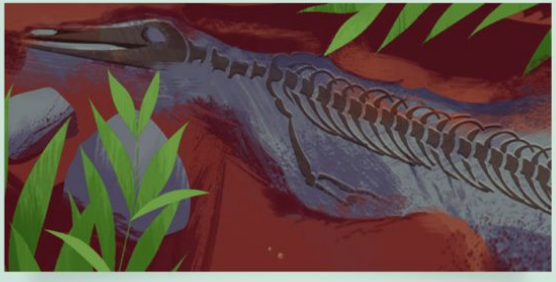
Core units

19 Lessons

Force and Motion

19 Lessons

Metabolism



19 Lessons

Plate Motion

Middle School curriculum: Unit types

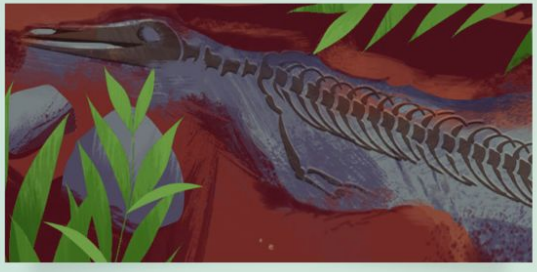
Engineering Internships

19 Lessons

Force and Motion

19 Lessons

Metabolism



19 Lessons

Plate Motion

10 Lessons

Force and Motion Engineering Internship

10 Lessons

Metabolism Engineering Internship

10 Lessons

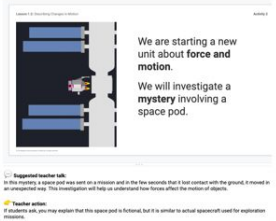
Plate Motion Engineering Internship

Middle school unit resources

Investigation Notebooks or digital student experience

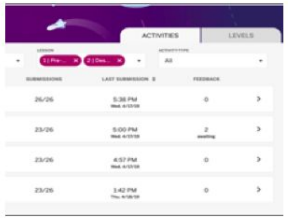
Articles (digital or print)

Simulations and other digital tools



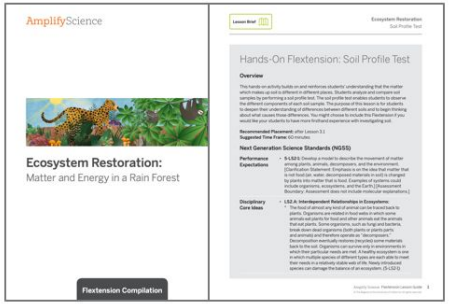
Classroom Slides

Teacher's Guide (digital or print)



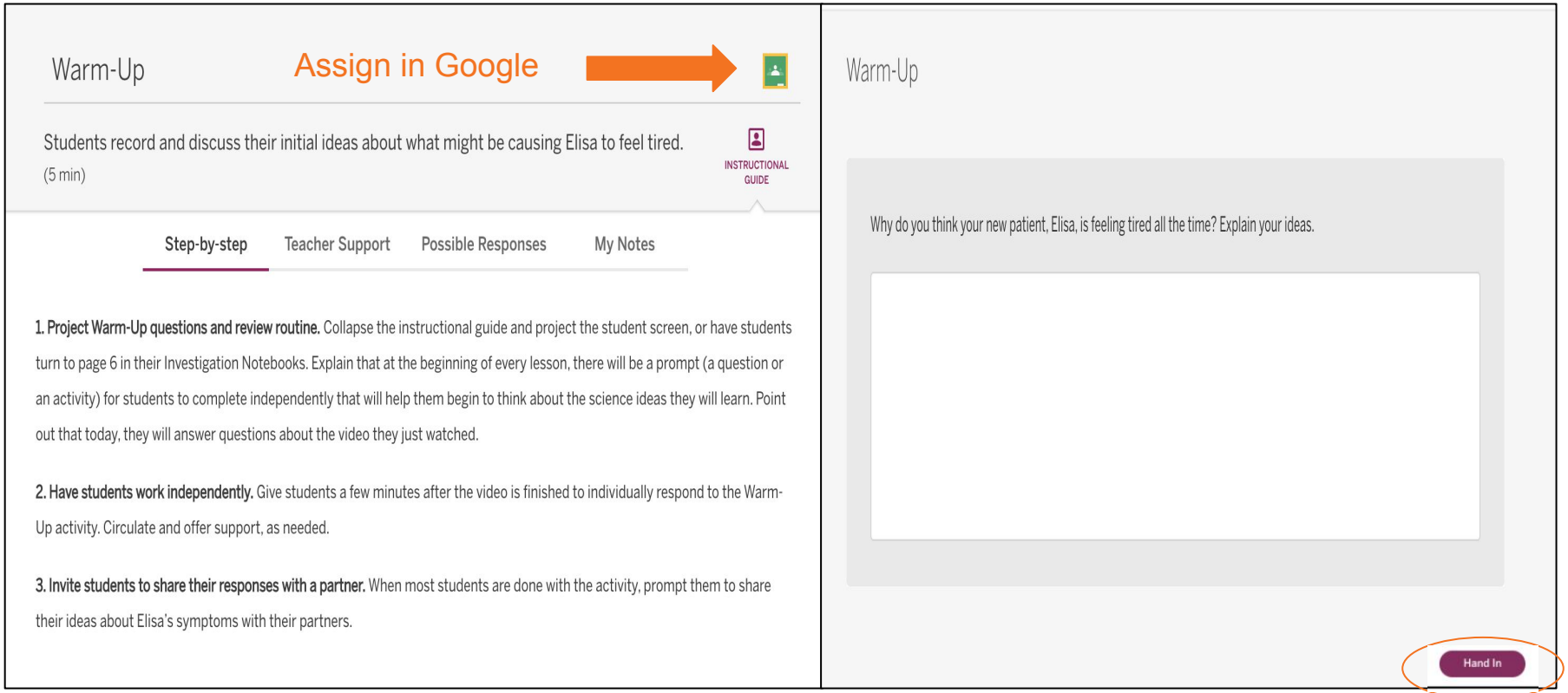
Assessments and Reporting

Hands-on and print materials

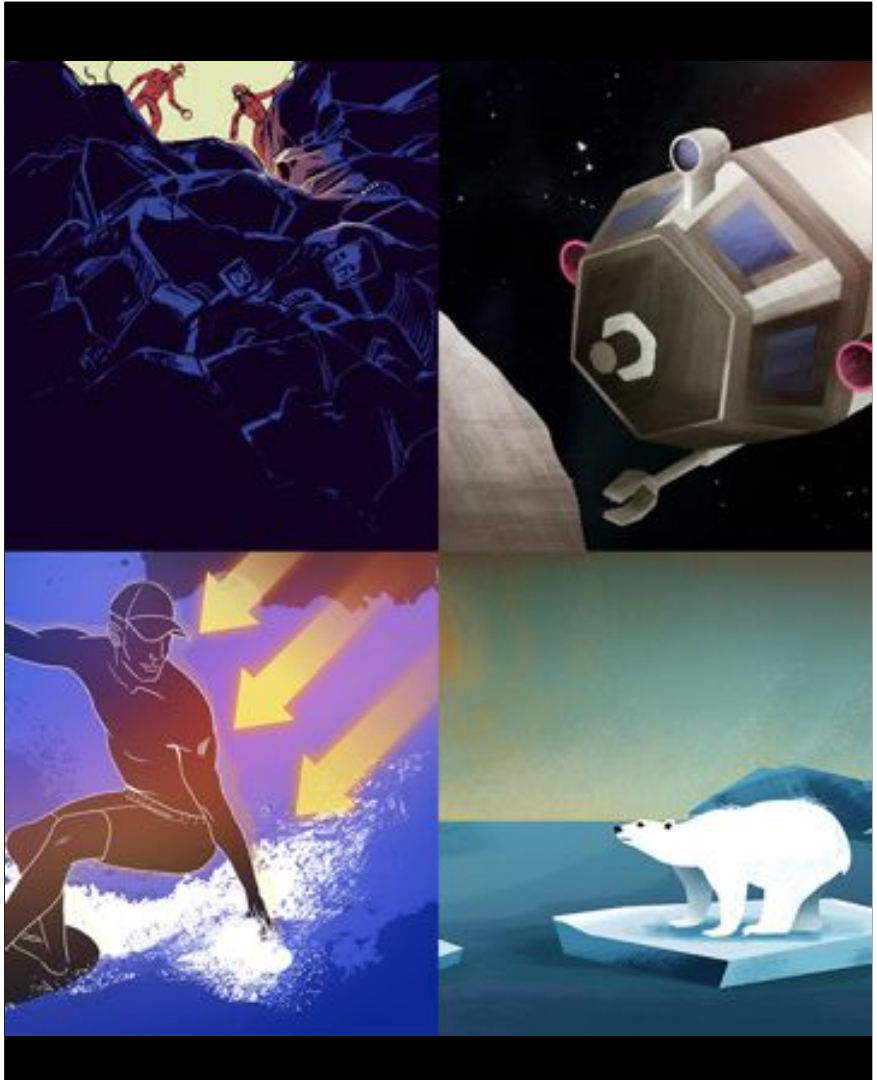


Hands-on Flextensions

Middle School Online Component



Amplify.



Plan for the day

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  - Planning to Teach using @Home
- Reflection and closing

Navigation Temperature Check

Rate yourself on your comfort level accessing the traditional Amplify Science site (learning.amplify.com)

1 = Extremely Uncomfortable

2 = Uncomfortable

3 = Mild

4 = Comfortable

5 = Extremely Comfortable

19 Lessons

Metabolism

JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

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

Planning for the Unit

- Unit Overview
- Unit Map
- Progress Build
- Getting Ready to Teach
- Materials and Preparation
- Science Background

Printable Resources

- Article Compilation
- Coherence Flowchart
- Copymaster Compilation
- Flextension Compilation
- Investigation Notebook
- NGSS Information for Parents and Guardians

Español

19 Lessons

Metabolism

JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

Chapter 1: Molecules Needed by the Cells

3 Lessons

Chapter 2: Body Systems

7 Lessons

Chapter 3: Cellular Respiration

5 Lessons

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- Flextension Compilation
- Investigation Notebook
- NGSS Information for Parents and Guardians

Español

Metabolism: Making the Diagnosis

Problem Students Work to Solve

What is causing Elisa, a young patient, to feel tired all the time?

Chapter 1 Question

Why does Elisa feel tired all the time?

Investigation Questions

What does the human body need to function? (1.2)

Which molecules do cells need to function? (1.3)

Evidence Sources and Reflection Opportunities

- Investigate molecules in the Sim (1.2)
- Test diets in the Sim (1.2)

- Read "Molecules Cells Need" (1.3)
- Model a healthy cell in the modeling tool (1.3)

Key Concepts

Students figure out:
- The body takes in molecules by eating and breathing. (1.2)
- Some of these molecules travel to the cells of the body. (1.2)

- A functioning human body has molecules from food (glucose and amino acids) and molecules from air (oxygen) in its cells. (1.3)

Application of Key Concepts to Problem

- Evaluate evidence and claims about Elisa (1.3)

Explanation That Students Can Make to Answer the Chapter 1 Question

Elisa's cells need molecules from food like glucose and amino acids and oxygen molecules from air in her cells. If she is tired all of the time her cells may not be getting what they need.

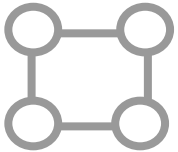
Chapter 1: Why does Elisa feel tired all the time?

Investigation Question:
What does the human body need to function?

Multiple sources of evidence

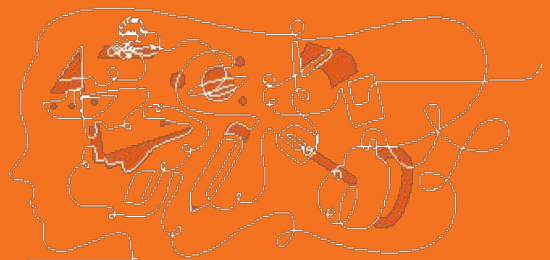
Visualize

Discussion



Modeling tool

Live Navigation



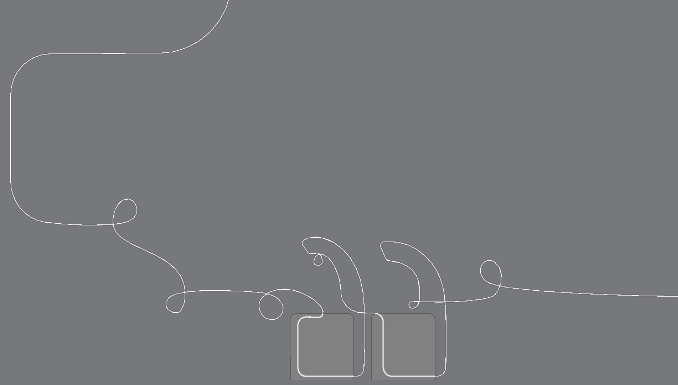
What are the two unit level resources you to find connections between the unit and chapters while lesson planning?

A Lesson overview

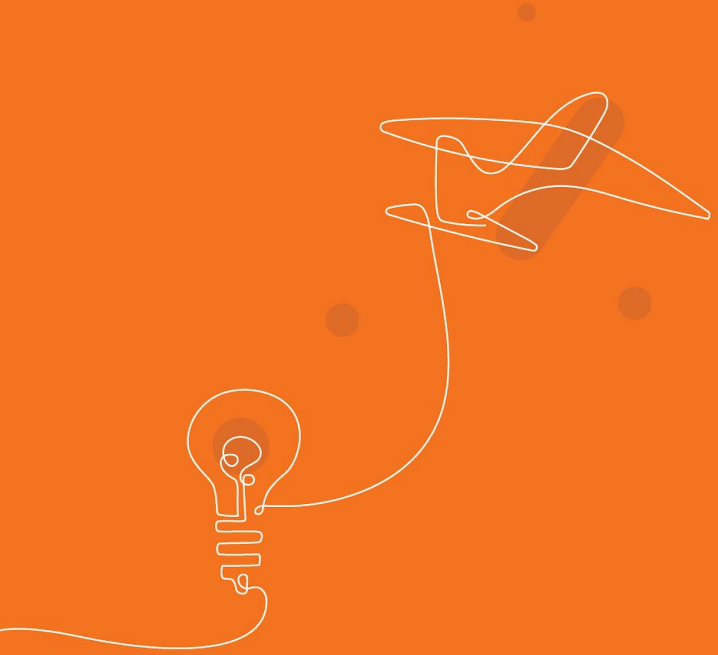
C In the offline preparation guide

B The Program Hub

D The unit map and coherence flowchart

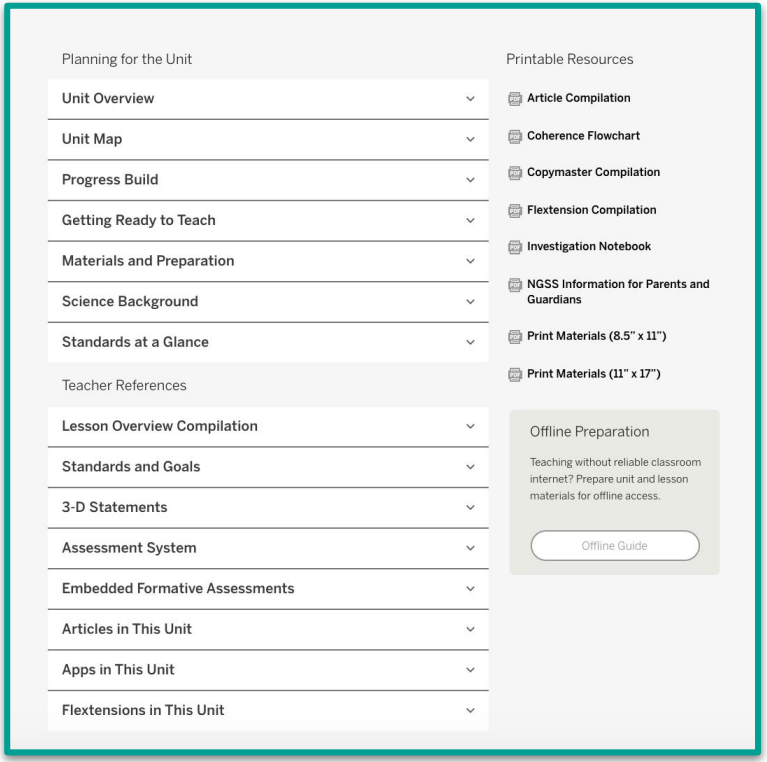


Questions?



Unit Internalization

Unit Guide Resources



Unit Guide resources

Once a unit is selected, select **JUMP DOWN TO UNIT GUIDE** in order to access all unit-level resources in an Amplify Science unit.

Planning for the unit

Unit Overview	Describes what's in each unit, the rationale, and how students learn across chapters
Unit Map	Provides an overview of what students figure out in each chapter, and how they figure it out
Progress Build	Explains the learning progression of ideas students figure out in the unit
Getting Ready to Teach	Provides tips for effectively preparing to teach and teaching the unit in your classroom
Materials and Preparation	Lists materials included in the unit's kit, items to be provided by the teacher, and briefly outlines preparation requirements for each lesson
Science Background	Adult-level primer on the science content students figure out in the unit
Standards at a Glance	Lists Next Generation Science Standards (NGSS) (Performance Expectations, Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts), Common Core State Standards for English Language Arts, and Common Core State Standards for Mathematics

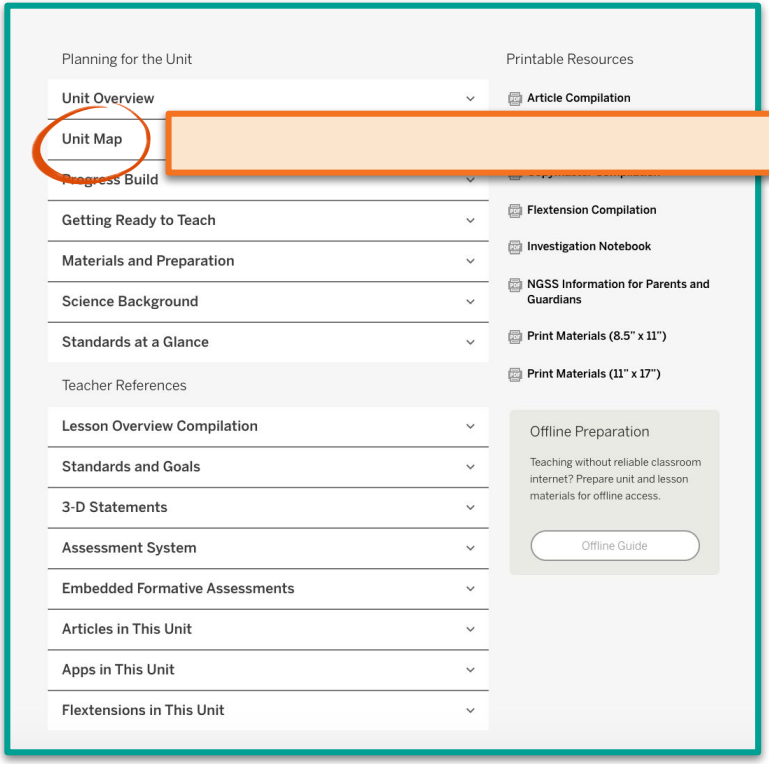
Teacher references

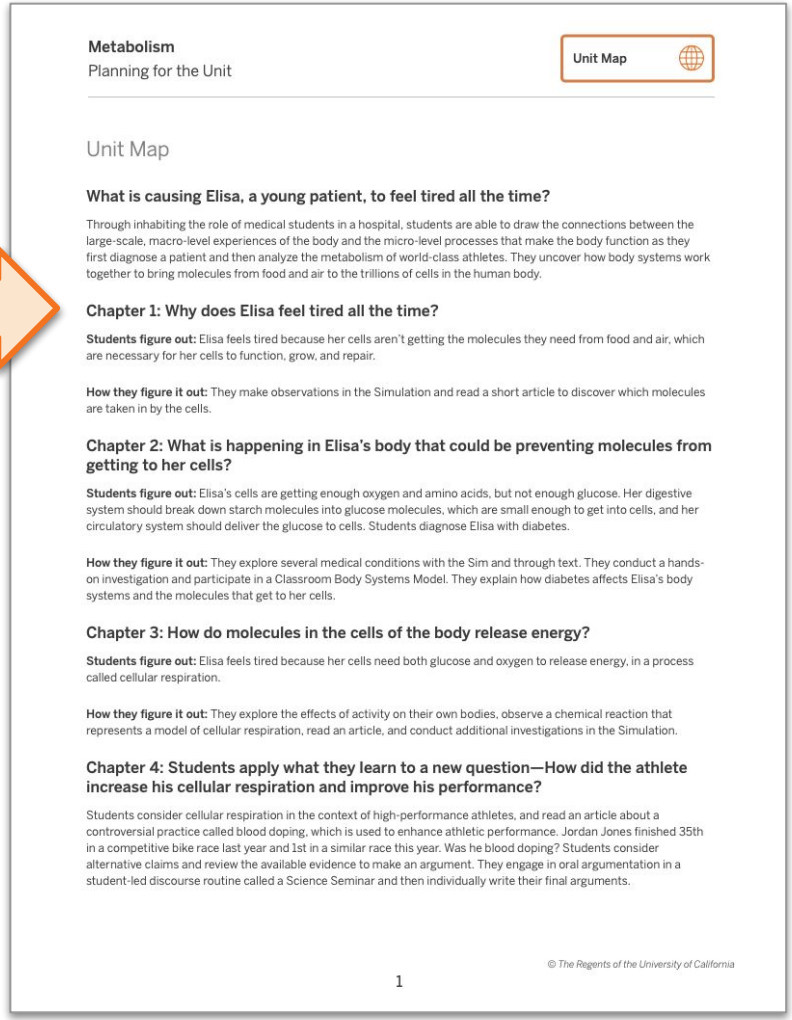
Lesson Overview Compilation	Lesson Overview of each lesson in the unit, including lesson summary, activity purposes, and timing
Standards and Goals	Lists NGSS (Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts) and CCSS (English Language Arts and Mathematics) in the unit, explains how the standards are reached
3-D Statements	Describes 3-D learning across the unit, chapters, and in individual lessons
Assessment System	Describes components of the Amplify Science Assessment System, identifies each 3-D assessment opportunity in the unit
Embedded Formative Assessments	Includes full text of formative assessments in the unit
Books in This Unit	Summarizes each unit text and explains how the text supports instruction
Apps in This Unit	Outlines functionality of digital tools and how students use them (in grades 2-5)

Printable resources

Copymaster Compilation	Compilation of all copymasters for the teacher to print and copy throughout the unit
Investigation Notebook	Digital version of the Investigation Notebook, for copying and projecting
Multi-Language Glossary	Glossary of unit vocabulary in multiple languages
Print Materials (8.5" x 11")	Digital compilation of printed cards (i.e. vocabulary cards, student card sets) provided in the kit
Print Materials (11" x 17")	Digital compilation of printed Unit Question, Chapter Questions, and Key Concepts provided in the kit

Unit Map





Metabolism
Planning for the Unit

Unit Map

Unit Map

What is causing Elisa, a young patient, to feel tired all the time?

Through inhabiting the role of medical students in a hospital, students are able to draw the connections between the large-scale, macro-level experiences of the body and the micro-level processes that make the body function as they first diagnose a patient and then analyze the metabolism of world-class athletes. They uncover how body systems work together to bring molecules from food and air to the trillions of cells in the human body.

Chapter 1: Why does Elisa feel tired all the time?

Students figure out: Elisa feels tired because her cells aren't getting the molecules they need from food and air, which are necessary for her cells to function, grow, and repair.

How they figure it out: They make observations in the Simulation and read a short article to discover which molecules are taken in by the cells.

Chapter 2: What is happening in Elisa's body that could be preventing molecules from getting to her cells?

Students figure out: Elisa's cells are getting enough oxygen and amino acids, but not enough glucose. Her digestive system should break down starch molecules into glucose molecules, which are small enough to get into cells, and her circulatory system should deliver the glucose to cells. Students diagnose Elisa with diabetes.

How they figure it out: They explore several medical conditions with the Sim and through text. They conduct a hands-on investigation and participate in a Classroom Body Systems Model. They explain how diabetes affects Elisa's body systems and the molecules that get to her cells.

Chapter 3: How do molecules in the cells of the body release energy?

Students figure out: Elisa feels tired because her cells need both glucose and oxygen to release energy, in a process called cellular respiration.

How they figure it out: They explore the effects of activity on their own bodies, observe a chemical reaction that represents a model of cellular respiration, read an article, and conduct additional investigations in the Simulation.

Chapter 4: Students apply what they learn to a new question—How did the athlete increase his cellular respiration and improve his performance?

Students consider cellular respiration in the context of high-performance athletes, and read an article about a controversial practice called blood doping, which is used to enhance athletic performance. Jordan Jones finished 35th in a competitive bike race last year and 1st in a similar race this year. Was he blood doping? Students consider alternative claims and review the available evidence to make an argument. They engage in oral argumentation in a student-led discourse routine called a Science Seminar and then individually write their final arguments.

Page 2

Amplify.

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title: Metabolism

What is the phenomenon students are investigating in your unit?

What is causing Elisa, a young patient in the hospital, to feel tired all of the time?

Unit Question:

Student role:

Medical students

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title: Metabolism

What is the phenomenon students are investigating in your unit?

What is causing Elisa, a young patient in the hospital, to feel tired all of the time?

Unit Question:

Student role:

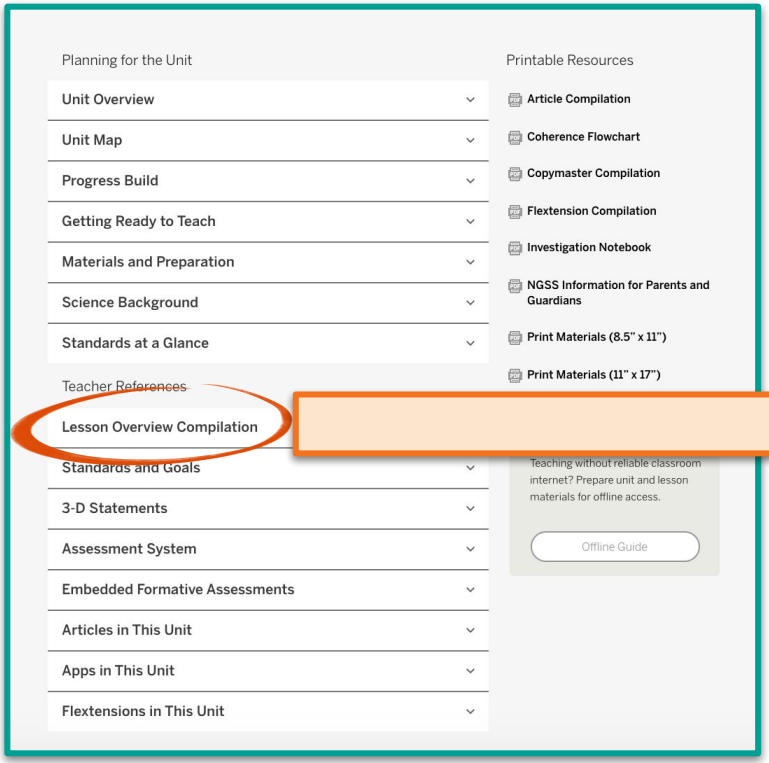
Medical students

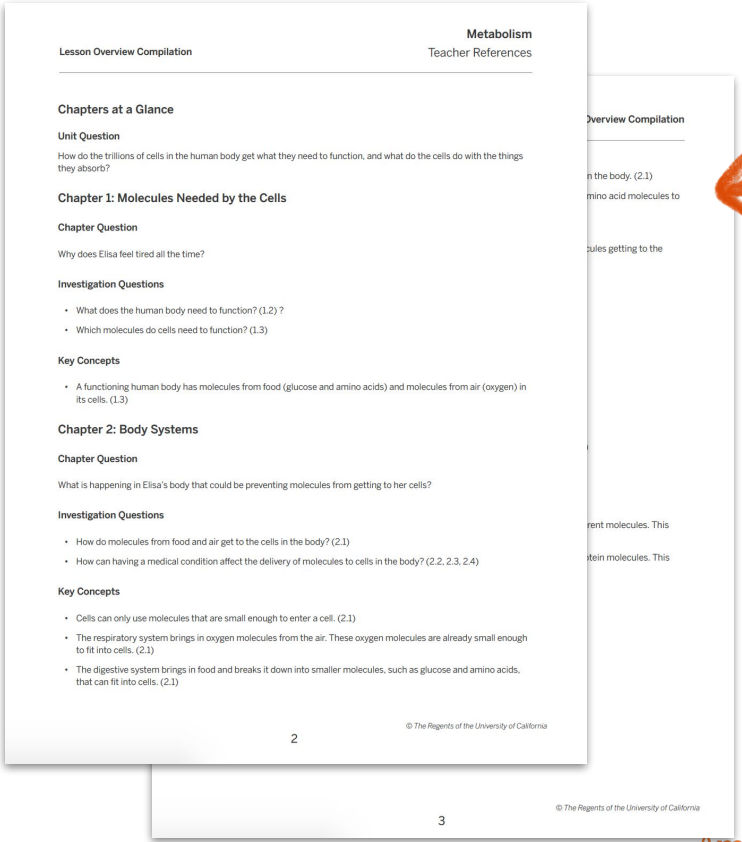
By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Lesson Overview Compilation

Pages 3-4





Lesson Overview Compilation — Metabolism — Teacher References

Chapters at a Glance

Unit Question

How do the trillions of cells in the human body get what they need to function, and what do the cells do with the things they absorb?

Chapter 1: Molecules Needed by the Cells

Chapter Question

Why does Elisa feel tired all the time?

Investigation Questions

- What does the human body need to function? (1.2) ?
- Which molecules do cells need to function? (1.3)

Key Concepts

- A functioning human body has molecules from food (glucose and amino acids) and molecules from air (oxygen) in its cells. (1.3)

Chapter 2: Body Systems

Chapter Question

What is happening in Elisa's body that could be preventing molecules from getting to her cells?

Investigation Questions

- How do molecules from food and air get to the cells in the body? (2.1)
- How can having a medical condition affect the delivery of molecules to cells in the body? (2.2, 2.3, 2.4)

Key Concepts

- Cells can only use molecules that are small enough to enter a cell. (2.1)
- The respiratory system brings in oxygen molecules from the air. These oxygen molecules are already small enough to fit into cells. (2.1)
- The digestive system brings in food and breaks it down into smaller molecules, such as glucose and amino acids, that can fit into cells. (2.1)

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title: Metabolism

What is the phenomenon students are investigating in your unit?

What is causing Elisa, a young patient in the hospital, to feel tired all of the time?

Unit Question:
How do the trillions of cells in the human body get what they need to function, and what do the cells do with the things they absorb?

Student role:
Medical students

By the end of the unit, students figure out ...

What science ideas do students need to figure out in order to explain the phenomenon?

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title: Metabolism

What is the phenomenon students are investigating in your unit?

How can we make a mixture separate? How can we make unmixable substances mix instead of separating into layers in a salad dressing?

Unit Question:
How do the trillions of cells in the human body get what they need to function, and what do the cells do with the things they absorb?

Student role:
Food scientists

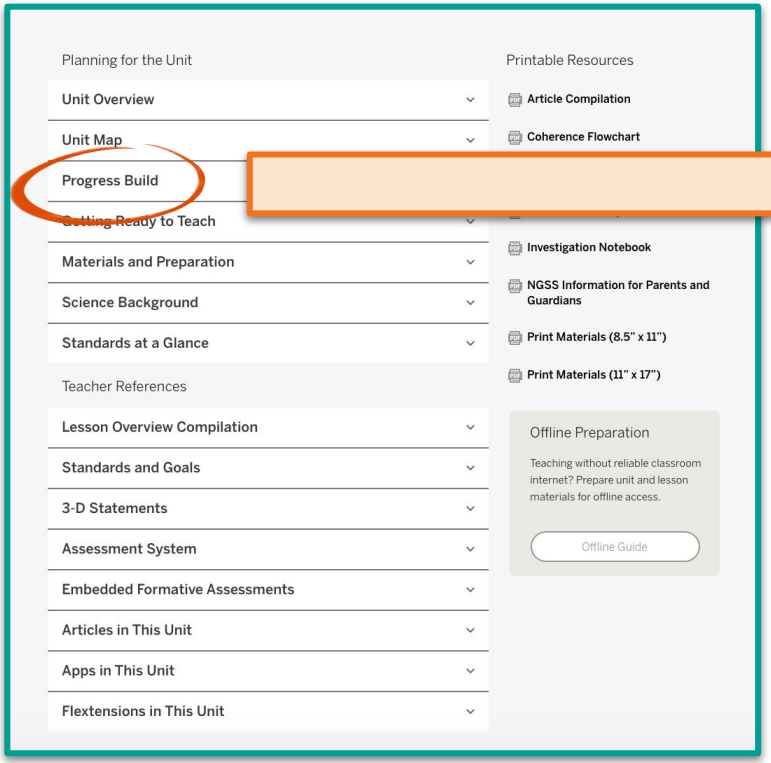
By the end of the unit, students figure out ...

Elisa's diabetes causes her cells not to get glucose, so they can't release energy.

What science ideas do students need to figure out in order to explain the phenomenon?

Progress Build

Pages 5-6



Metabolism
Planning for the Unit

Progress Build

Progress Build

Each Amplify Science Middle School unit is structured around a unit-specific learning progression, which we call the Progress Build. The unit's Progress Build describes the way students' explanatory understanding of the unit's focal phenomena is likely to develop and deepen over the course of a unit. It is an important tool in understanding the structure of a unit and in supporting students' learning: it organizes the sequence of instruction (generally, each level of the Progress Build corresponds to a chapter), defines the focus of assessments, and grounds the inferences about student learning progress that guide suggested instructional adjustments and differentiation. By aligning instruction and assessment to the Progress Build (and therefore to each other), evidence about how student understanding is developing may be used during the course of the unit to support students and modify instruction in an informed way.

The *Metabolism* Progress Build consists of three levels of science understanding. To support a growth model for student learning progress, each level encompasses all of the ideas of prior levels and represents an explanatory account of unit phenomena, with the sophistication of that account increasing as the levels increase. At each level, students add new ideas and integrate them into a progressively deeper understanding of how body systems work together to provide cells in the human body with the molecules they need. Since the Progress Build reflects an increasingly complex yet integrated explanation, we represent it by including the new ideas for each level in bold.

Prior knowledge (preconceptions). At the start of the *Metabolism* unit, middle school students will likely know that eating and breathing are necessary for life, but will know little about the specifics of why these activities allow our bodies to function. Students may associate eating with gaining energy, but will not know that oxygen is also required for energy release. Students may know about the process of digestion, but are unlikely to know what happens to food after it is digested. Depending on previous instruction, some students may know about cells. Additionally, students will know that a body has blood and a heart, but will not generally know how these contribute to a body's ability to function. This experience and prior knowledge can be built on and refined, which the *Metabolism* Progress Build and unit structure are designed to do.

Progress Build Level 1: Cells in the body need molecules from outside to function.

The body can function when the cells of the body are getting and using molecules that come from outside the body—from the food we eat and the air we breathe. Oxygen, glucose, and amino acids are molecules the cells need that come from outside the body.

Progress Build Level 2: Systems in the body work together to take in, break down, and deliver needed molecules to the cells.

The body can function when the cells of the body are getting and using molecules that come from outside the body—from the food we eat and the air we breathe. Oxygen, glucose, and amino acids are molecules the cells need that come from outside the body. **The digestive system breaks down starch and protein molecules from food into glucose and amino acids, and then the circulatory system transports these molecules to the cells. Also, the respiratory system takes in oxygen molecules from the air, and the circulatory system transports those molecules unchanged to the cells because oxygen molecules are already small enough to fit into cells.**

Amplify.

Guided Unit Internalization

Part 1: Unit-level internalization

Unit title: Metabolism

What is the phenomenon students are investigating in your unit?

How can we make a mixture separate? How can we make unmixable substances mix instead of separating into layers in a salad dressing?

Unit Question:
How do the trillions of cells in the human body get what they need to function, and what do the cells do with the things they absorb?

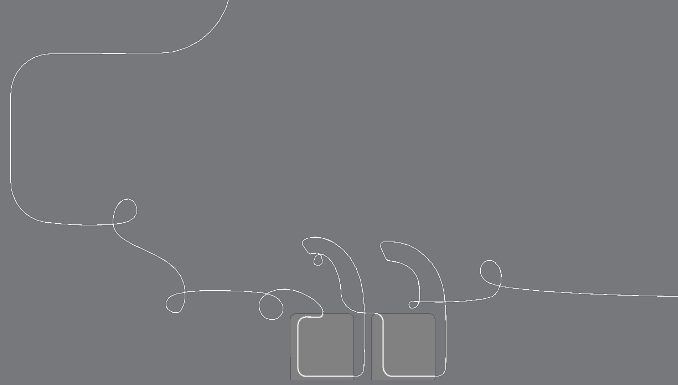
Student role:
Food scientists

By the end of the unit, students figure out ...

Elisa's diabetes causes her cells not to get glucose, so they can't release energy

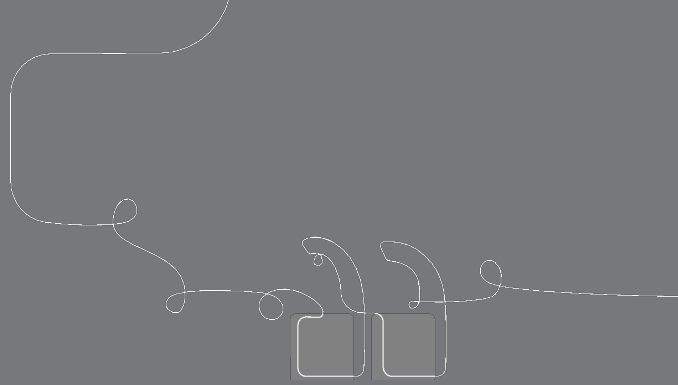
What science ideas do students need to figure out in order to explain the phenomenon?

Cells in the body need molecules from outside to function. Systems in the body work together to take in, break down, and deliver needed molecules to the cells. Cells can use these molecules to release energy for the body to function.



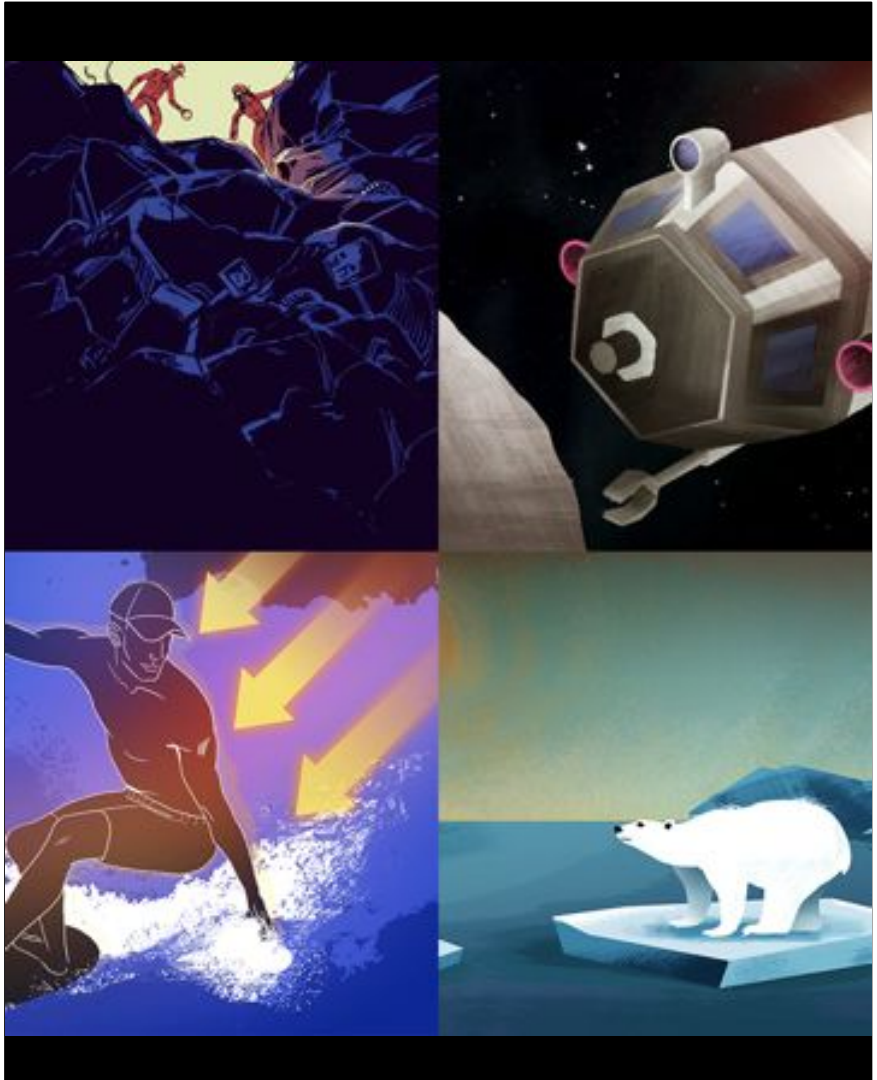
Think & Share:

In 15 words or less, what do students figure out by the **end of the unit**?



Questions?

5 min break



Plan for the day

- Framing the day
  - Welcome and introductions
  - Reflection and vision setting
  - Revisiting the Amplify Approach
- Unit Internalization
- @Home Resources Internalization
  - @Home Units
  - @Home Videos
  - Lesson Level Internalization
  - Resource selection/Guidance
- Guided Planning
  - Planning to Teach using @Home
- Reflection and closing

Navigation Temperature Check

Rate yourself on your comfort level accessing the Amplify Science @Home resources for planning

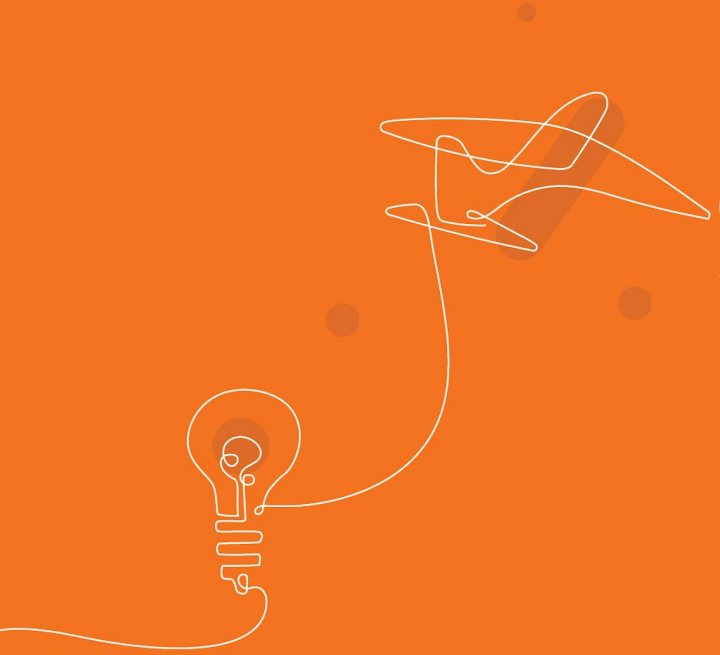
1 = Extremely Uncomfortable

2 = Uncomfortable

3 = Mild

4 = Comfortable

5 = Extremely Comfortable



@Home Resources Internalization

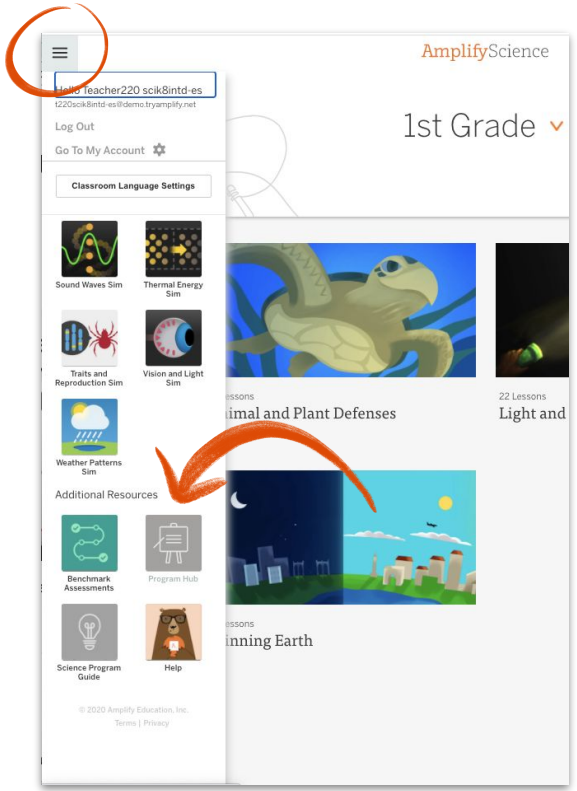
A suite of new resources designed to make extended remote and hybrid learning easier for teachers and students.

Amplify.

Accessing Amplify Science@Home

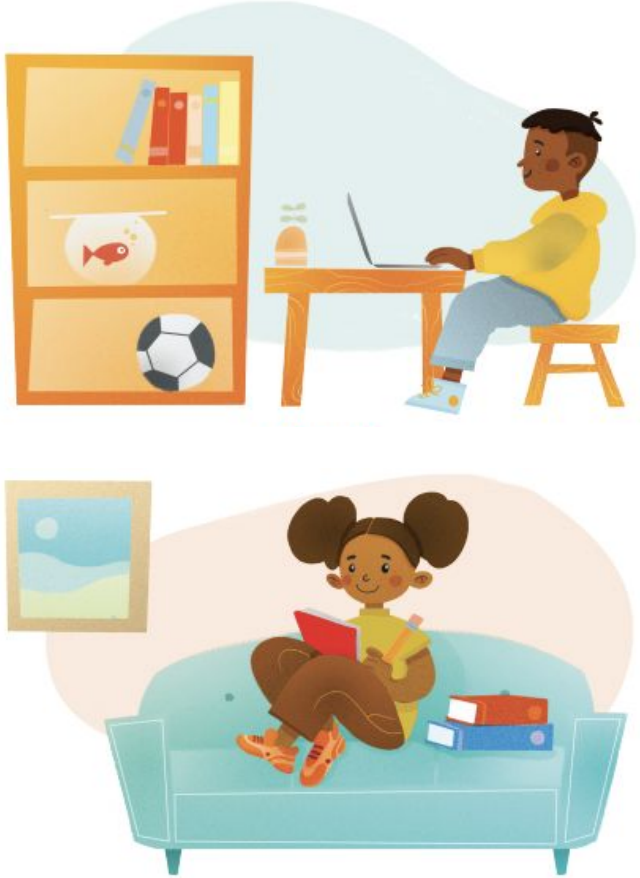
Amplify Science Program Hub

- New site containing Amplify Science@Home and additional PL resources
- Accessible via the Global Navigation menu



AmplifyScience@Home

- Built for a variety of instructional formats
- Digital and print-based options
- No materials required
- Available in English and Spanish (student and family materials)
- Accessible on the Amplify Science Program Hub



AmplifyScience@Home

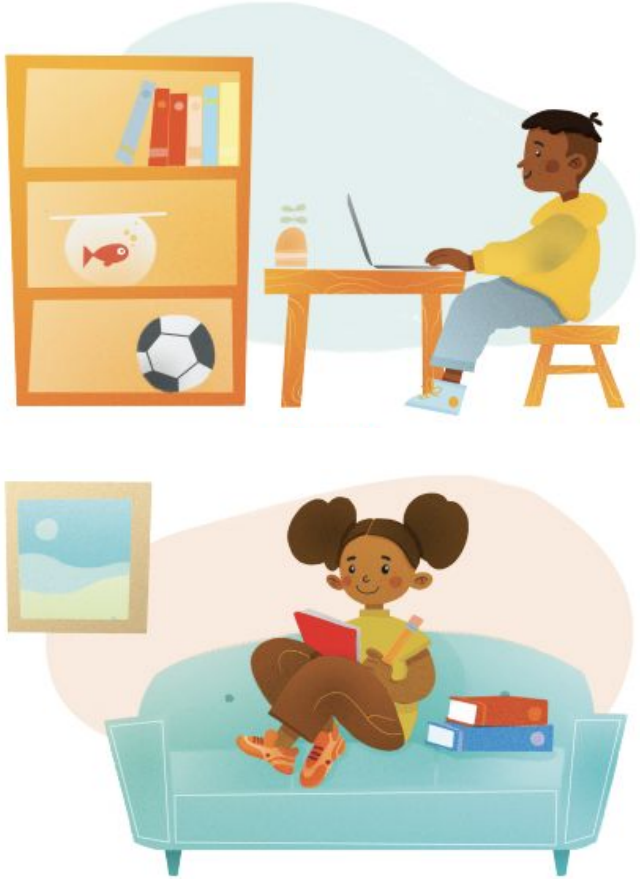
Two different options:

@Home Units

- Packet or slide deck versions of Amplify Science units condensed by about 50%

@Home Videos

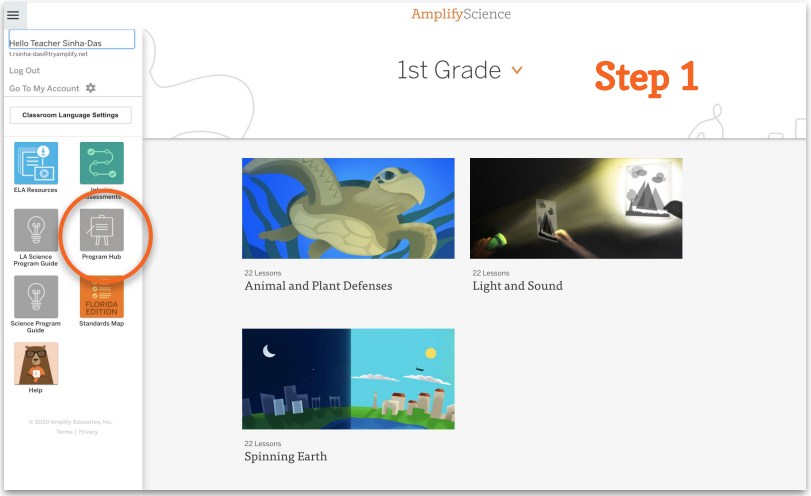
- Video playlists of Amplify Science lessons, taught by real Amplify Science teachers

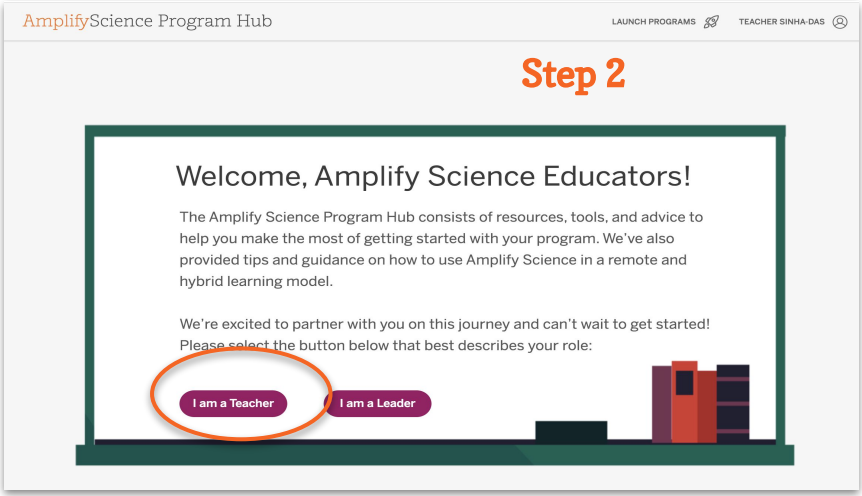


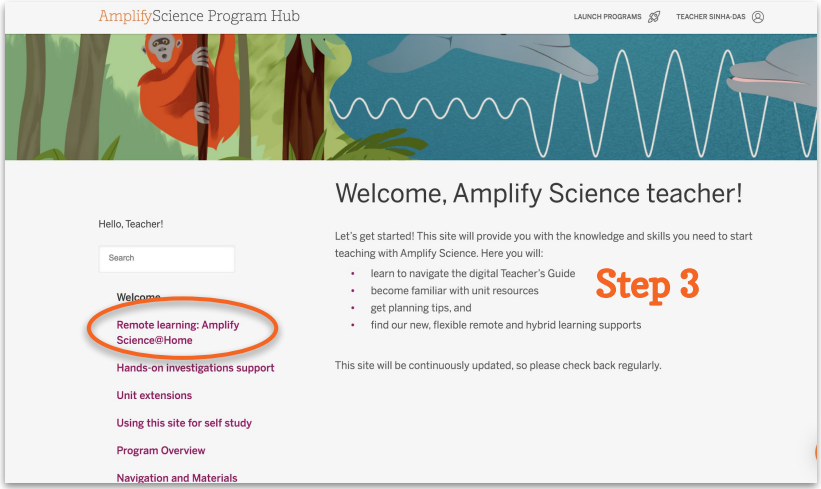
AmplifyScience@Home

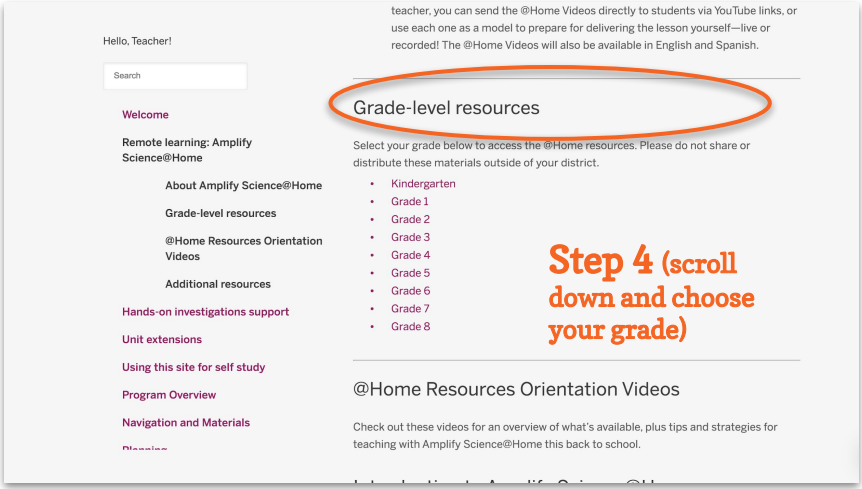
- First unit for each grade level is now available on the Science Program Hub

- Additional units rolling out throughout back-to-school


AmplifyScience
Hello Teacher Sinha-Das
Log Out
Go To My Account
Classroom Language Settings
ELA Resources
LA Science Program Guide
Program Hub
Science Program Guide
Standards Map
Help
1st Grade
Step 1
22 Lessons
Animal and Plant Defenses
22 Lessons
Light and Sound
22 Lessons
Spinning Earth

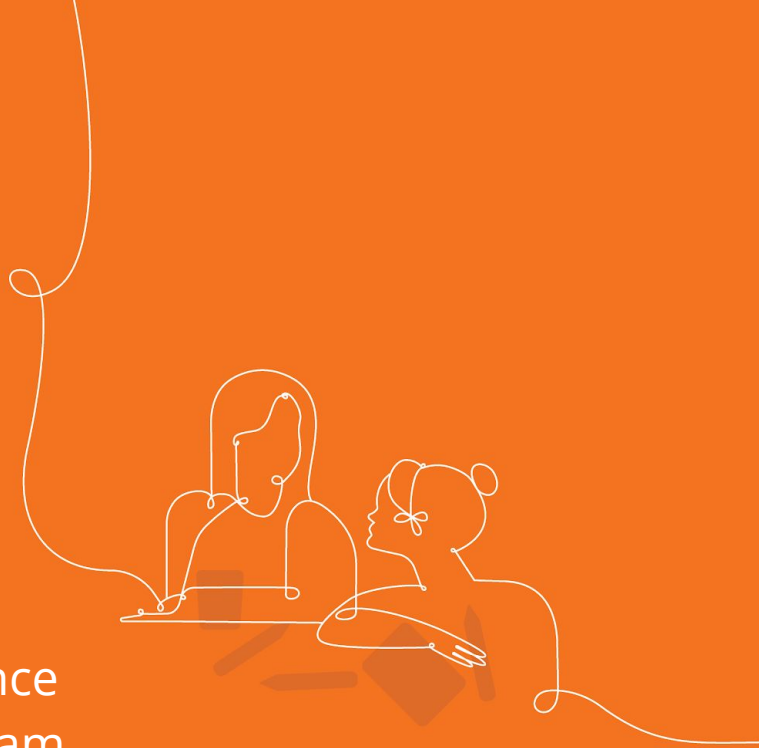

AmplifyScience Program Hub
LAUNCH PROGRAMS
TEACHER SINHA-DAS
Step 2
Welcome, Amplify Science Educators!
The Amplify Science Program Hub consists of resources, tools, and advice to help you make the most of getting started with your program. We've also provided tips and guidance on how to use Amplify Science in a remote and hybrid learning model.
We're excited to partner with you on this journey and can't wait to get started! Please select the button below that best describes your role:
I am a Teacher
I am a Leader


AmplifyScience Program Hub
LAUNCH PROGRAMS
TEACHER SINHA-DAS
Welcome, Amplify Science teacher!
Hello, Teacher!
Search
Welcome
Remote learning: Amplify Science@Home
Hands-on investigations support
Unit extensions
Using this site for self study
Program Overview
Navigation and Materials
Let's get started! This site will provide you with the knowledge and skills you need to start teaching with Amplify Science. Here you will:
learn to navigate the digital Teacher's Guide
become familiar with unit resources
get planning tips, and
find our new, flexible remote and hybrid learning supports
Step 3
This site will be continuously updated, so please check back regularly.


Hello, Teacher!
Search
Welcome
Remote learning: Amplify Science@Home
About Amplify Science@Home
Grade-level resources
@Home Resources Orientation Videos
Additional resources
Hands-on investigations support
Unit extensions
Using this site for self study
Program Overview
Navigation and Materials
teacher, you can send the @Home Videos directly to students via YouTube links, or use each one as a model to prepare for delivering the lesson yourself—live or recorded! The @Home Videos will also be available in English and Spanish.
Grade-level resources
Select your grade below to access the @Home resources. Please do not share or distribute these materials outside of your district.
Kindergarten
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Grade 6
Grade 7
Grade 8
Step 4 (scroll down and choose your grade)
@Home Resources Orientation Videos
Check out these videos for an overview of what's available, plus tips and strategies for teaching with Amplify Science@Home this back to school.

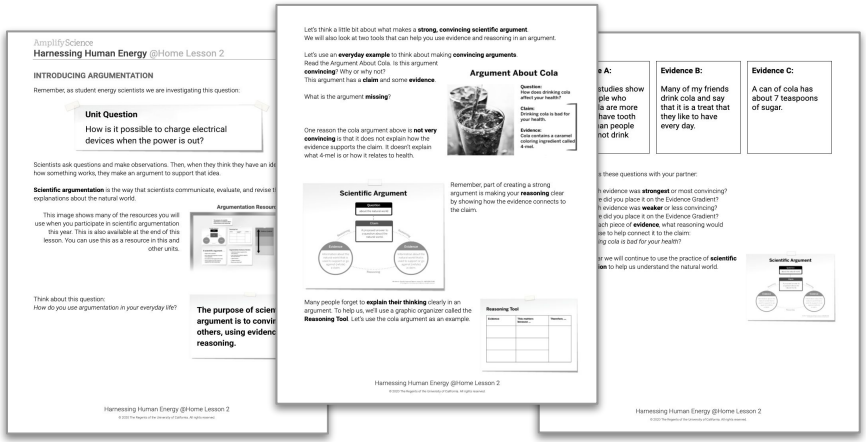
@Home Units

Strategically modified versions of Amplify Science units, highlighting key activities from the program



@Home Units

- Solution for **reduced instructional time**
- Two options for student access



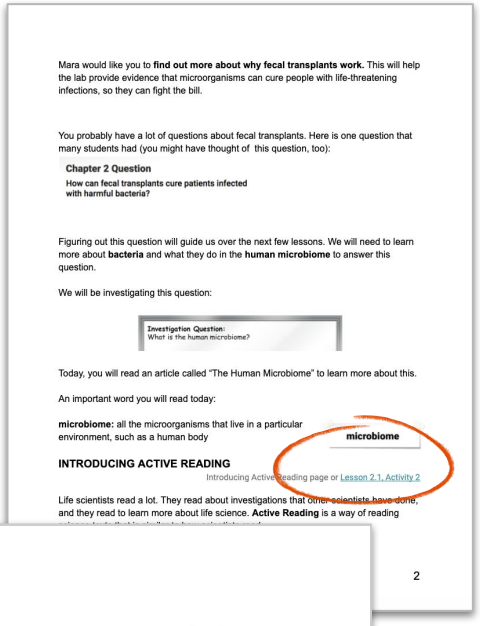
@Home Packets: print-based

@Home Slides and Student Sheets: tech-based

Options for student access

Embedded links to videos:

- Hands-on demonstrations
- Digital tool activities
- Read-alouds



Mara would like you to **find out more about why fecal transplants work.** This will help the lab provide evidence that microorganisms can cure people with life-threatening infections, so they can fight the bill.

You probably have a lot of questions about fecal transplants. Here is one question that many students had (you might have thought of this question, too):

Chapter 2 Question

How can fecal transplants cure patients infected with harmful bacteria?

Figuring out this question will guide us over the next few lessons. We will need to learn more about **bacteria** and what they do in the **human microbiome** to answer this question.

We will be investigating this question:

Investigation Question:
What is the human microbiome?

Today, you will read an article called "The Human Microbiome" to learn more about this.

An important word you will read today:

microbiome: all the microorganisms that live in a particular environment, such as a human body

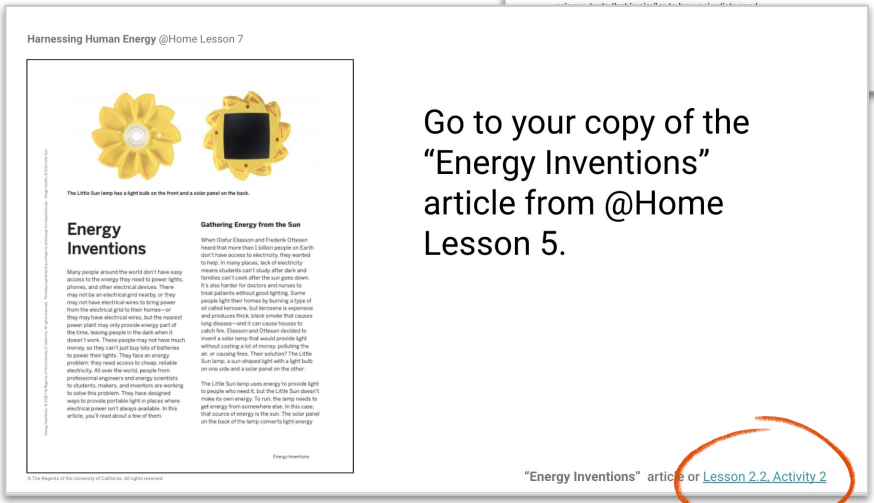
microbiome

INTRODUCING ACTIVE READING

Introducing Active Reading page or Lesson 2.1, Activity 2

Life scientists read a lot. They read about investigations that other scientists have done, and they read to learn more about life science. **Active Reading** is a way of reading

2



Harnessing Human Energy @Home Lesson 7

The Little Sun lamp has a light bulb on the front and a solar panel on the back.

Energy Inventions

Gathering Energy from the Sun

Many people around the world don't have easy access to the energy they need to power lights, phones, and other electrical devices. There may not be an electrical grid nearby, or they may not have electrical wires to bring power from the electrical grid to their homes—or they may have electrical wires, but the nearest power plant may only provide energy part of the time, leaving people in the dark when it doesn't work. These people may not have much money, so they can't just buy lots of batteries to power their lights. They face an energy problem: they need access to cheap, reliable electricity. All over the world, people from professional engineers and energy scientists to students, makers, and inventors are working to solve this problem. They have designed ways to provide portable light in places where electrical power isn't always available. In this article, you'll read about a few of them.

When Olafur Eliasson and Frederik Ottesen heard that more than 1 billion people on Earth don't have access to electricity, they wanted to help. In many places, lack of electricity means students can't study after dark and families can't cook after the sun goes down. It's also harder for doctors and nurses to treat patients without good lighting. Some people light their homes by burning a type of oil called kerosene, but kerosene is expensive and produces thick, black smoke that causes lung disease—and it can cause houses to catch fire. Eliasson and Ottesen decided to invent a solar lamp that would provide light without costing a lot of money, polluting the air, or causing fires. Their solution? The Little Sun lamp, a sun-shaped light with a light bulb on one side and a solar panel on the other.

The Little Sun lamp uses energy to provide light to people who need it, but the Little Sun doesn't make its own energy. To run, the lamp needs to get energy from somewhere else. In this case, that source of energy is the sun. The solar panel on the back of the lamp converts light energy

Energy Inventions

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Go to your copy of the "Energy Inventions" article from @Home Lesson 5.

"Energy Inventions" article or Lesson 2.2, Activity 2

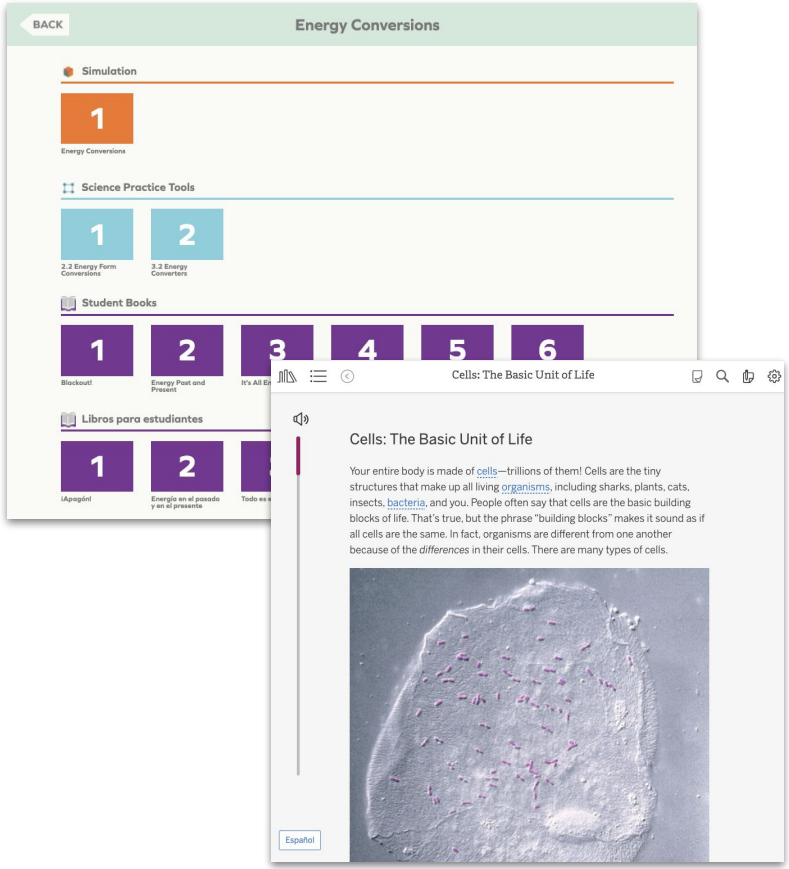
Options for student access

Alternative to embedded video links

Access via curriculum:

- Science practice tools
- Simulations
- Amplify Library

Hands-on demos accessible only via embedded YouTube links



Let's Discuss

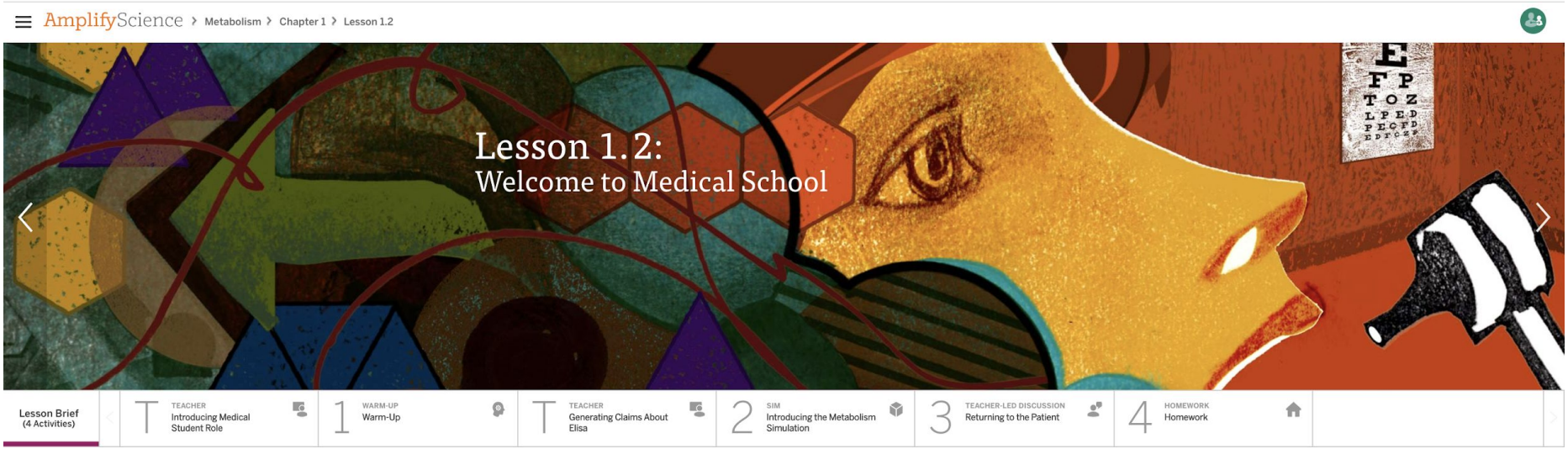
How do you plan to use these resources?

@Home Unit resources

All resources are fully editable and customizable

- **Family Overview**
  - Provides context for families
- **Teacher Overview**
  - Outlines the unit and summarizes each lesson
  - Suggestions for adapting for different scenarios
- **Student materials**
  - ~30-minute lessons (slide decks or packets) featuring prioritized activities from Amplify Science curriculum

Example lesson: *Metabolism 1.2*



@Home Lesson : Amplify Science lesson 1.2

@Home Lesson 1

Adapted from: Amplify Science *Metabolism* Lesson 1.2

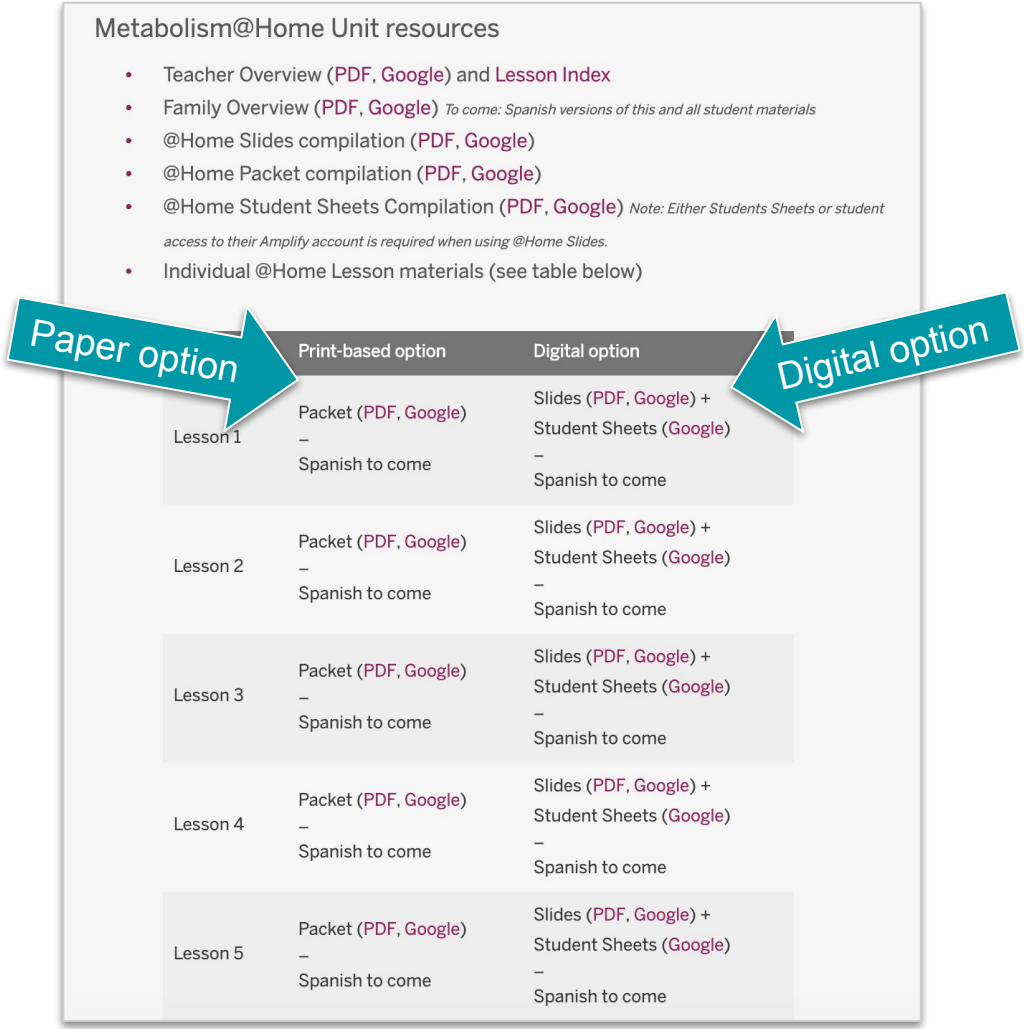
Key Activities

- **Introducing the *Metabolism* Unit:** Students are introduced to the unit problem and their role as medical students. They consider their initial ideas about why their patient Elisa is feeling tired all the time, and are introduced to the claims they will be investigating.
- **Do:** Students are introduced to the *Metabolism* Simulation (Sim) and observe what happens to molecules the body is taking in. Students using @Home Slides use the Sim, while students using @Home packets observe a video of a Sim investigation.
- **Reflect:** Students consider whether they have any new ideas about the claims.

Amplify Science @Home Curriculum

You have access to the Metabolism @Home Unit.

The Metabolism @Home Unit has **14 lessons.** Each lesson is written to be **30 minutes** long.



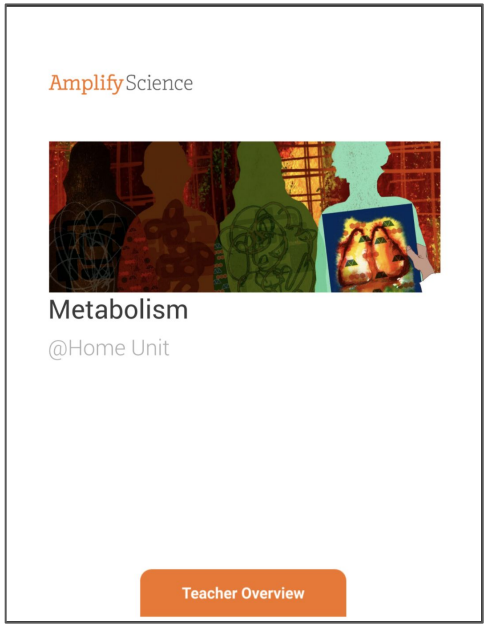
Teacher Overview

Unit-level

- Overview of resources
- Pacing
- Planning for instructional routines
- Assessment considerations

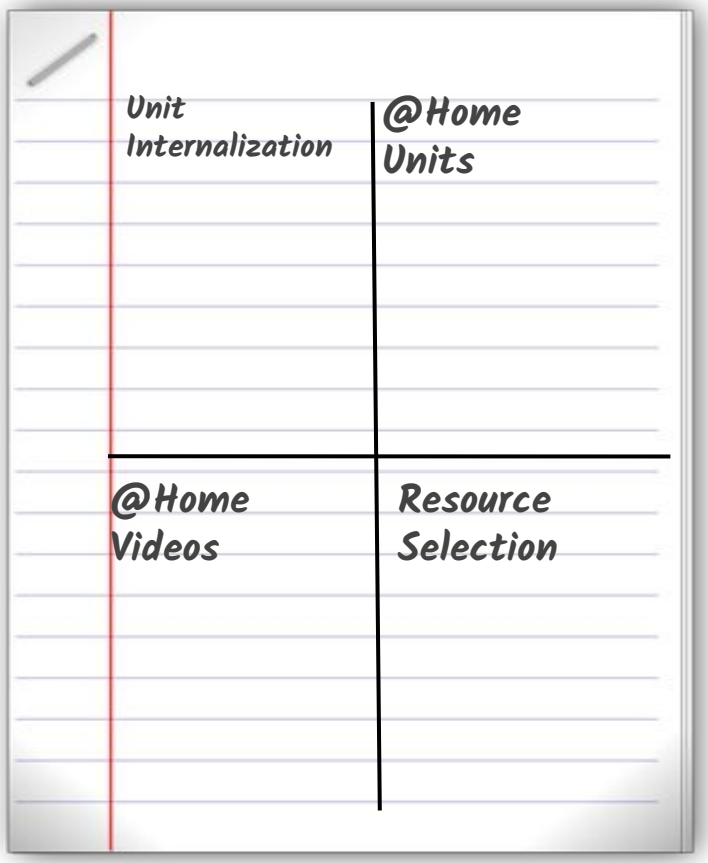
Lesson-level

- Chapters at a glance
- Lesson outlines

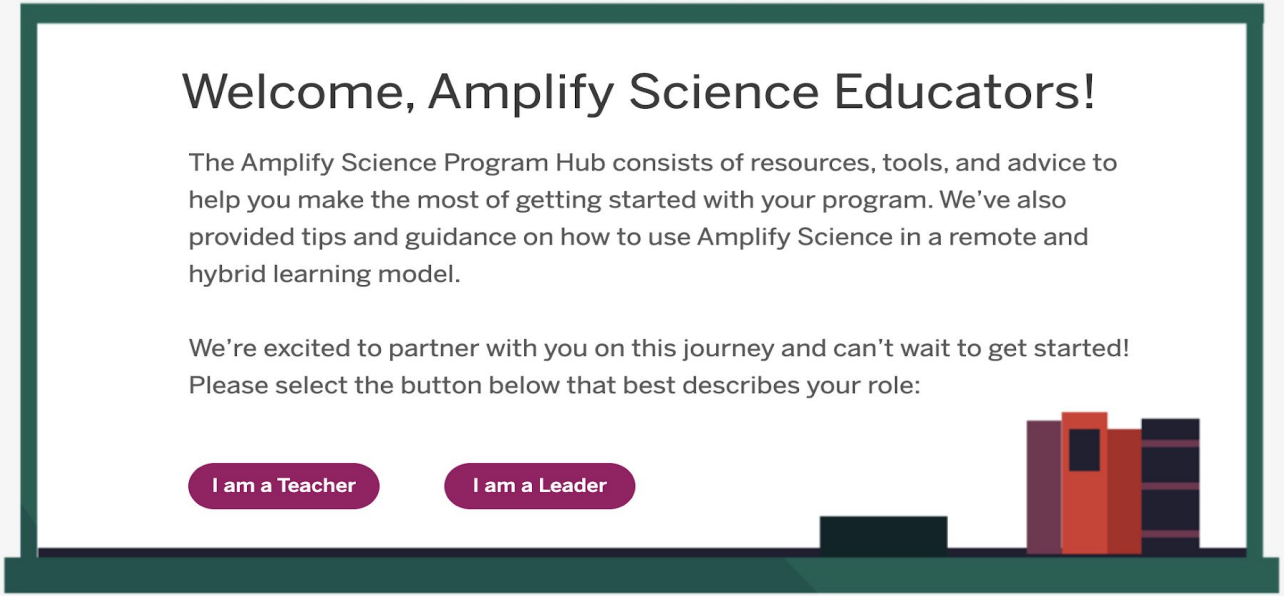


*Appendix provides the student investigation notebook pages that go with each lesson.

Capturing key takeaways!



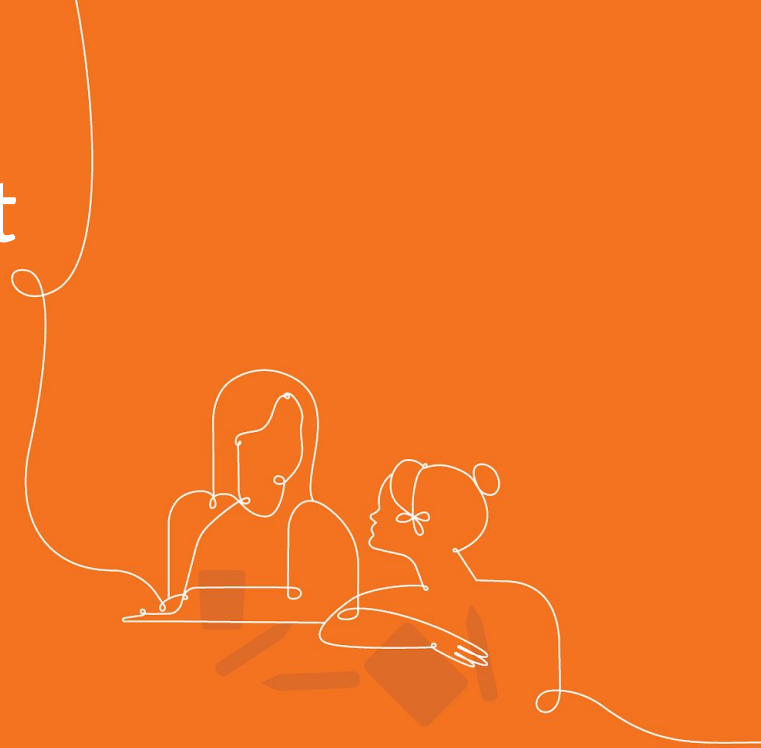
Navigating the Program HUB



Explore your @Home Unit

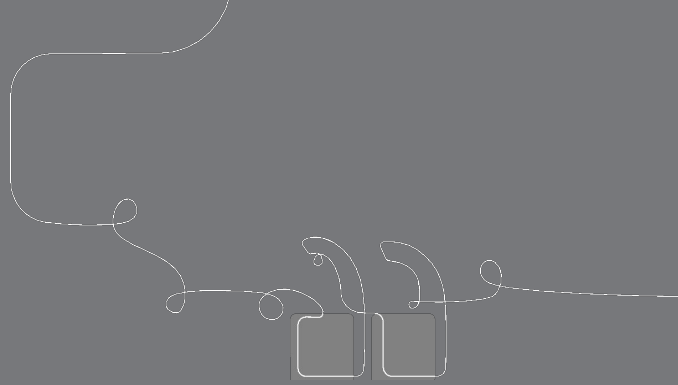
Navigate to Metabolism on the Program Hub and explore. You may choose to start with the Teacher Overview, or dig into a lesson.

Consider how this resource can help you reach the vision you set for science this year.



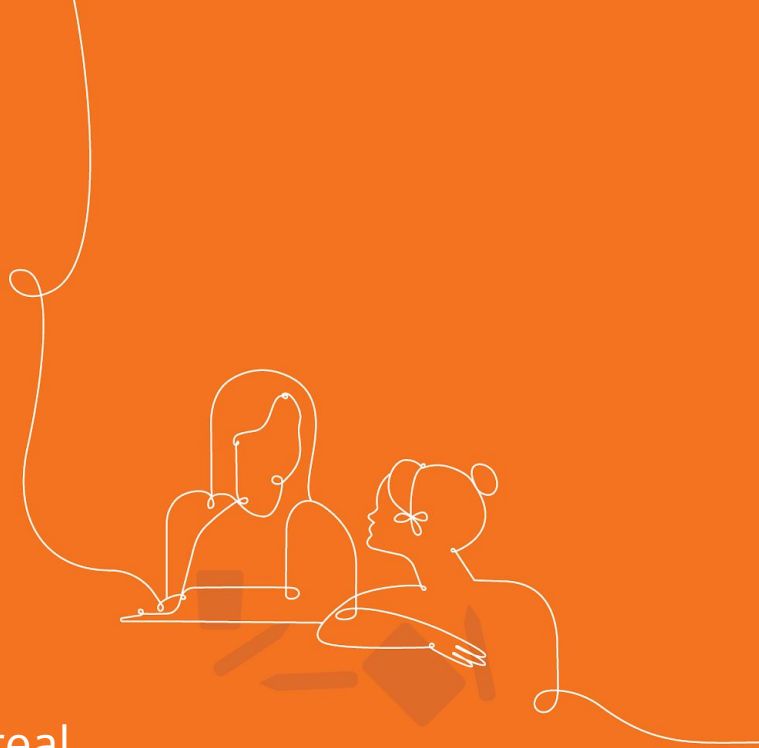
Share insights

How could the @Home Units resources in your remote instruction?



Questions?

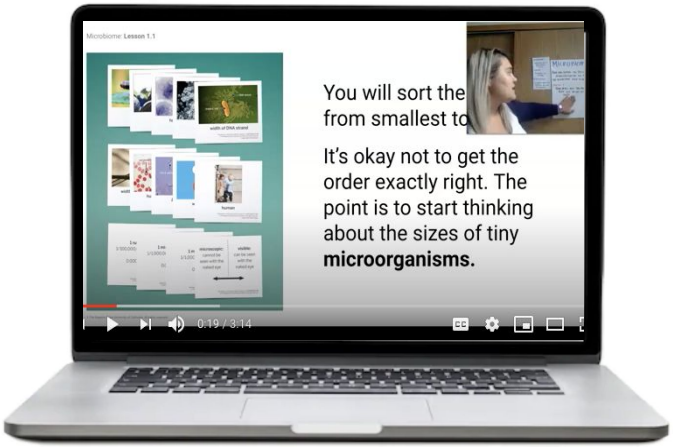
@Home Videos



Versions of original Amplify Science lessons adapted for remote learning and recorded by real Amplify Science teachers

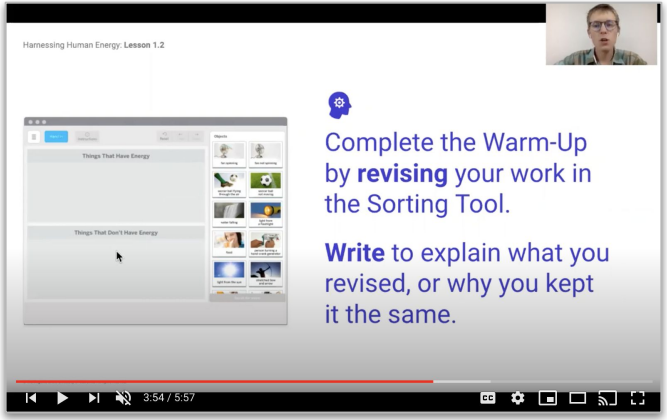
@Home Videos

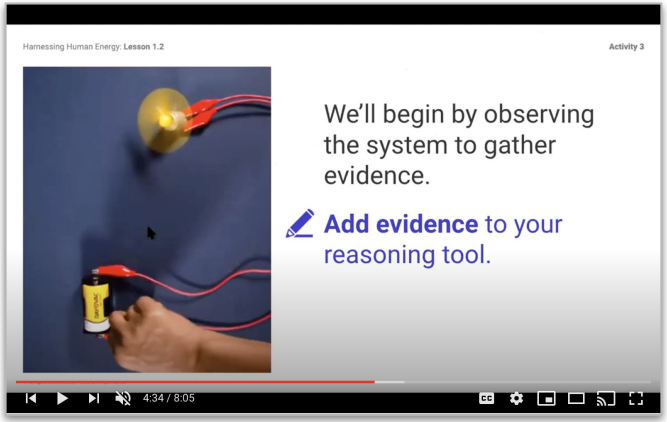
- Lesson playlists include **all activities** from original units
- Great option if have the **same amount of instructional time** as you typically would for science
- Requires **tech access** at home
- Use videos as **models for making your own lesson videos** or leading **online science class**



Interactive video experience

- **Calls to action**
  - Think prompts, pause and take notes, stand up and try it, talk to someone
- **Stand-alone videos within lesson playlists**
  - Read-alouds, digital tool uses, hands-on
- **Options** to use notebooks and/or materials if available





Amplify Science @Home Curriculum

You have access to the Metabolism @Home Videos.

There are 16 @Home Videos for the Metabolism unit. This covers all lessons expect for the assessment lessons (1.1, 2.5, and 4.4). The video playlists on YouTube teach the standard Amplify Science Lessons.

Metabolism@Home Video playlists

Note: Assessment lessons are not included. Spanish videos to come.

Instructions:

- The @Home Videos are separate from the @Home Units. The lessons listed below correspond with the lessons in the full version of Amplify Science. Each lesson is linked to a playlist of recorded versions of the activities that make up that lesson, which you can share with your students

Chapter 1

- Lesson 1.2
- Lesson 1.3

Chapter 2

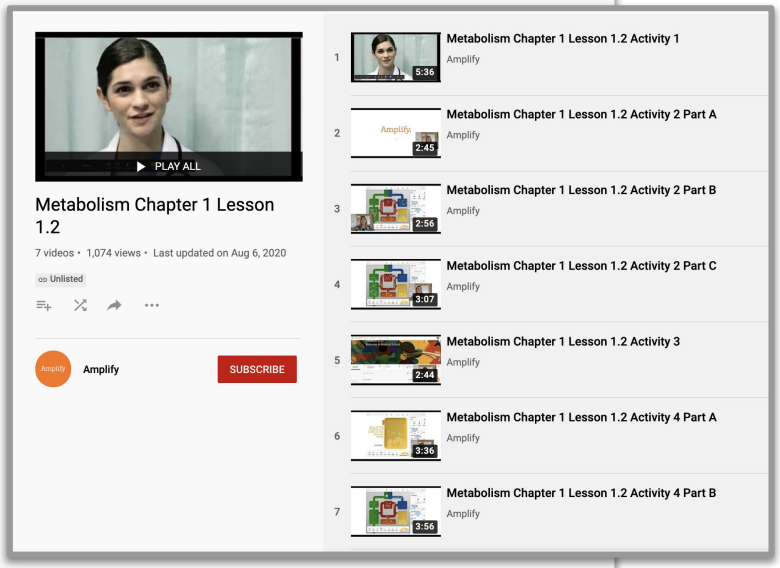
- Lesson 2.1
- Lesson 2.2
- Lesson 2.3
- Lesson 2.4
- Lesson 2.6
- Lesson 2.7

Chapter 3

- Lesson 3.1
- Lesson 3.2
- Lesson 3.3
- Lesson 3.4
- Lesson 3.5

Chapter 4

- Lesson 4.1
- Lesson 4.2
- Lesson 4.3



@Home Videos

Using the resources

- Assign videos for students to watch during remote, asynchronous time
- Leverage synchronous time for live teaching
    - Lots of time? Teach full lessons
    - Less time? Revisit and preview (see table)

Synchronous time
• Online discussions • Hands-on investigations (option for teacher demo) • Sim demonstrations • Interactive read-alouds • Shared Writing • Co-constructed class charts

@Home Videos

Using the resources

- Assign videos for students to watch during remote, asynchronous time
- Leverage synchronous time for live teaching
  - Lots of time? Teach full lessons
  - Less time? Revisit and preview (see table)

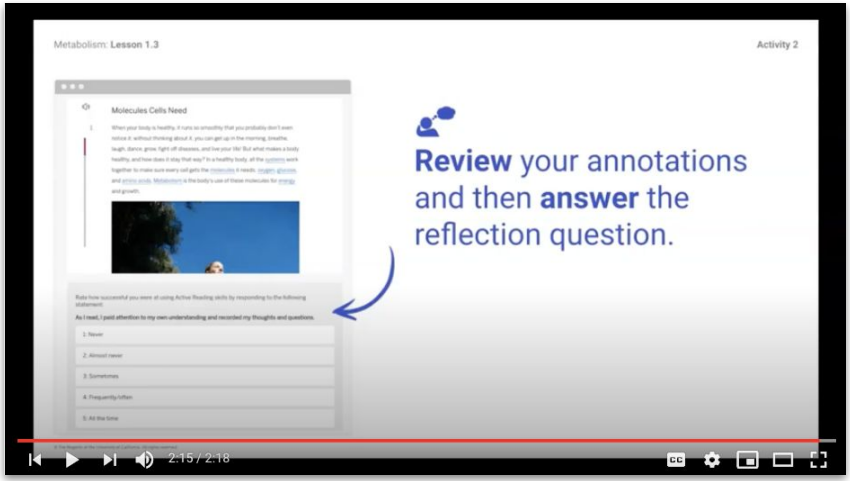
Synchronous time	
In-person	**Online class**
• Discourse routines • Class discussions • Hands-on investigations (option for teacher demo) • Physical modeling activities	• Online discussions • Sim demonstrations • Interactive read-alouds • Shared Writing • Co-constructed class charts

@Home videos

Completing written work

Students can complete written work using:

- Digital student platform
- Investigation Notebook
- Pencil and paper



Teaching Tips:

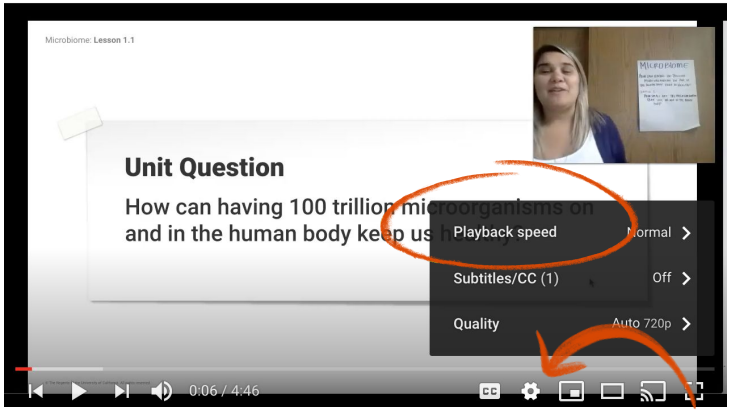
- Use in collaboration with instruction
- Make a plan for how students will **submit** written work.
- Use the **Teacher's Guide** to plan which work products you will collect.

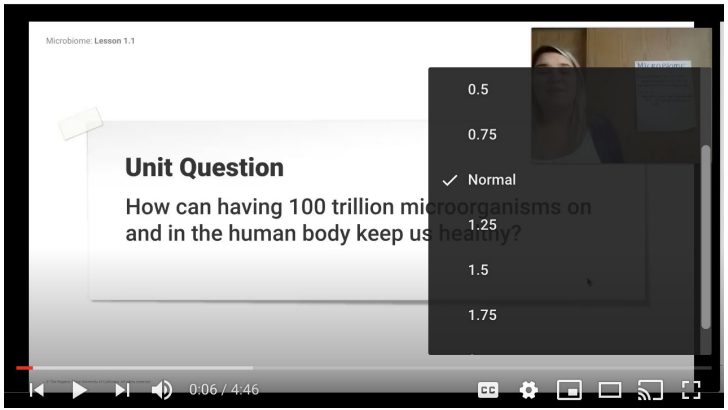
Planning suggestions: @Home Videos

The Teacher's Guide is the best planning tool for @Home videos.

- Use the **Lesson Overview Compilation** in the Unit Guide as a pacing and planning tool.
- Refer to the lessons themselves to plan for synchronous instruction.

Try **adjusting the playback speed** of videos to preview them.





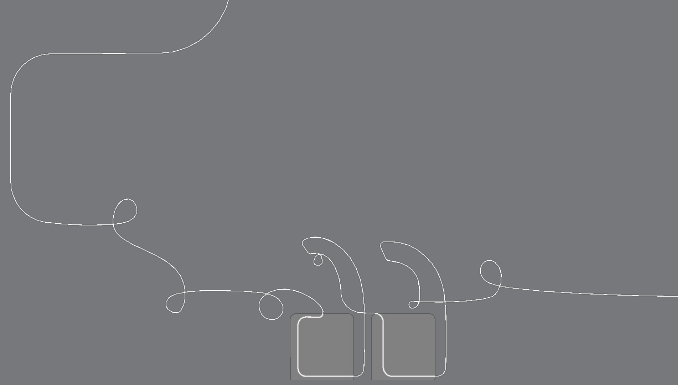
Explore your @Home Videos

Navigate to Metabolism on the Program Hub and explore a video lesson. You may want to compare the video lesson to the lesson in the Teacher's Guide.

Consider how this resource can help you reach the vision you set for science this year.

Share insights

How could you use the @Home Videos in your remote instruction?



Questions?

Navigation Temperature Check

Rate yourself on your comfort level accessing the Amplify Science @Home resources for planning

1 = Extremely Uncomfortable

2 = Uncomfortable

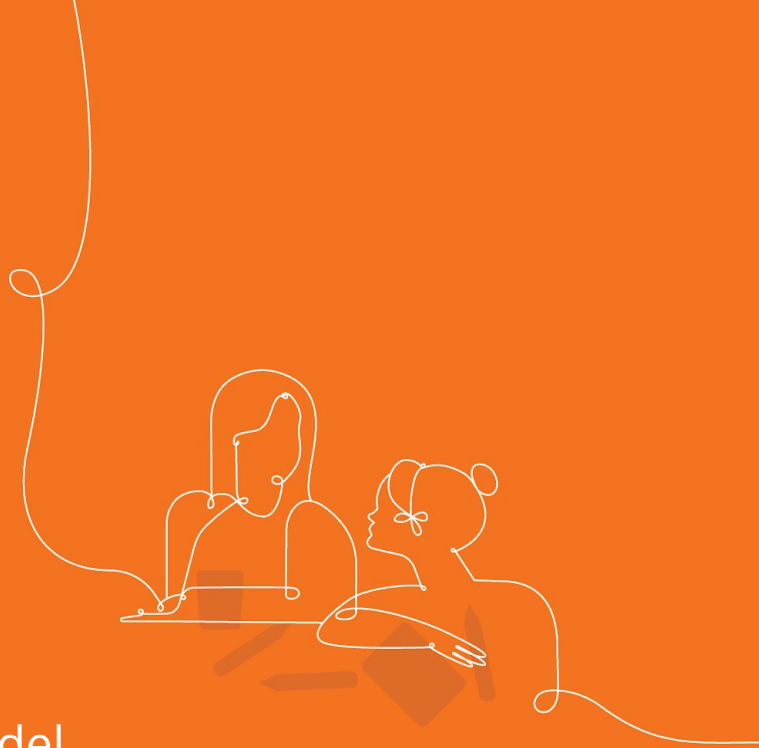
3 = Mild

4 = Comfortable

5 = Extremely Comfortable

@Home Resources Lesson Internalization

Determine which resource you will use in accordance with your schools instructional model.



Key Activities

- **Introducing the *Metabolism* Unit:** Students are introduced to the unit problem and their role as medical students. They consider their initial ideas about why their patient Elisa is feeling tired all the time, and are introduced to the claims they will be investigating.
- **Do:** Students are introduced to the *Metabolism* Simulation (Sim) and observe what happens to molecules the body is taking in. Students using @Home Slides use the Sim, while students using @Home packets observe a video of a Sim investigation.
- **Reflect:** Students consider whether they have any new ideas about the claims.

Ideas for synchronous or in-person instruction

Before meeting, have students watch the introductory video. While meeting, have students share their initial ideas about Elisa's condition, then introduce the Sim. You can either have students complete the Sim investigation individually, then share observations as a class, or have students observe and record as you show the Sim. If you are meeting in person with students who don't have digital access at home, take the opportunity to have them complete the Sim investigation in class (as in *Metabolism*, Lesson 1.2, Activity 2).

Metabolism

@Home Lesson 1

AmplifyScience

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

We will begin by watching a video that introduces you to the problem you will solve in this unit and your new role as **medical students.**

tinyurl.com/AMPMET-01

Think about this question.

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

Claims

Elisa is feeling tired because she:

- is not getting enough sleep.
- is not eating enough food or not eating the right foods.
- has a medical condition.

You probably thought of some of these ideas.

These are possible **claims.** As medical students, you will investigate these claims to try to explain why Elisa's body isn't functioning properly.

To figure out why Elisa feels so tired, we will first think about healthy bodies.

What are some things you know the human body needs to function?

Key Activities

- **Introducing the *Metabolism* Unit:** Students are introduced to the unit problem and their role as medical students. They consider their initial ideas about why their patient Elisa is feeling tired all the time, and are introduced to the claims they will be investigating.
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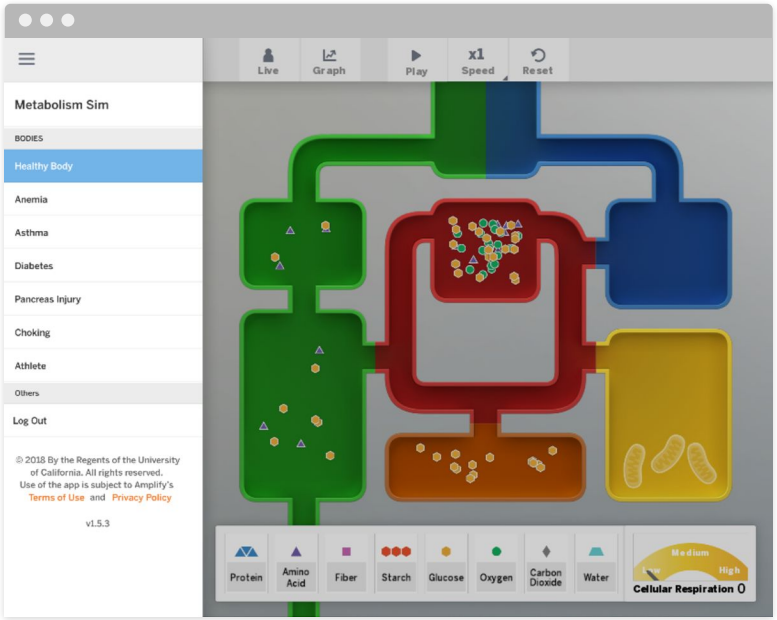
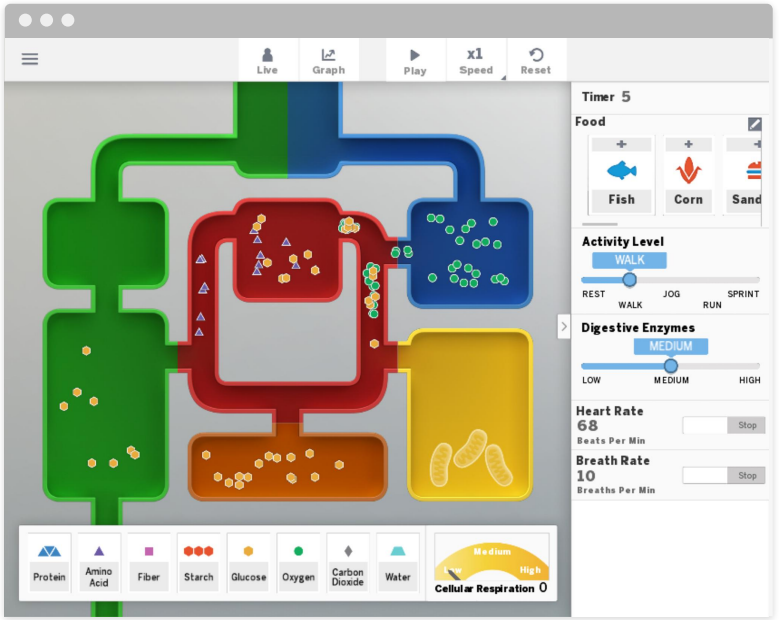


A lot of things that happen in the human body are hidden or too small to directly observe. We will use the *Metabolism* Simulation to help us learn more about how human body systems function.



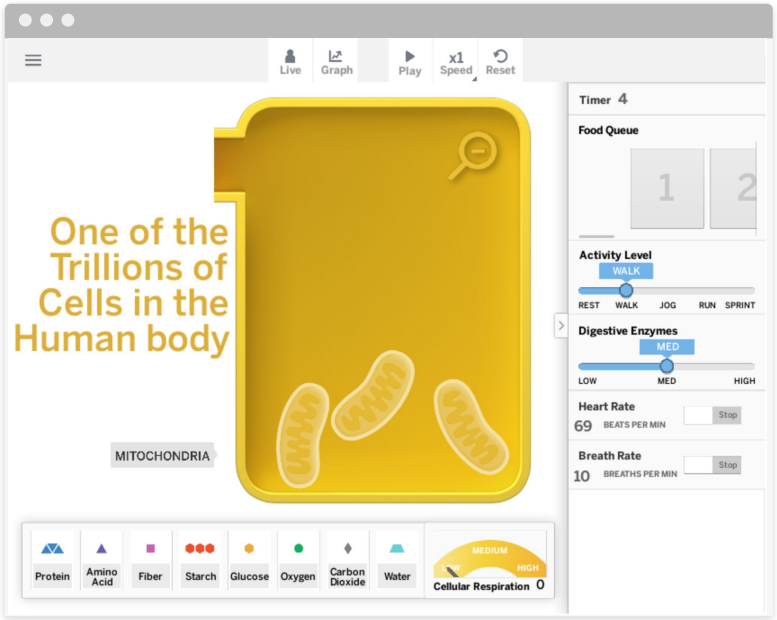
The *Metabolism* Sim is a scientific model that simulates many things that happen inside the human body.

Next you will watch a video about how to use the Sim.

You can also stop the body's **heart**

tinyurl.com/AMPMET-02

Check with your teacher about how you will access Sims and other digital tools in this @Home Unit.

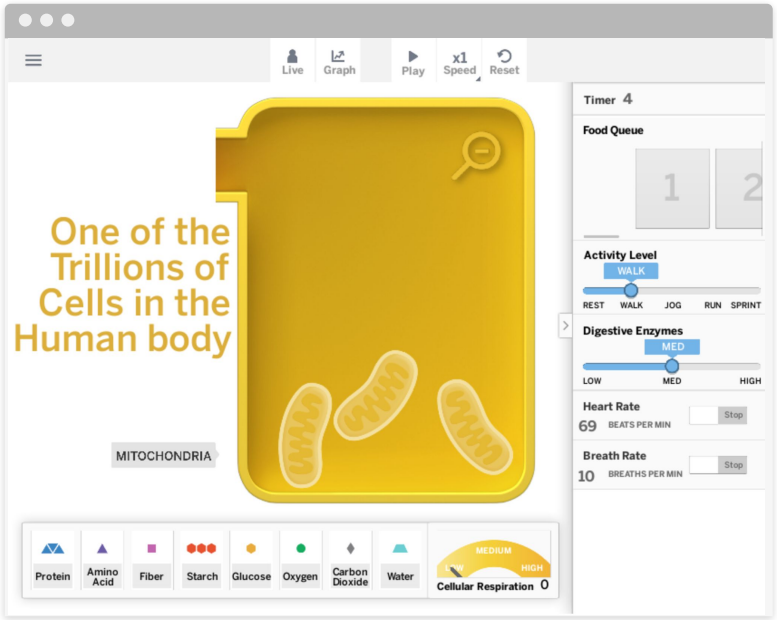


Think about this question.

Which **molecules** enter the cell?

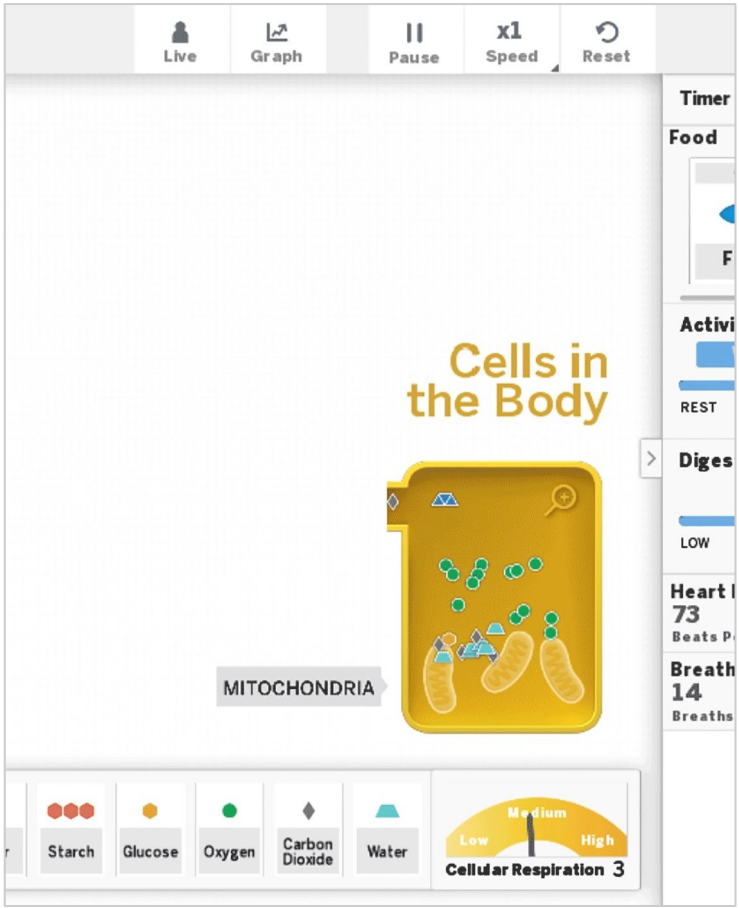
There are certain things we already know the human body needs to function. Two important things the human body needs to survive are **food** and **air.**

As you explore the *Metabolism* Sim, you will **watch what happens to the food and air** that enter this healthy Simulation body.



One thing you will observe is what is happening in the **cells** of the body. We know that our bodies are made of **trillions of cells**.

The Sim shows only one representative cell. We can learn about what all cells need by observing this cell in the Sim.



You will observe **which molecules** are entering the cell.

You can zoom into this cell by pressing on the cell and then on the magnifying glass.

Name: _____ Date: _____

Observing Molecules in the Sim

1. Launch the *Metabolism* Simulation.
2. Select HEALTHY BODY from the menu.
3. Select OBSERVE.
4. Feed the body.

As you watch the Sim investigation, record your observations:

What happens to the food and air that enter this healthy Simulation body?

_____

_____

_____

Which molecules are entering the cell?

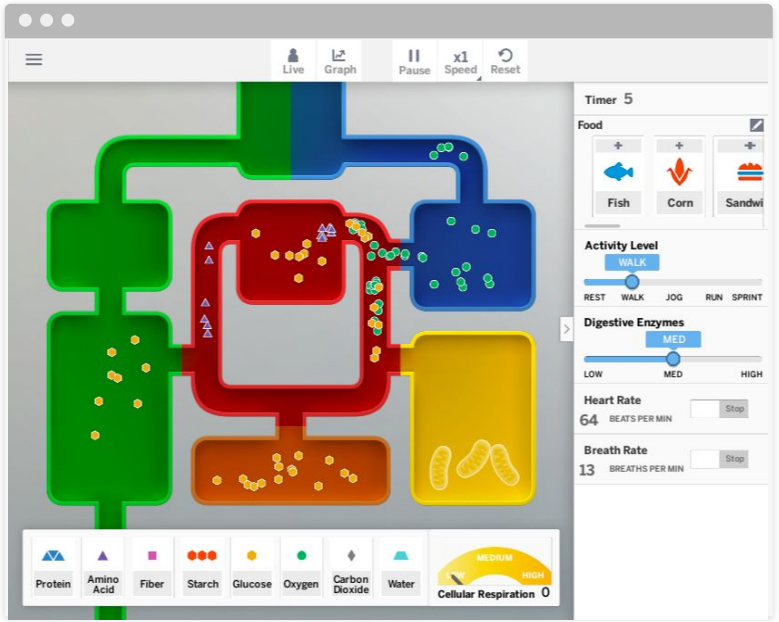
_____

_____

Metabolism @Home Lesson 1

Go to the Observing Molecules in the Sim page.

Use the Sim to observe and record what happens to the **food and air** that enter the body, and which **molecules** are entering the cells.



Think about this question.

What did you notice happens to the **food and air** that enter this healthy Simulation body?

You may have noticed that:

- air has oxygen molecules
- food breaks down into different molecules
- some molecules from food and air go into the yellow box representing one of the trillions of cells in the human body.

You probably noticed that these molecules enter the cell:

- glucose (from food)
- amino acids (from food)
- oxygen (from air)

Key Activities

- **Introducing the *Metabolism* Unit:** Students are introduced to the unit problem and their role as medical students. They consider their initial ideas about why their patient Elisa is feeling tired all the time, and are introduced to the claims they will be investigating.
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Ideas for synchronous or in-person instruction

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In the *Metabolism* unit we will be thinking about this question:

Unit Question

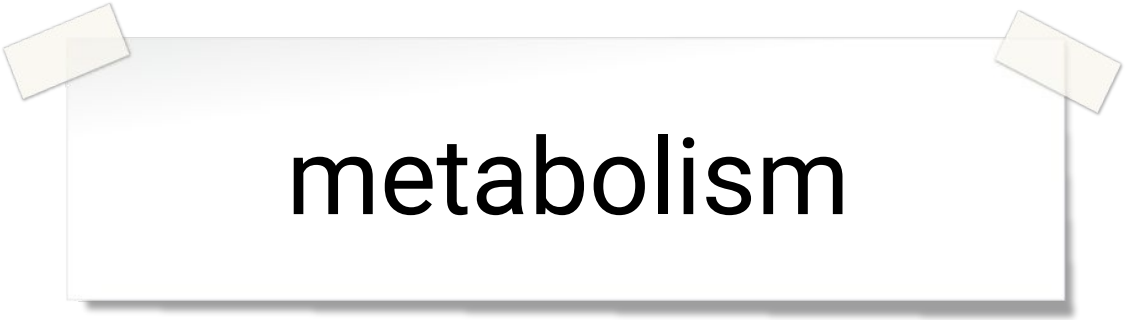
How do the trillions of cells in the human body get what they need to function, and what do the cells do with the things they absorb?

Investigating this Chapter Question will help us answer the Unit Question.

Chapter 1 Question

Why does Elisa feel tired all the time?

Here is an important word you will learn more about in this unit.



the body’s use of molecules for energy and growth

In this lesson and throughout the unit you will need to **access different pages** such as the Glossary on the next slide. Check with your teacher about how you will access materials and complete and submit work in this @Home Unit.

***Metabolism* Glossary**

amino acids: molecules that are the building blocks of proteins
aminoácidos: moléculas que son los componentes fundamentales de las proteínas

carbon dioxide: a molecule made of carbon and oxygen atoms
dióxido de carbono: una molécula hecha de átomos de carbono y oxígeno

cellular respiration: the chemical reaction between oxygen and glucose that releases energy into cells
respiración celular: la reacción química entre oxígeno y glucosa que libera energía en las células

chemical reaction: a process in which atoms rearrange to form new substances
reacción química: un proceso en el que los átomos se reorganizan para formar nuevas sustancias

circulatory system: the body system that transports molecules to and from all cells of the body
sistema circulatorio: el sistema que transporta moléculas desde y hacia todas las células del cuerpo

claim: a proposed answer to a question about the natural world
afirmación: una respuesta propuesta a una pregunta sobre el mundo natural

digestive system: the body system that takes in food and breaks it down
sistema digestivo: el sistema del cuerpo que toma alimento por dentro y lo desintegra

energy: the ability to make things move or change
energía: la capacidad de hacer que las cosas se muevan o cambien

evidence: information about the natural world that is used to support or go against (refute) a claim
evidencia: información sobre el mundo natural que se utiliza para respaldar o rechazar (refutar) una afirmación

glucose: a molecule that organisms can use to release energy, and that is made of carbon, hydrogen, and oxygen atoms
glucosa: una molécula que los organismos pueden usar para liberar energía y que está hecha de átomos de carbono, hidrógeno y oxígeno

metabolism: the body's use of molecules for energy and growth
metabolismo: el uso de moléculas por el cuerpo para obtener energía y crecer

molecule: a group of atoms joined together in a particular way
molécula: un grupo de átomos unidos de una manera particular

Metabolism @Home Lesson 1

Metabolism @Home Lesson 1

Throughout the year, you can look up vocabulary words in the **glossary** to help you understand what they mean. You can find this in your student sheets or in the Amplify Library.

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.**

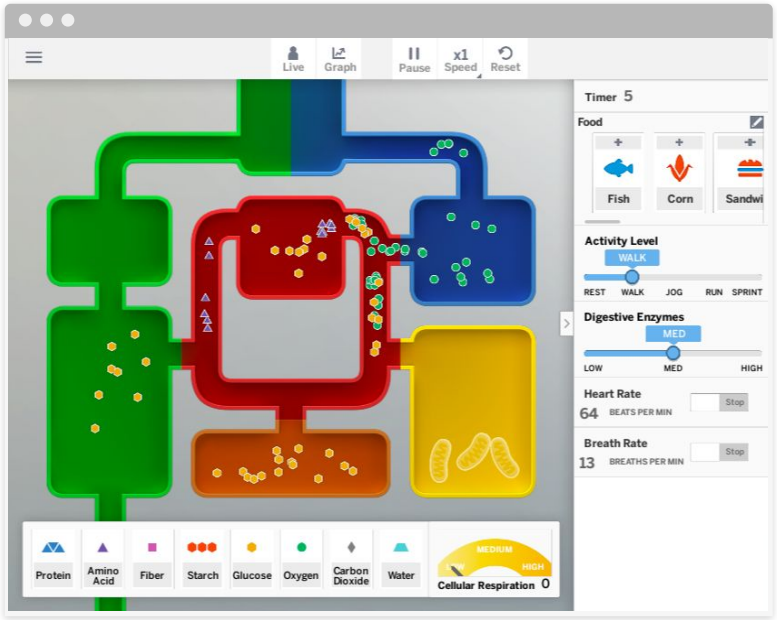
Claims

Elisa is feeling tired because she:

- is not getting enough sleep.
- is not eating enough food or not eating the right foods.
- has a medical condition.

Remember the claims about why Elisa is feeling tired.

Do you have any **new insights** or **changes in thinking** about these claims after observing the Sim?



We will be investigating whether Elisa's problem is related to the **molecules she is taking in from the environment** and/or what is happening in the **cells in her body.**

In this unit, we will continue to learn more about how the **cells of the body** use these molecules for **energy and growth**, allowing the whole body to **function**.

Studying how these processes work in a healthy, functioning body will help us figure out what might be going on in Elisa's body.

End of @Home Lesson

THE LAWRENCE HALL OF SCIENCE
UNIVERSITY OF CALIFORNIA, BERKELEY

Amplify.

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Key Activities

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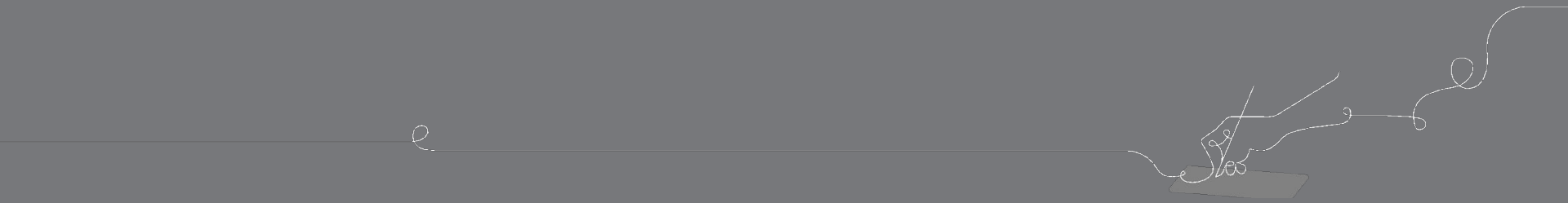
Reflection

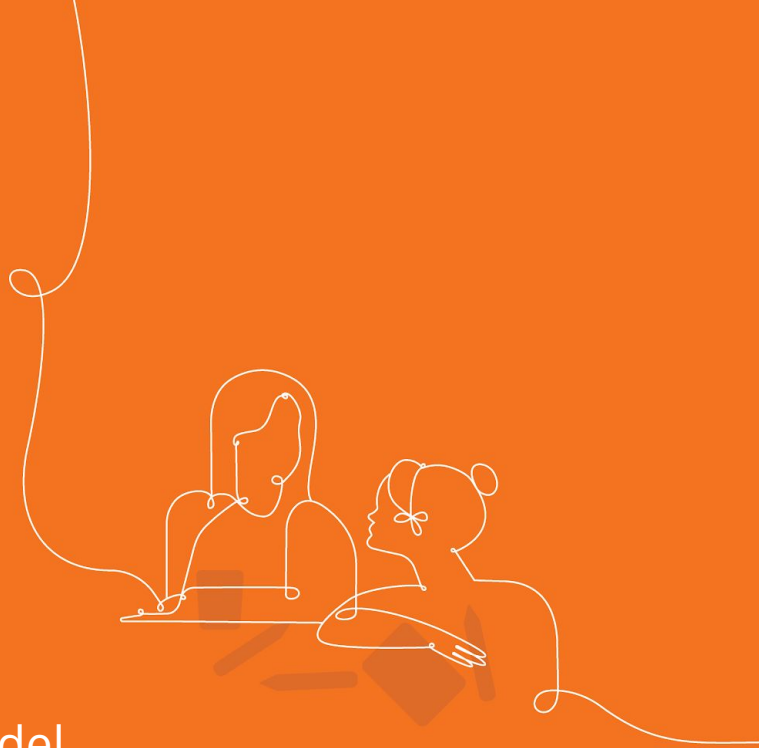
Revisit the vision you set for your students at the beginning of today's session.

How will the Amplify Science@Home resources help you reach that goal?



@Home Resource Selection/ Guidance

Determine which resource you will use in accordance with your schools instructional model.



Which instructional model has your school adopted?

A Hybrid Model

B Remote Only

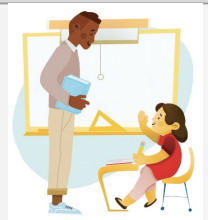
Sample instructional scenario

Hybrid pod model

	M-T	W	Th-F
Pod 1	In class 	Remote online class 	Remote 
Pod 2	Remote 		In class 

Sample instructional scenario

Hybrid pod model

Select 1-2 lessons for the week and decide the best instructional format for the different parts of the lesson		
In class 	**Remote online class**   	**Remote** 
• Hands-on investigations (option for teacher demo) • Discourse routines • Class discussions • Physical modeling activities	• Sim demonstrations • Read-alouds • Shared Writing • Co-constructed class charts	• @Home video lessons • @Home Unit activities • Reflective writing • Independently review

@Home Resources example use case

Hybrid Model: Teach live during in-person/synchronous time

Day 1

Remote

Assign: Lesson 1.1 @Home Video

Day 2

In-person

Teach: Lesson 1.2 live

Day 3

Synchronous

Teach: Lesson 1.3 using clips from @Home Video

Day 4

Remote

Assign: Lesson 1.4 @Home Packet/Slides

Day 5

In-person

Revisit: hands-on or discourse-based activities the week's lessons

@Home Resources example use case

Remote Model: with synchronous & asynchronous learning

Days 1 & 2

Asynchronous

Assign: Lesson 1.1 @Home Video and sheets for students to work through on their own

Day 3

Synchronous

Teach: Lesson 1.2 using clips from the @Home Video

Day 4

Asynchronous

Assign: Lesson 1.3 @Home Packet or @Home Slides for students to work through on their own

Day 5

Synchronous

Revisit: hands-on or discourse-based activities from the week's lessons

What resources can my students access?

Reading and digital tool uses

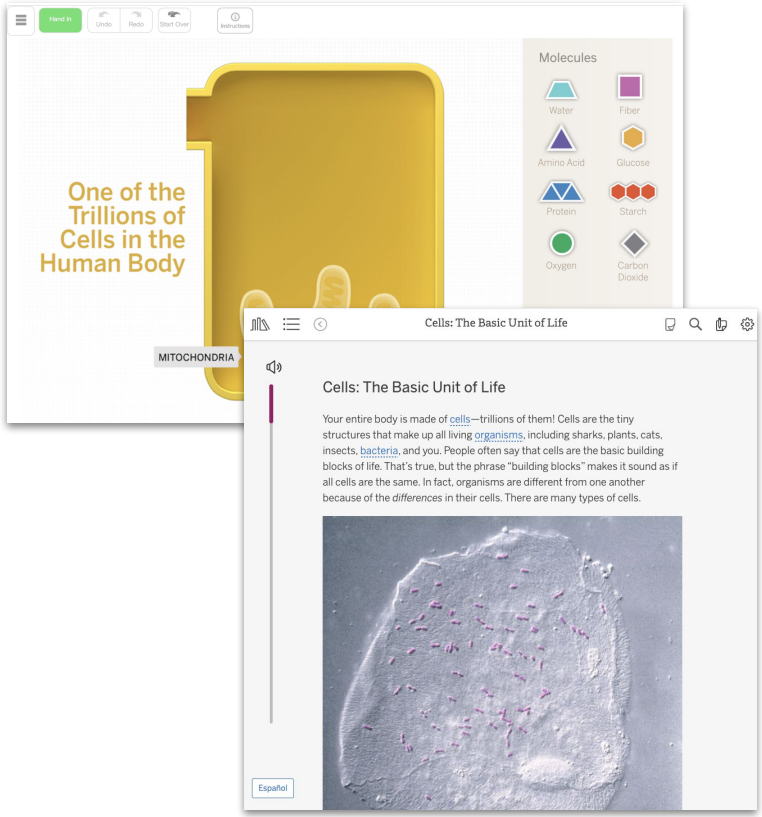
Options for student access

Access via curriculum (students using tablets or laptops):

- Digital tools
- Amplify Library

Access via @Home Videos (students using smartphones):

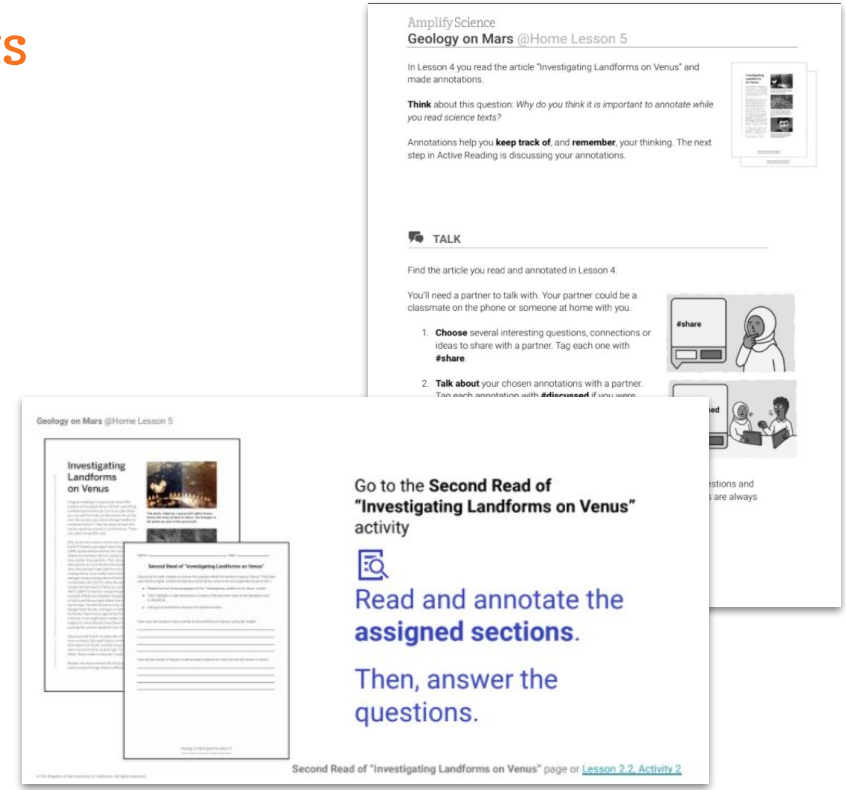
- Read-alouds of articles
- Screencast videos of digital tool uses



@Home Units: student experience

@Home Slides and @Home Packets

- Student-friendly text
- Supportive images (photos and illustrations)
- Activity instructions
- Prompts for writing, discussion, and reflection
- Embedded links to supplementary material



@Home Units: student experience

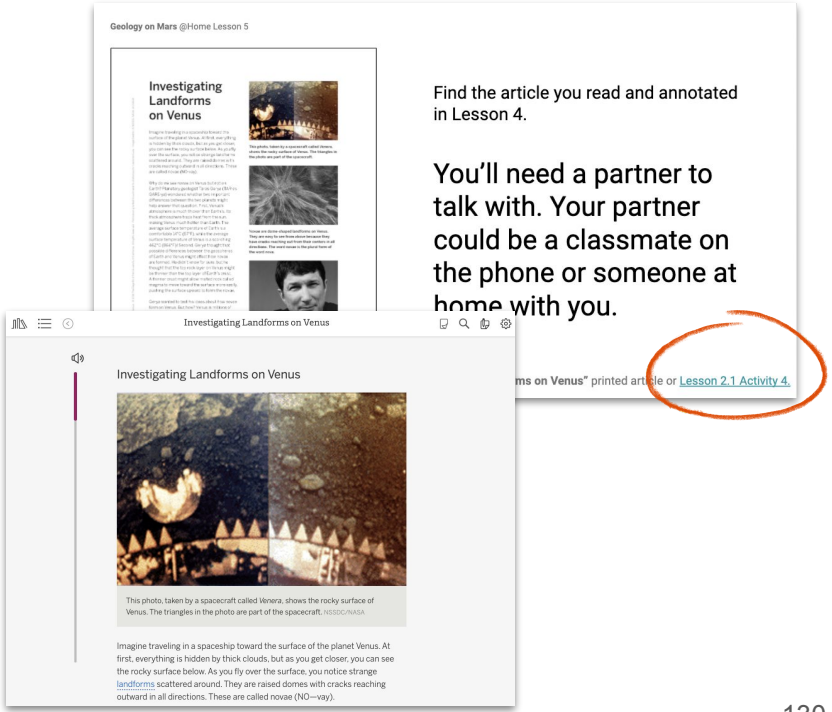
Embedded links in @Home Slides and @Home Packets

Links to curriculum resources:

- Amplify Library
- Sims and digital tools
- Student platform

Links to videos:

- Hands-on demonstrations
- Read-alouds

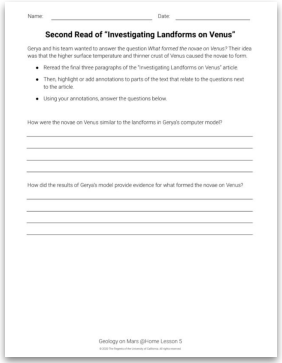


@Home Units: Slides and Student Sheets

Completing written work

Written work can be submitted through the **Amplify Science student platform** or completed using Student sheets.

Student sheets are **not used** with @Home Packets. Students can complete their written work right in the packets.


Name: _____ Date: _____

Second Read of "Investigating Landforms on Venus"

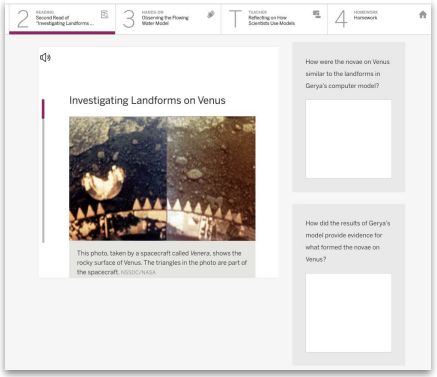
Gerya and his team wanted to answer the question *What formed the novae on Venus?* Their idea was that the higher surface temperature and thinner crust of Venus caused the novae to form.

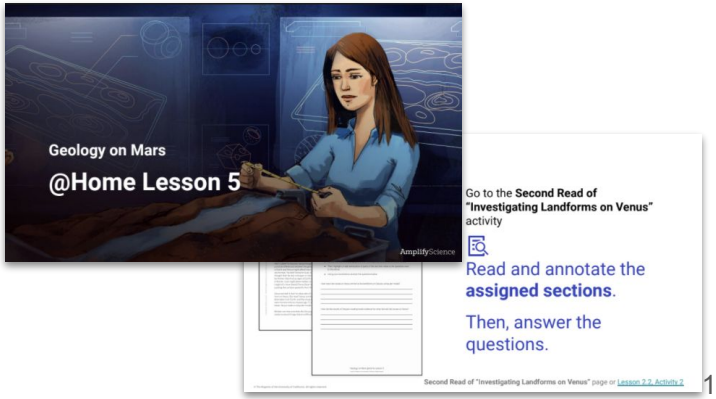
- Reread the final three paragraphs of the "Investigating Landforms on Venus" article.
- Then, highlight or add annotations to parts of the text that relate to the questions next to the article.
- Using your annotations, answer the questions below.

How were the novae on Venus similar to the landforms in Gerya's computer model?

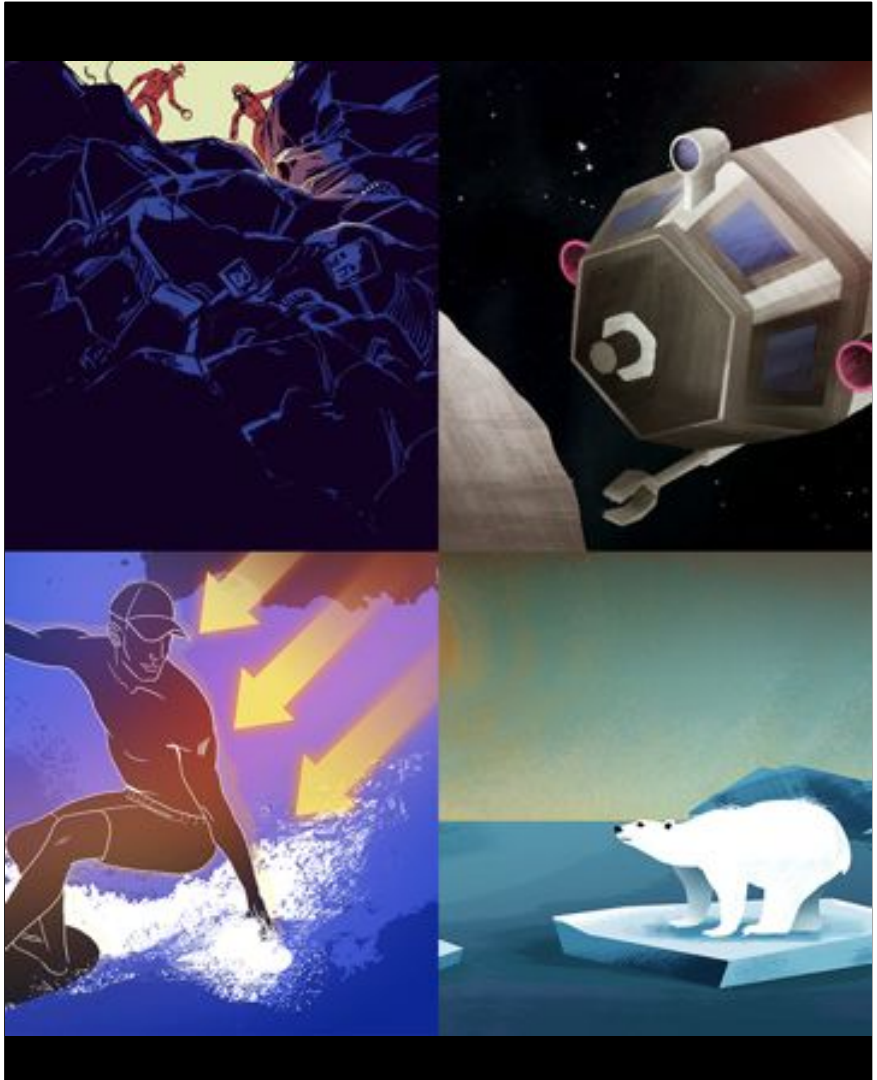
How did the results of Gerya's model provide evidence for what formed the novae on Venus?

Geology on Mars @Home Lesson 5





5 min break



Plan for the day

- Framing the day
  - Welcome and introductions
  - Reflection and vision setting
  - Revisiting the Amplify Approach
- Unit Internalization
- @Home Resources Internalization
  - @Home Units
  - @Home Videos
  - Lesson Level Internalization
  - Resource selection/Guidance
- Guided Planning
  - Planning to Teach using @Home
- Reflection and closing

@Home Unit lesson #: 6		
Date(s) to administer: Thursday, 10/15 & Tuesday, October 20		
Investigation question: Why can an animal live where it does?		
@ Home Unit lesson (asynchronous)		
Key activities from @ Home lesson: • Reviewing Key Concepts and Vocabulary: Students review what they have figured out so far in the unit. • Introducing Investigating: Students are introduced to ideas about how they will investigate questions about plants in this unit. • Do: Students set up an investigation to compare whether or not a garlic clove needs water to grow into a garlic plant. • Draw and Write: Students record their first observation of garlic cloves with water and with no water.	Dates to administer: Thursday, 10/15	Other notes:

Corresponding synchronous ideas		
In-person or remote? ❑ In-person X ❑ Remote	Synchronous activity: Engage students in setting up the investigation of garlic with water and with no water, and then recording their initial observations. Dates(s) to administer: Tuesday, October 20	Other notes: Refer to materials and preparation section of this corresponding lesson in Teacher's Guide Take out slides 14 onwards from Home Slides. Ask students to propose an investigation set-up. Edit slide 14 to include this.
@Home Videos		
Use for synchronous or asynchronous? ❑ Synchronous X ❑ Asynchronous X ❑ Neither If using, note lesson & activity/activities: Use hands-on preparation video	View for best practices? ❑ Yes X ❑ No If yes, notes some best practices: Tips on how to set-up investigation	Other notes: Send investigation video to students who missed in-person demonstration

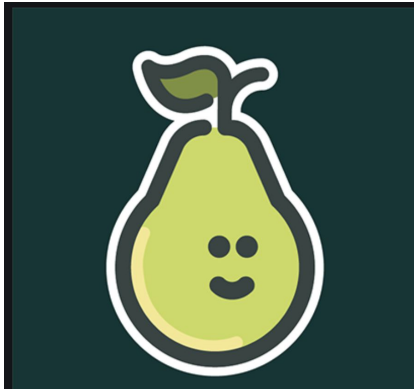
Corresponding original lesson(s)		
Differentiation strategies: • additional teacher modeling in a small group setting • strategic partnering to provide students who need more support with a peer to check in with • write a few sentences that more fully describe what they have recorded about their investigation students who need more challenge	**Additional synchronous activity notes:** Locate the following materials (*Needs of Plants and Animals* kit)clear plastic cups, 9 oz. • clamp lamp • grow light lightbulb • 2 large planter trays • automatic light timer • grow light lightbulb • 2 large planter trays • automatic light timer Need to provide 2 index cards (3" x 5"), 1 garlic bulb (intact), 2 garlic cloves for each pair of students and 2 for demonstration purposes, pitcher with water, large mixing bowl, large spoon, pair of scissors.	**Use any original slides?** ❑ Yes X ❑ No **Other notes:** Slides 21 onwards for in-person
Differentiation plan		
Synchronous, remote ideas: • additional teacher modeling in Zoom break-outs	**Synchronous, in-person ideas:** • strategic partnering to provide students who need more support with a peer to check in with	**Asynchronous ideas:** • send scaffolded versions of student sheets to students who need more support

Preparing to teach: Step 3

3rd party applications

1. Edit original **Classroom slides** (for synchronous instruction) or **@Home slides** (synchronous or asynchronous) with usage/inclusion of **apps** such as:
    - Jamboard
    - Pear Deck

2. Upload assignments on to **Google Classroom**



3rd party apps to use		
Using a Jamboard ? ❑ Yes X ❑ No Notes: To answer the question: How can we find out if the garlic plant needs water to live? Using a Pear Deck slide(s)? ❑ Yes X ❑ No Notes: For Critical juncture in activity 1 of original lesson	Google Classroom: Which @Home Resources to upload? ❑ @Home Unit pdf X ❑ @Home Unit slides X ❑ @Home Video url X ❑ Other Notes: Hands-on lesson video for students who missed in-person instruction	Other apps & notes: Flip Grid for audio responses?

Sample Jamboard

We will share our ideas here on how we would test to see if a garlic plant needs water to live.

Sample Pear Deck slide

TEMPLATE LIBRARY

Our Template Library
Explore and add premade content to your lesson

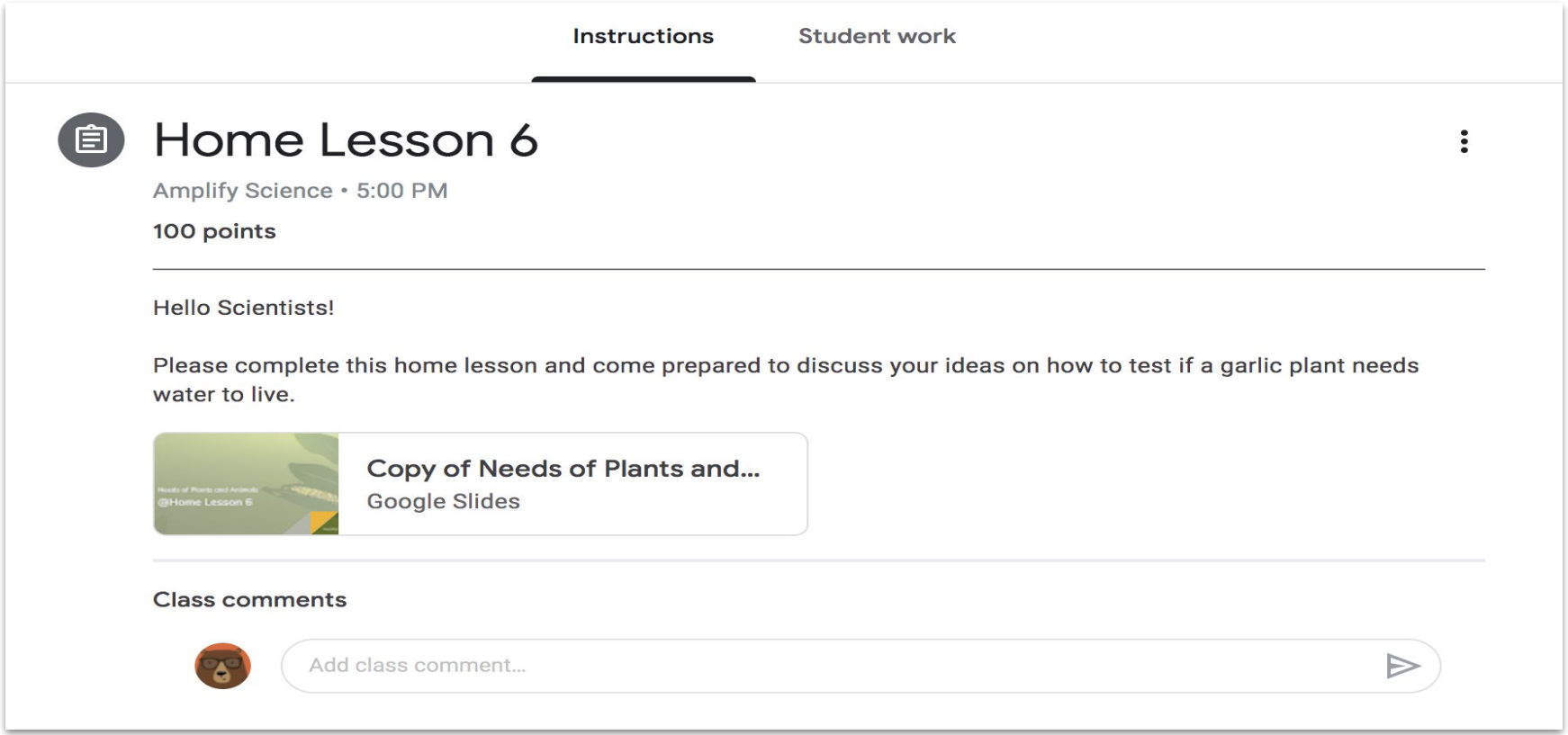
ASK STUDENTS A QUESTION
Adds a question to your current slide:

abc Text | Choice | 123 Number | www Website

Draw | Draggable™

ADD AUDIO
Record or upload audio files for your

Sample Google Classroom entry



Sample Seesaw Slide

Sample Student's Post

In response to: Lesson 1.3 : Activity 1 Describing Tortoise Structures

Amplify Science - Structure-Function

A tortoise uses its mouth to eat leaves.

A tortoise uses its eyes to see.

A tortoise uses its toenails to protect.

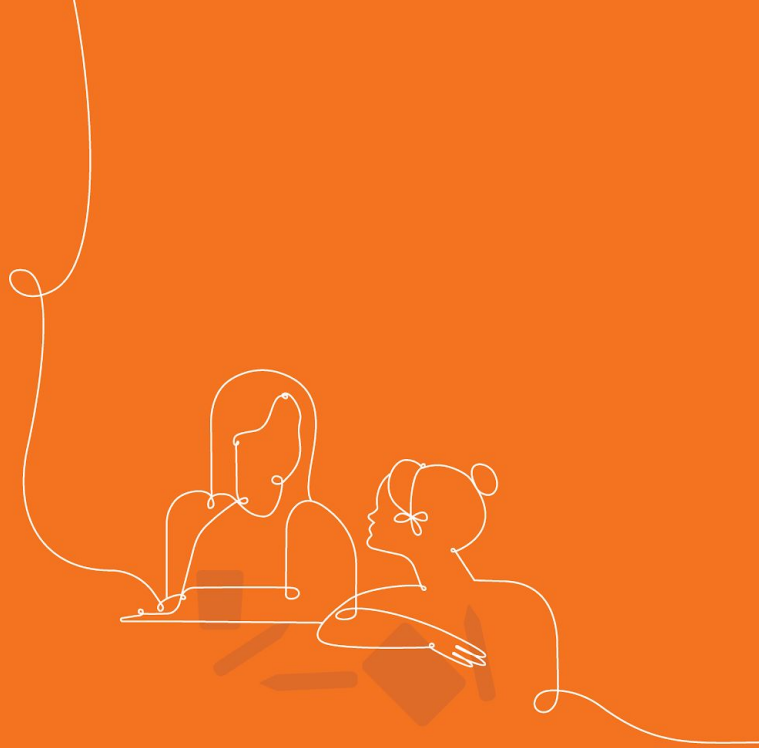
A tortoise uses its shell to dig.

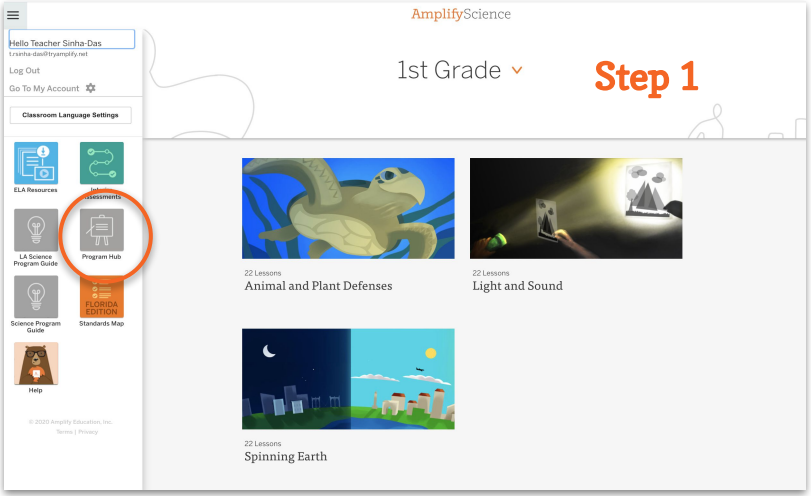
October 21, 2020, 9:46 PM

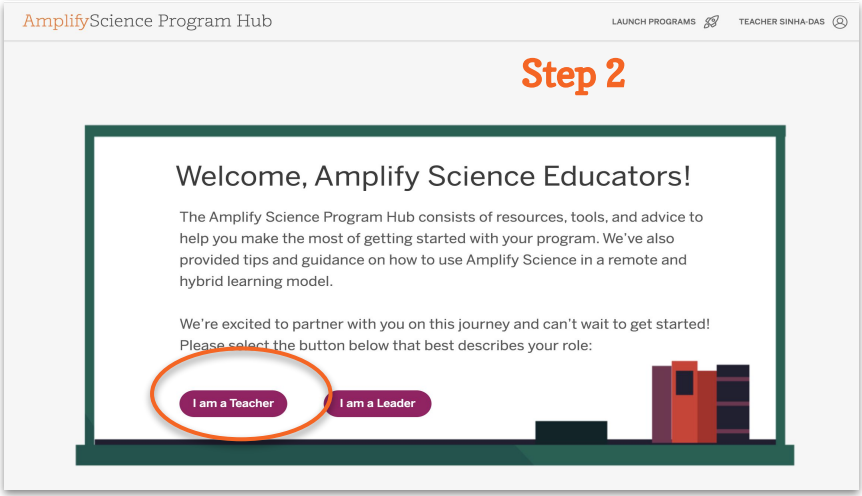
Like Comment

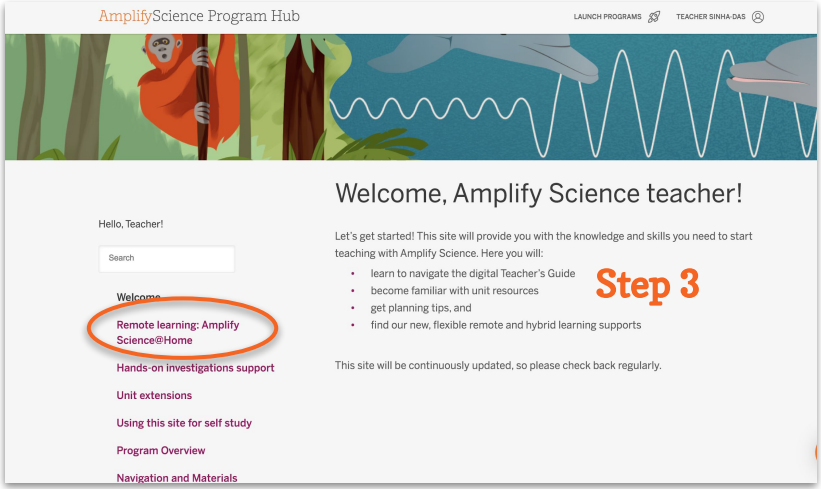
Independent Planning Preparation

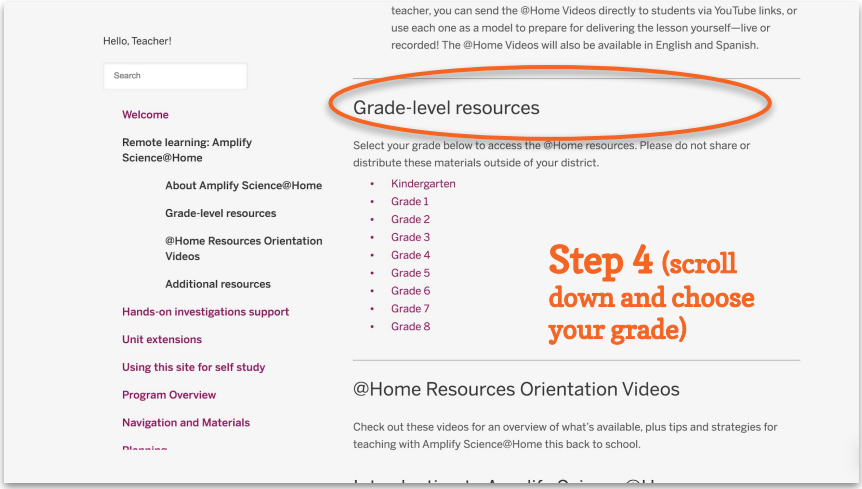
Begin planning for upcoming instruction




AmplifyScience
Hello Teacher Sinha-Das
Log Out
Go To My Account
Classroom Language Settings
ELA Resources
LA Science Program Guide
Program Hub
Science Program Guide
Standards Map
Help
1st Grade
Step 1
22 Lessons
Animal and Plant Defenses
22 Lessons
Light and Sound
22 Lessons
Spinning Earth


AmplifyScience Program Hub
LAUNCH PROGRAMS
TEACHER SINHA-DAS
Step 2
Welcome, Amplify Science Educators!
The Amplify Science Program Hub consists of resources, tools, and advice to help you make the most of getting started with your program. We've also provided tips and guidance on how to use Amplify Science in a remote and hybrid learning model.
We're excited to partner with you on this journey and can't wait to get started! Please select the button below that best describes your role:
I am a Teacher
I am a Leader


AmplifyScience Program Hub
LAUNCH PROGRAMS
TEACHER SINHA-DAS
Welcome, Amplify Science teacher!
Hello, Teacher!
Search
Welcome
Remote learning: Amplify Science@Home
Hands-on investigations support
Unit extensions
Using this site for self study
Program Overview
Navigation and Materials
Let's get started! This site will provide you with the knowledge and skills you need to start teaching with Amplify Science. Here you will:
learn to navigate the digital Teacher's Guide
become familiar with unit resources
get planning tips, and
find our new, flexible remote and hybrid learning supports
Step 3
This site will be continuously updated, so please check back regularly.

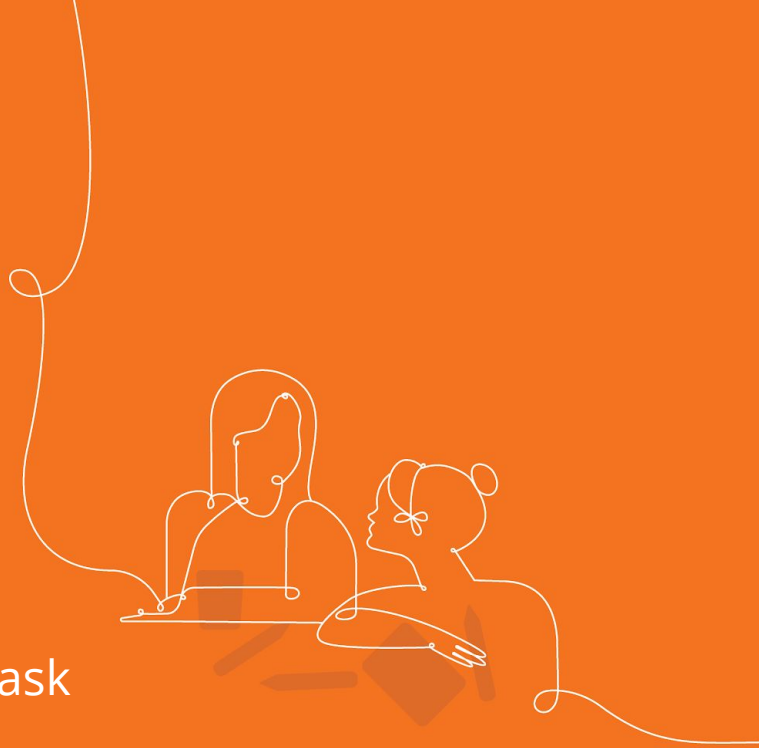

Hello, Teacher!
Search
Welcome
Remote learning: Amplify Science@Home
About Amplify Science@Home
Grade-level resources
@Home Resources Orientation Videos
Additional resources
Hands-on investigations support
Unit extensions
Using this site for self study
Program Overview
Navigation and Materials
teacher, you can send the @Home Videos directly to students via YouTube links, or use each one as a model to prepare for delivering the lesson yourself—live or recorded! The @Home Videos will also be available in English and Spanish.
Grade-level resources
Select your grade below to access the @Home resources. Please do not share or distribute these materials outside of your district.
Kindergarten
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Grade 6
Grade 7
Grade 8
Step 4 (scroll down and choose your grade)
@Home Resources Orientation Videos
Check out these videos for an overview of what's available, plus tips and strategies for teaching with Amplify Science@Home this back to school.

Preparing to teach

3-step method

1. Program Hub: **@ Home Resources**
2. Teacher's Guide: **Lesson Brief**
3. 3rd party **applications**

Guided Planning

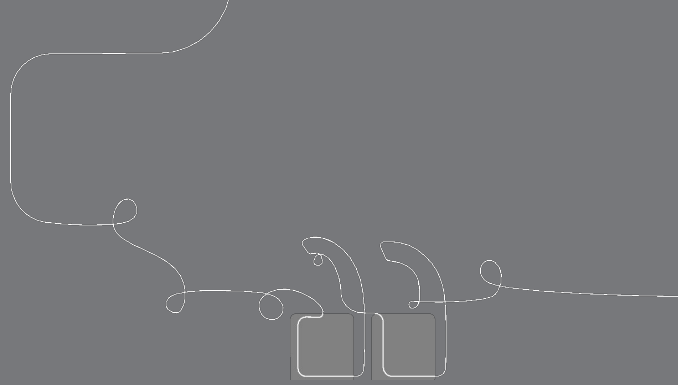


Independent planning with the opportunity to ask questions

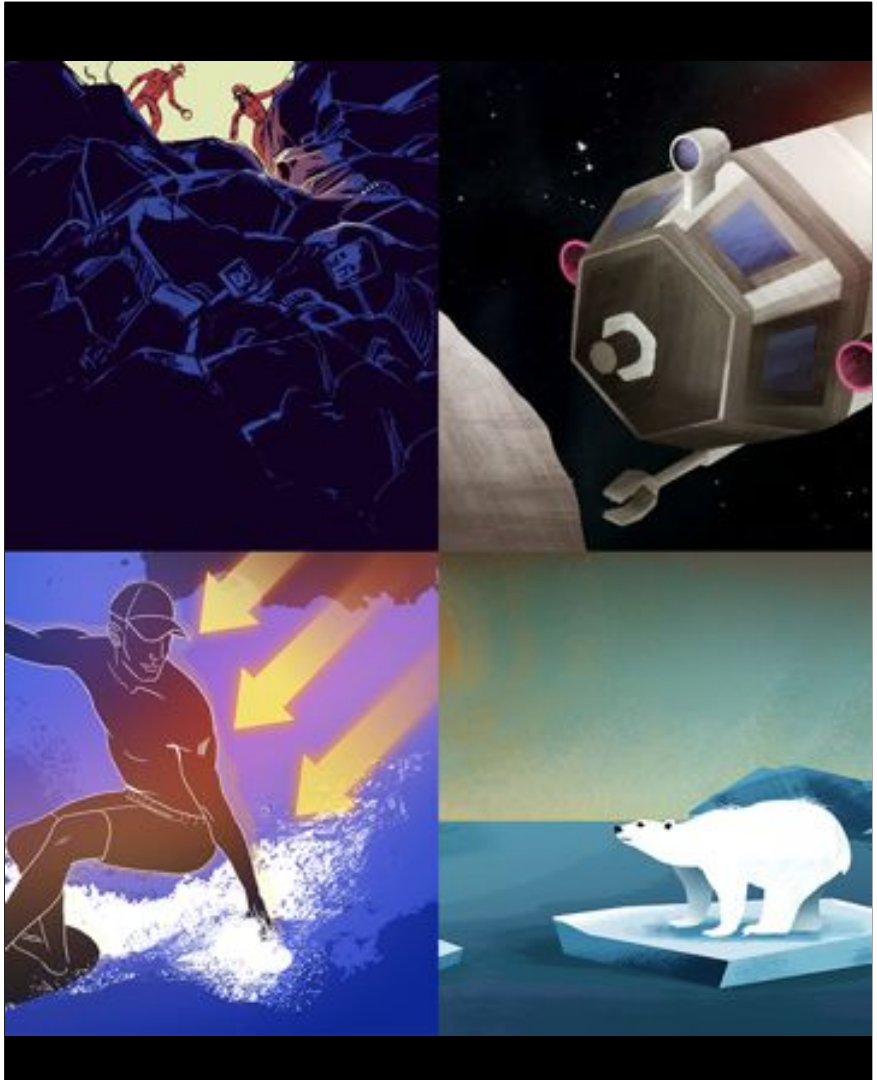
Guided Planning Work Time

Pages 13-15

- Use the planning template and @Home resources (found on the Program HUB) to plan an upcoming lesson
- While planning consider the information below to select the appropriate resources:
  - Do you have more, less, or the same time as last year for Science?
  - Your classroom instructional model (Hybrid or Remote)
  - Student's access to technology (packet or slides/sheets)
  - The 3rd party applications will you pair with Amplify resources (if any)?
  - Do I want to add a hands on component? (model via video? Or complete during in person synchronous instruction)



Questions?



Plan for the day

- Framing the day
  - Welcome and introductions
  - Reflection and vision setting
  - Revisiting the Amplify Approach
- Unit Internalization
- @Home Resources Internalization
  - @Home Units
  - @Home Videos
  - Lesson Level Internalization
  - Resource selection/Guidance
- Guided Planning
  - Planning to Teach using @Home
- Reflection and closing

Revisiting Our Objective:

- Leverage your understanding of your upcoming unit to make instructional decisions about remote or hybrid learning using the Unit Guide and Amplify Science@Home resources.
- Apply new understanding of the unit to determine which @Home resources best meet the needs of students and give them the most robust experience in figuring out the phenomenon of the unit.
- Plan for the next week of instruction using the @Home resources, your class schedule, instructional format, and internalize the planning protocol to use for future planning.

Revisiting our objectives

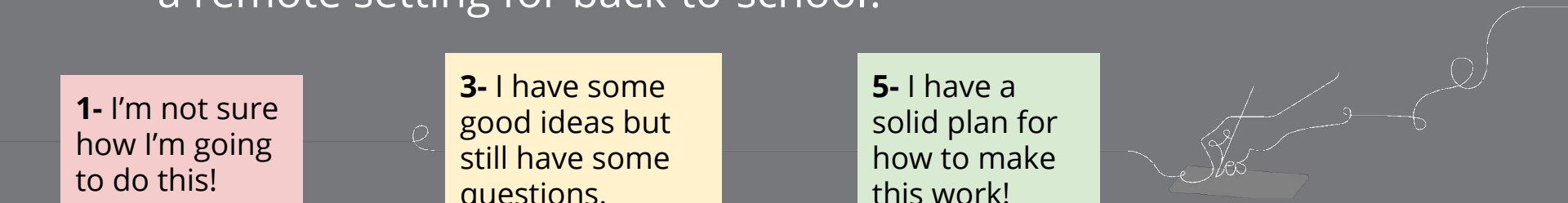
Do you feel ready to…

- Select the Amplify Science@Home resources that best fit your instructional context?
- Internalize tips and strategies for remote and hybrid instruction using Amplify Science@Home?
- Plan how you will leverage Amplify Science@Home resources in a remote setting for back-to-school?

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

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

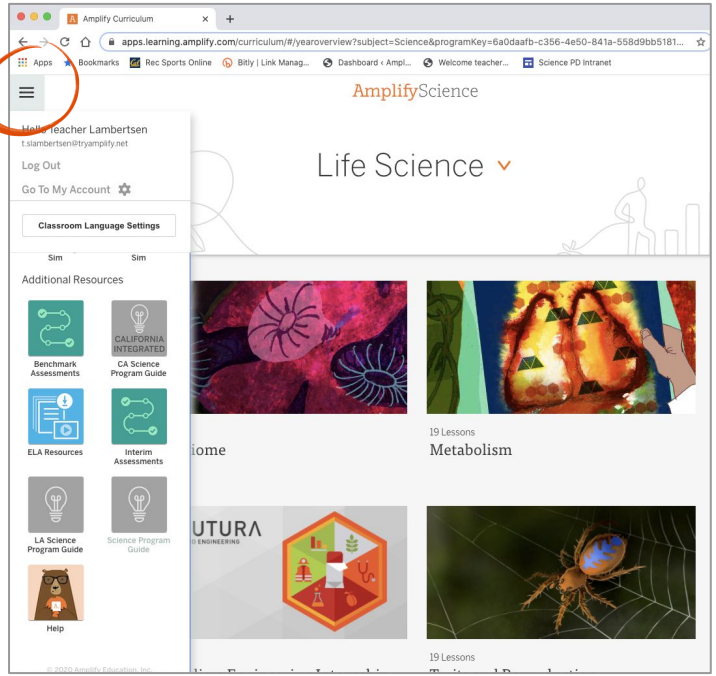
5- I have a solid plan for how to make this work!



Amplify Science Program Hub

A new hub for Amplify Science resources

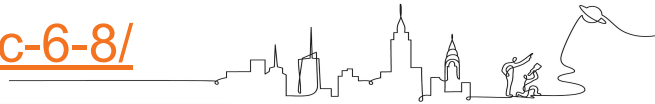
- **Videos and resources to continue getting ready to teach**
- Amplify@Home resources
- Keep checking back for updates

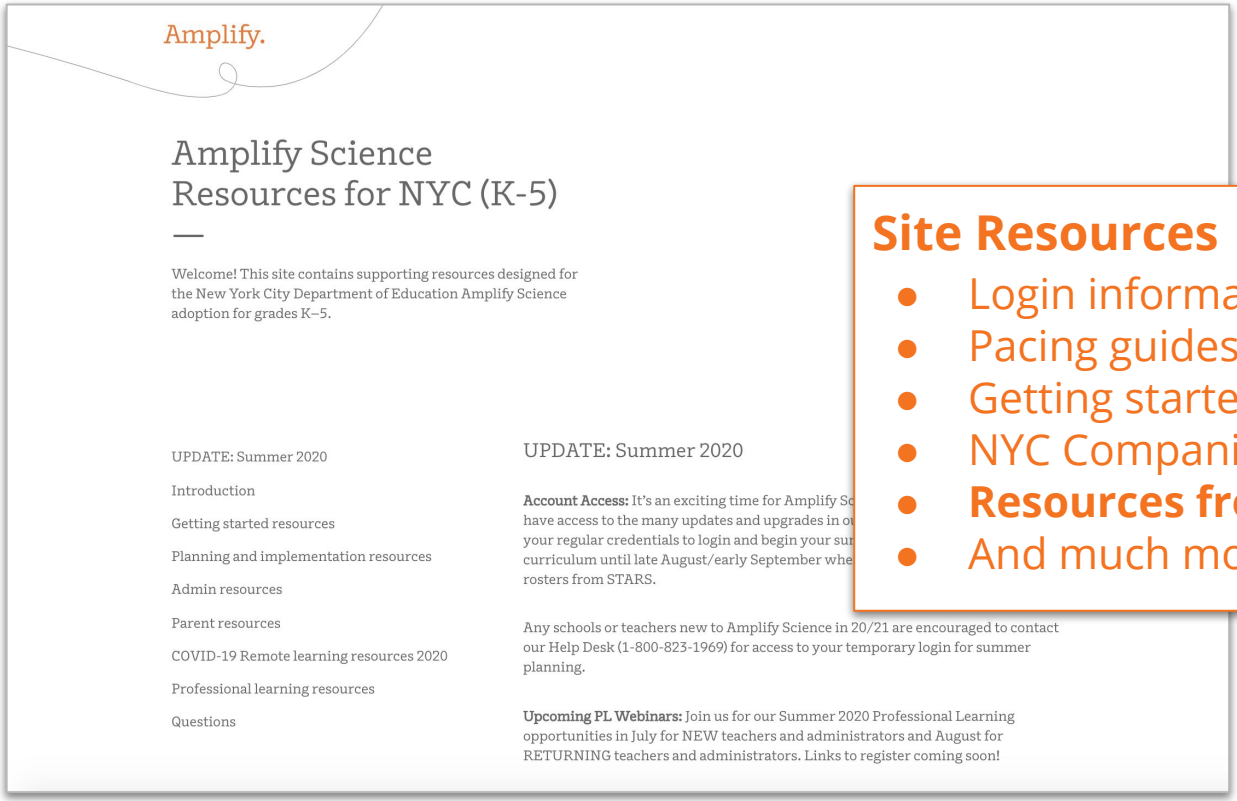


science.amplify.com/programhub

New York City Resources Site

https://amplify.com/resources-page-for-nyc-6-8/

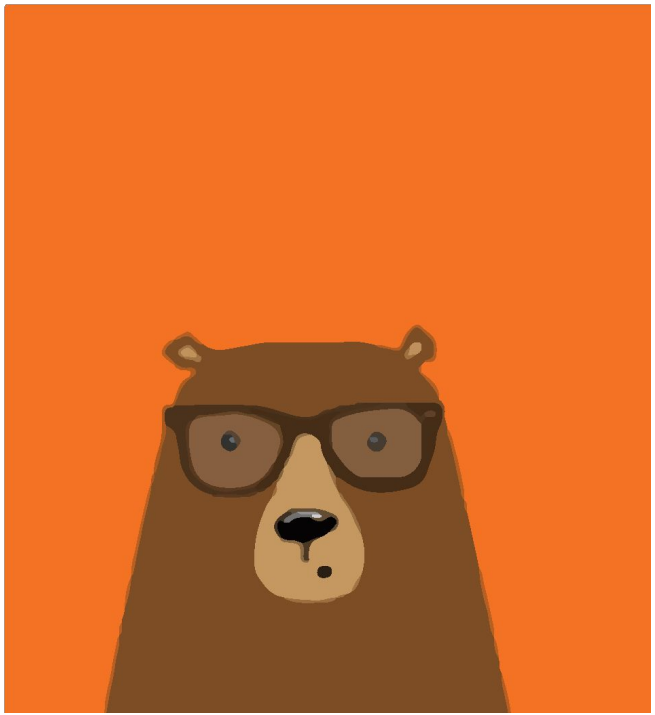




Site Resources

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

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.