

Welcome to Amplify Science!

This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

All LAUSD schools have access to Amplify Science resources at this time.

Click here for [Remote Learning Resources for Amplify Science](#)

[Click here](#) to go back to the LAUSD homepage.

Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



<https://amplify.com/lausd-science/>

Use two windows for today's webinar

The diagram illustrates the setup for a two-window webinar. An inset box shows a close-up of the top-left corner of a window, with an orange arrow pointing to the red, yellow, and green window control buttons. Two orange arrows labeled "Window #1" and "Window #2" point to the respective browser windows.

Window #1 displays a Google Meet link: `meet.google.com/hcs-dxpk-wrm?aut...`. Below the video player, the Amplify Science curriculum page for "Plate Motion" is visible, showing progress build levels and materials preparation sections.

Window #2 displays the Amplify Curriculum website for Lesson 1.2: "Using Fossils to Understand Earth". The page includes a navigation bar, a main content area with a dinosaur illustration, and a sidebar with sections like "Lesson Brief (4 Activities)", "Warm-Up", "Teacher", and "Teacher-Led Discussion".

Do Now: Please use the chat to self-reflect on your ability to navigate the Amplify Science curriculum (1= very uncomfortable to 5 = very comfortable).

Amplify Science

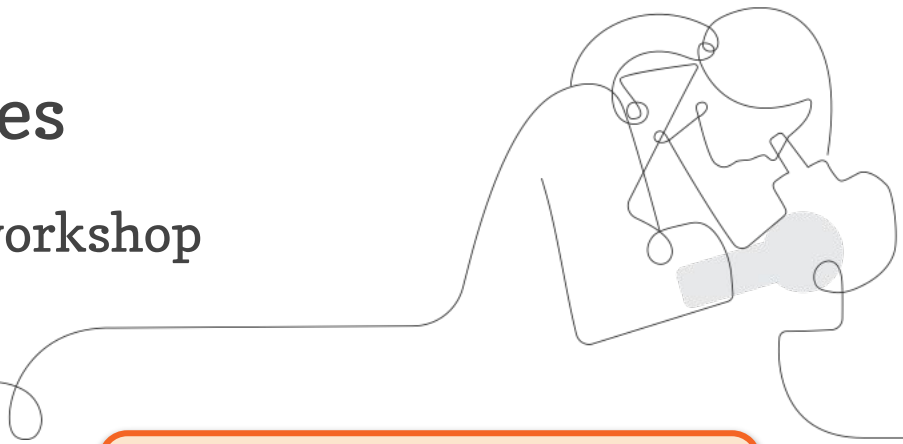
Unit Internalization With @Home Resources

Deep-dive and strengthening workshop
Metabolism, Grade 6

LAUSD

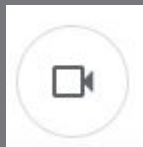
11/x/2020

Presented by Your Name



In a new tab, please log in to
your Amplify Science account
through Schoology.

Norms: Establishing a Culture of Learners



- Please keep your camera on, if possible.
- 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

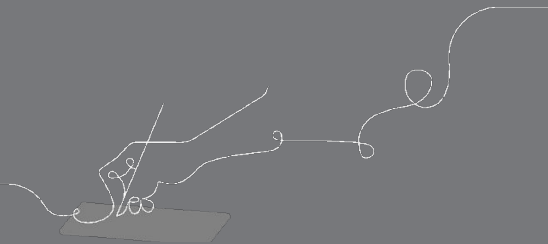


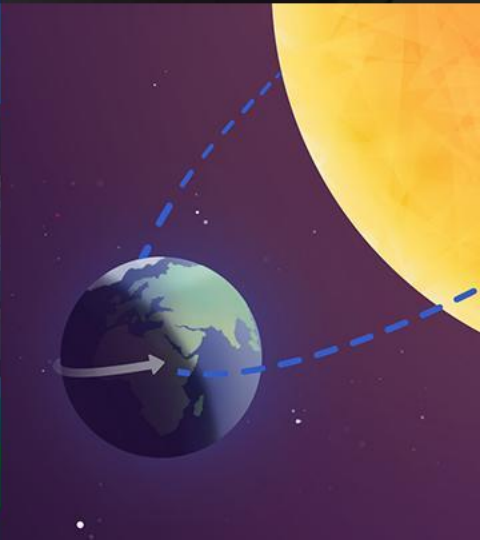
- Be an active participant - chat, ask questions, discuss, share!

Workshop goals

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

- Leverage your understanding of your upcoming unit to make instructional decisions about remote learning using the Amplify Science@Home resources.
- Develop a multi-day plan for using @Home resources within your class schedule and instructional format.



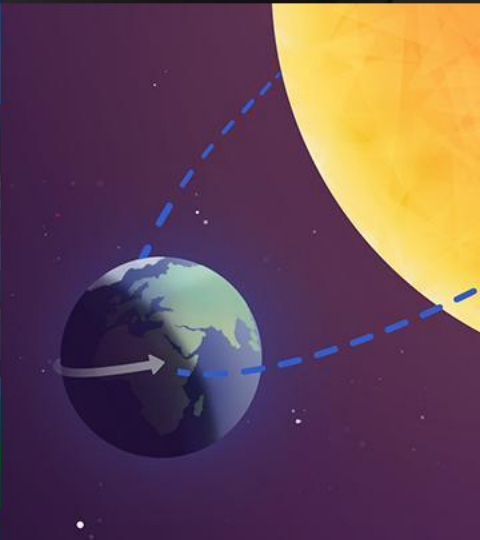


Plan for the day

- Framing the day
- Amplify Science Instructional Materials
- Unit Internalization
- Planning to teach using @Home resources
- Reflection and closing

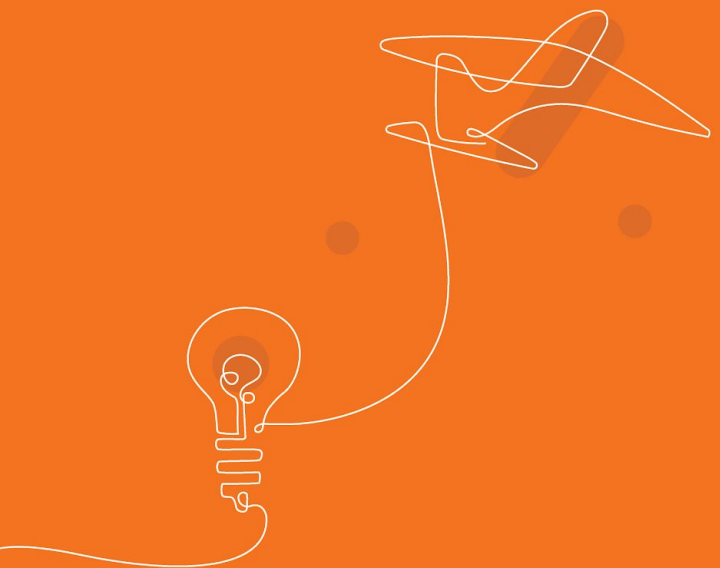


Questions?



Plan for the day

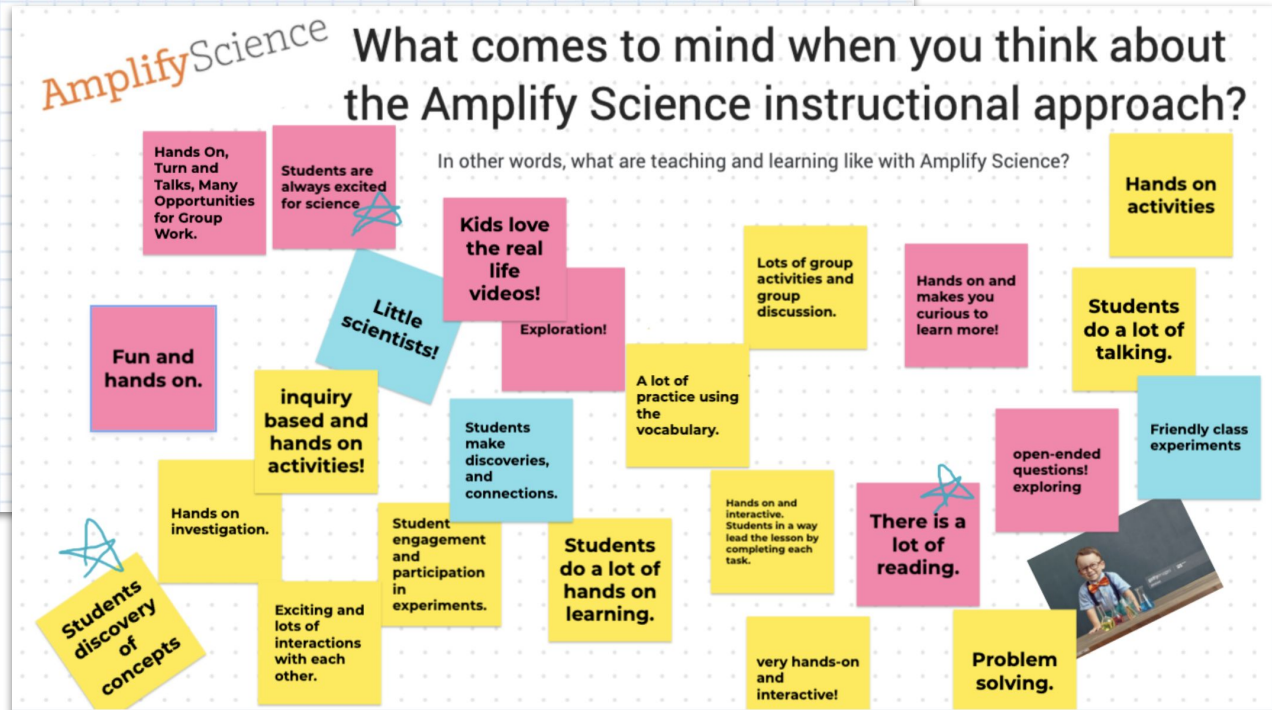
- **Framing the day**
- Amplify Science Instructional Materials
- Unit Internalization
- Planning to teach using @Home resources
- Reflection and closing



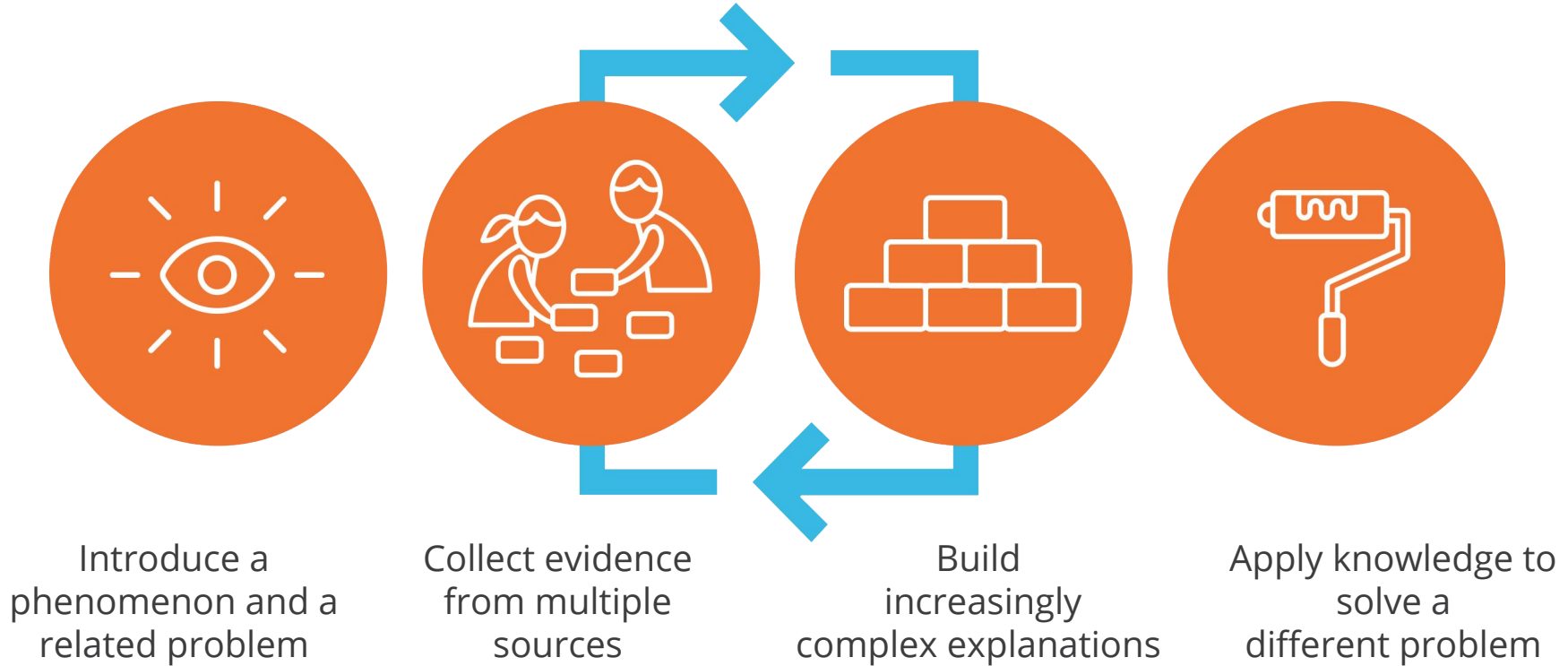
Revisiting the Amplify Science approach

What comes to mind when you think about the Amplify Science instructional approach?

(In other words, what are teaching and learning like with Amplify Science?)



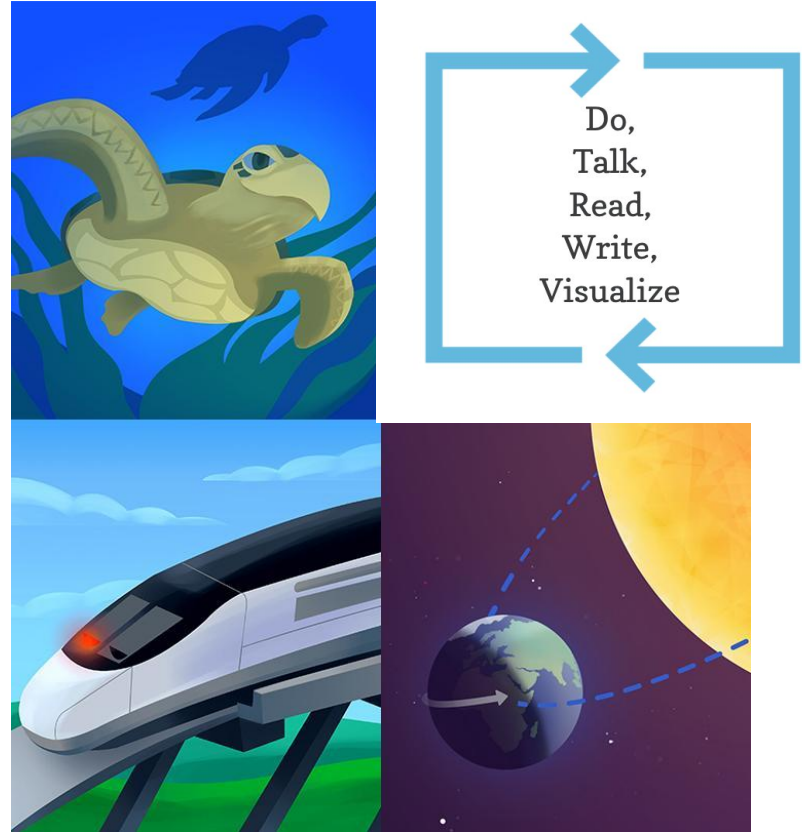
Amplify Science Instructional Approach



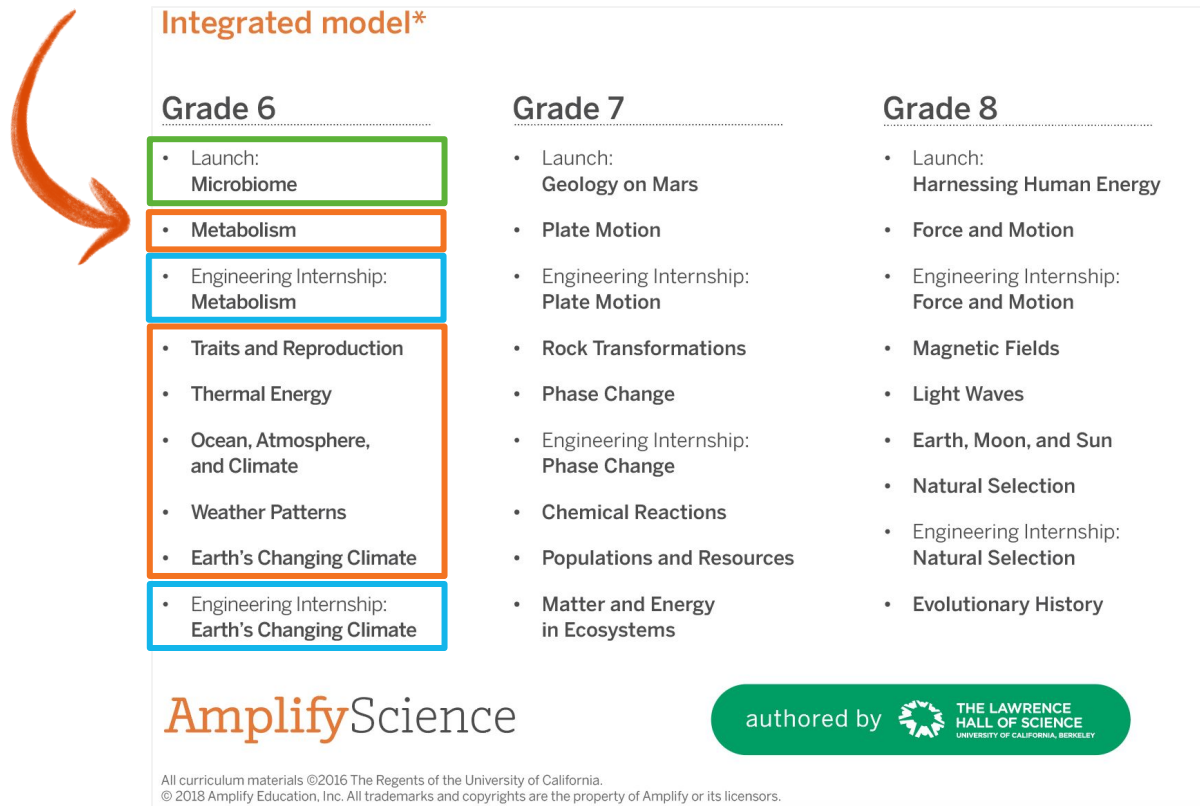
Multimodal, phenomenon-based learning

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.



Middle school course curriculum structure



Launch units

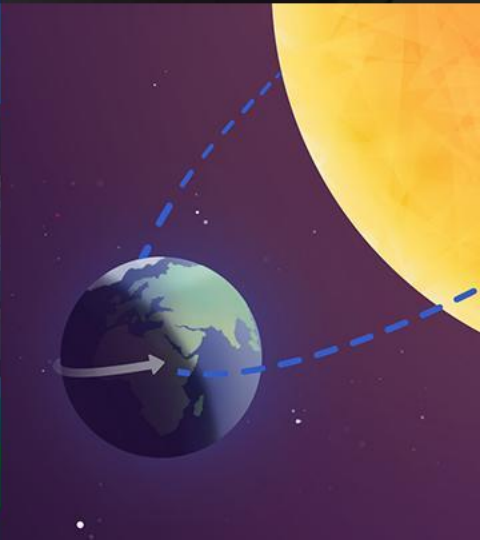
- First unit
- 11 lessons

Core units

- Majority of units
- 19 lessons

Engineering Internships

- Two per year
- 10 lessons



Plan for the day

- Framing the day
- **Amplify Science Instructional Materials**
- Unit Internalization
- Planning to teach using @Home resources
- Reflection and closing

Amplify Science @Home Curriculum

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



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.

Metabolism@Home Unit resources

- Teacher Overview ([PDF](#), [Google](#)) and [Lesson Index](#)
- Family Overview ([PDF](#), [Google](#)) *To come: Spanish versions of this and all student materials*
- @Home Slides compilation ([PDF](#), [Google](#))
- @Home Packet compilation ([PDF](#), [Google](#))
- @Home Student Sheets Compilation ([PDF](#), [Google](#)) *Note: Either Students Sheets or student access to their Amplify account is required when using @Home Slides.*
- Individual @Home Lesson materials (see table below)

Paper option

| | Print-based option | Digital option |
|----------|---|--|
| Lesson 1 | Packet (PDF , Google) – Spanish to come | Slides (PDF , Google) + Student Sheets (Google) – Spanish to come |
| Lesson 2 | Packet (PDF , Google) – Spanish to come | Slides (PDF , Google) + Student Sheets (Google) – Spanish to come |
| Lesson 3 | Packet (PDF , Google) – Spanish to come | Slides (PDF , Google) + Student Sheets (Google) – Spanish to come |
| Lesson 4 | Packet (PDF , Google) – Spanish to come | Slides (PDF , Google) + Student Sheets (Google) – Spanish to come |
| Lesson 5 | Packet (PDF , Google) – Spanish to come | Slides (PDF , Google) + Student Sheets (Google) – Spanish to come |

Digital option

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

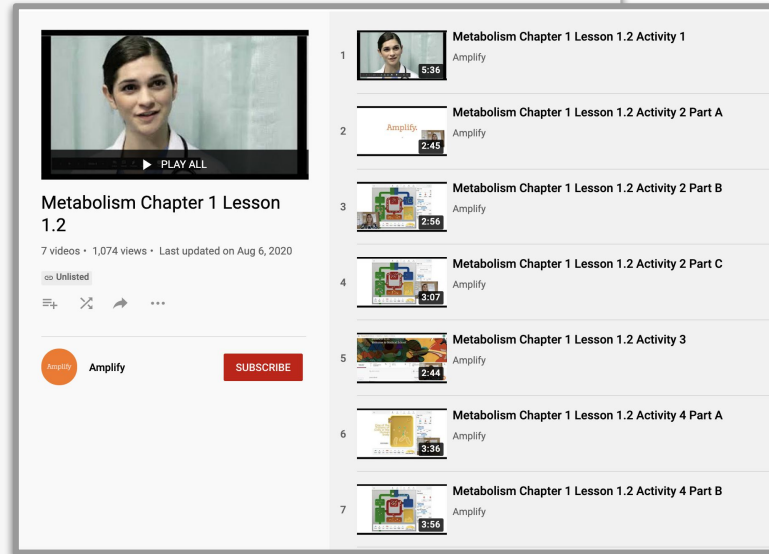
- Lesson 2.1
- Lesson 2.2
- Lesson 2.3
- Lesson 2.4
- Lesson 2.6
- Lesson 2.7

Chapter 3

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

Chapter 4

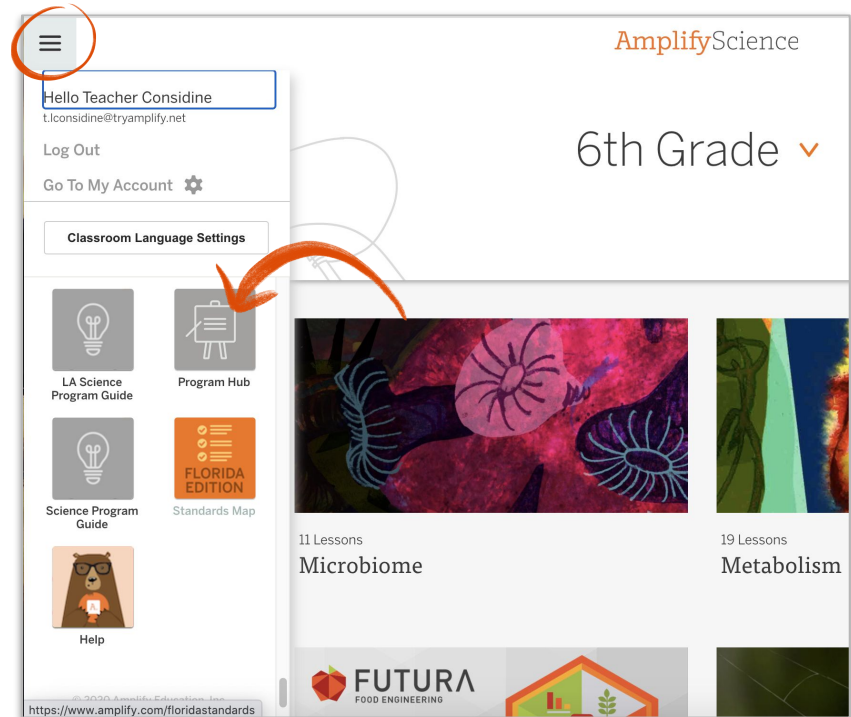
- Lesson 4.1
- Lesson 4.2
- Lesson 4.3



Accessing Amplify Science@Home

Amplify Science Program Hub

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



Standard Amplify Science Curriculum

19 Lessons

Metabolism

✓ JUMP DOWN TO UNIT GUIDE

GENERATE PRINTABLE TEACHER'S GUIDE

Standard Amplify Science Curriculum

The Metabolism unit has **19 lessons** across 4 chapters. Each lesson is written to be **45 minutes** long.



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

Skip slide if modeling
live on the platform.

Standard Amplify Science Curriculum

On the standard Amplify Science platform you will find all of your key documents for planning for the unit.

We will be using many of these in today's workshop.

Planning for the Unit

Unit Overview

Unit Map

Progress Build

Getting Ready to Teach

Materials and Preparation

Science Background

Standards at a Glance

Teacher References

Lesson Overview Compilation

Standards and Goals

3-D Statements

Assessment System


Embedded Formative Assessments


Articles in This Unit


Apps in This Unit


Flexensions in This Unit


Printable Resources


 Article Compilation


 Coherence Flowchart


 Copymaster Compilation

 Flexension Compilation

 Investigation Notebook

 NGSS Information for Parents and Guardians

 Print Materials (8.5" x 11")

 Print Materials (11" x 17")

Offline Preparation

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

Skip slide if modeling live on the platform.

Standard Amplify Science Curriculum

On the standard Amplify Science platform you will find key lesson level information.

We will be navigating to lessons during today's workshop in order to better plan for collecting evidence of student learning in order to plan to meet the needs of diverse learners.

The screenshot shows the Amplify Science platform interface for Lesson 1.2: Welcome to Medical School. The top navigation bar includes the Amplify Science logo and breadcrumb navigation: Metabolism > Chapter 1 > Lesson 1.2. The main header features a colorful abstract illustration of a person's face and a stethoscope, with the text "Lesson 1.2: Welcome to Medical School" overlaid. Below the header is a horizontal navigation bar with five tabs: Lesson Brief (4 Activities), Teacher (Introducing Medical Student Role), 1 Warm-Up (Warm-Up), 2 SIM (Introducing the Metabolism Simulation), 3 Teacher-Led Discussion (Returning to the Patient), and 4 Homework (Homework). The main content area is divided into three columns. The left column contains a sidebar with links: Overview, Materials & Preparation, Differentiation, Standards, Vocabulary, and Unplugged?. The middle column is titled "Overview" and contains text about the unit's start, an anchor phenomenon, and student learning goals. The right column is titled "Digital Resources" and lists links for Classroom Slides 1.2 (PowerPoint and Google Slides), All Projections, Video: Elisa's Condition, Completed Scientific Argumentation Wall Diagram, and Metabolism Investigation Notebook, pages 5-. A yellow callout box is overlaid on the right side of the page, containing the text: "Skip slide if modeling live on the platform." At the bottom left, there is a small "Español" button. At the bottom right, there is a small red speech bubble icon.

AmplifyScience > Metabolism > Chapter 1 > Lesson 1.2

Lesson 1.2: Welcome to Medical School

Lesson Brief (4 Activities) | Teacher: Introducing Medical Student Role | 1 Warm-Up: Warm-Up | 2 SIM: Introducing the Metabolism Simulation | 3 Teacher-Led Discussion: Returning to the Patient | 4 Homework: Homework

RESET LESSON

GENERATE PRINTABLE LESSON GUIDE

Overview

Students begin the unit by viewing a dramatic video that immerses them in their new role as medical students. Students build on the video by brainstorming initial thoughts about why their patient, Elisa, could be feeling so tired. The teacher helps the class to create plausible alternative claims from these initial ideas. Students are then introduced to the *Metabolism* Simulation, and they begin to observe how molecules travel through systems in a healthy body. The purpose of this lesson is to help students begin to make connections between macro-effects, such as how tired someone feels, and the microscopic world of metabolism—the body's use of molecules for energy and growth.

Anchor Phenomenon: Elisa, a young patient, feels tired.

Students learn:

- The body takes in molecules by eating and breathing.
- Some of these molecules travel to the cells of the body.

Lesson at a Glance

(Teacher Only) Introducing Medical Student Role (5 min.)
An introductory video plunges students into their new students and introduces them to their patient, a teenage girl who is tired all the time.

1: Warm-Up (5 min.)

Digital Resources

- Classroom Slides 1.2 | PowerPoint
- Classroom Slides 1.2 | Google Slides
- All Projections
- Video: Elisa's Condition
- Completed Scientific Argumentation Wall Diagram
- Metabolism Investigation Notebook, pages 5–

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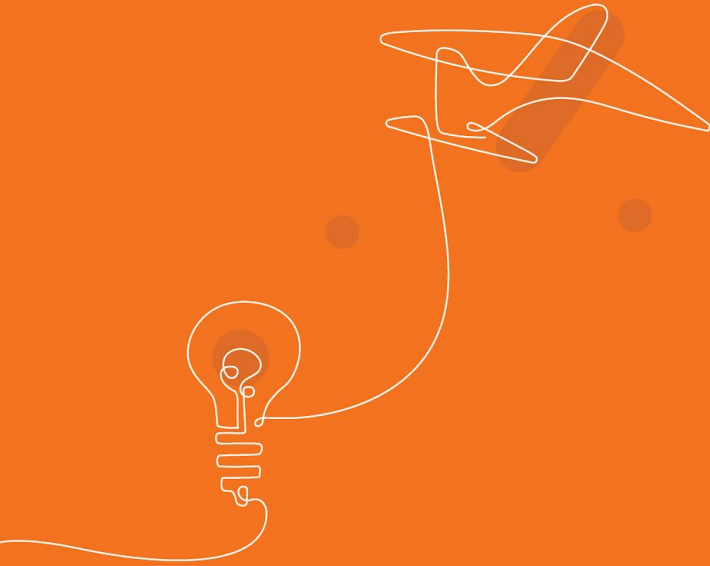
Español

Resource Reflection

Which resources have you been using or do you plan to use?

- ☐ Standard Amplify Science Curriculum
- ☐ @Home Units
- ☐ @Home Videos

How do these resources meet your needs for remote teaching?



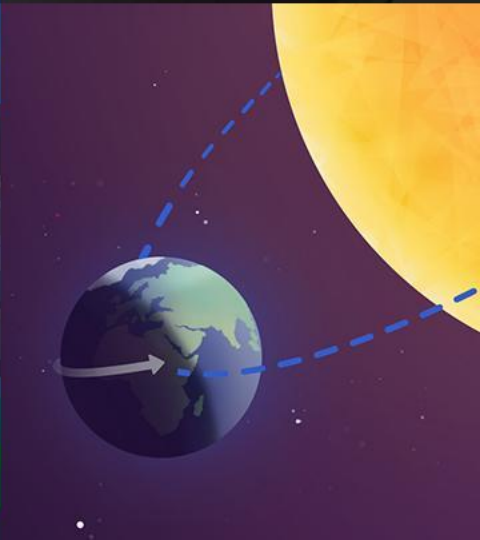
How does this resource meet the needs of your students in remote learning?

Which Amplify Science resources have you been using or do you plan to use?

How is instruction going with this resource?



Questions?



Plan for the day

- Framing the day
- Amplify Science Instructional Materials
- **Unit Internalization**
- Planning to teach using @Home resources
- Reflection and closing

Part 1: Unit-level Internalization

Unit Guide Resources

Planning for the Unit

Unit Overview

Unit Map

Progress Build

Getting Ready to Teach

Materials and Preparation

Science Background

Standards at a Glance

Teacher References

Lesson Overview Compilation

Standards and Goals

3-D Statements

Assessment System

Embedded Formative Assessments

Articles in This Unit

Apps in This Unit

Flextensions in This Unit

Printable Resources

Article Compilation

Coherence Flowchart

Copymaster Compilation

Flextension Compilation

Investigation Notebook

NGSS Information for Parents and Guardians

Print Materials (8.5" x 11")

Print Materials (11" x 17")

Offline Preparation

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

Offline Guide

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

Planning for the Unit

Unit Overview

Unit Map

Progress Build

Getting Ready to Teach

Materials and Preparation

Science Background

Standards at a Glance

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Offline Preparation

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Offline Guide

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 is 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.



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

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Student role:

Medical students

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

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Lesson Overview Compilation

Pages 3-4

Planning for the Unit

Unit Overview

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Assessment System

Embedded Formative Assessments

Articles in This Unit

Apps in This Unit

Flextensions in This Unit

Printable Resources

Article Compilation

Coherence Flowchart

Copymaster Compilation

Flextension Compilation

Investigation Notebook

NGSS Information for Parents and Guardians

Print Materials (8.5" x 11")

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

Offline Guide

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)

2

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3

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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:

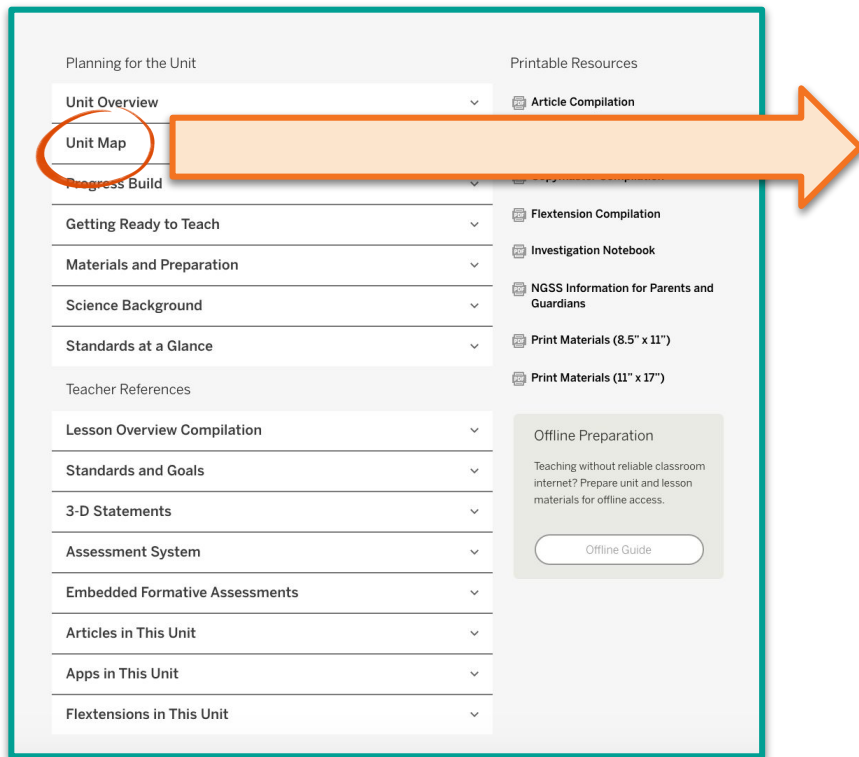
Medical students

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

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



Unit Map



Planning for the Unit

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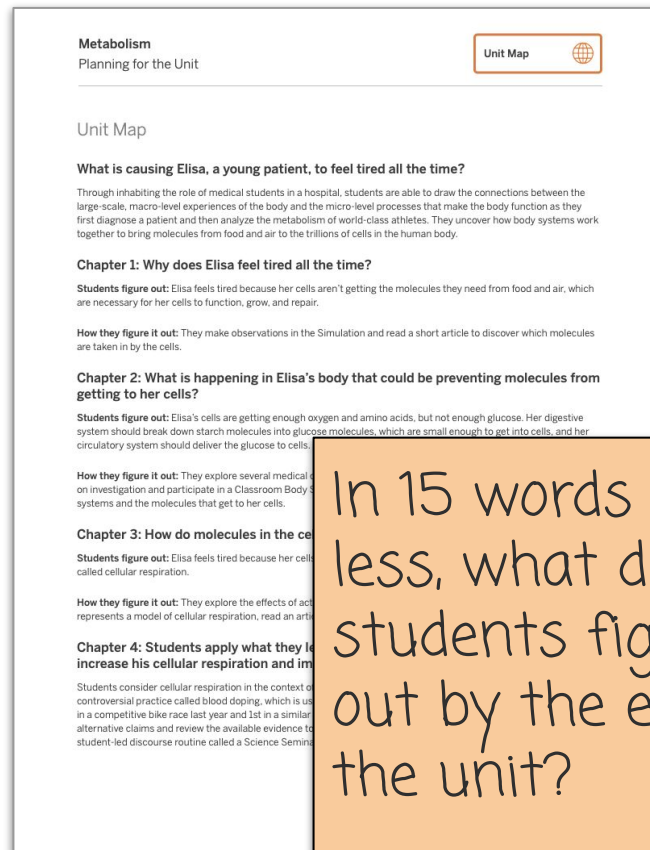
Print Materials (8.5" x 11")

Print Materials (11" x 17")

Offline Preparation

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Offline Guide



Metabolism

Planning for the Unit

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.

How they figure it out: They explore several medical cases on investigation and participate in a Classroom Body Systems game to understand how molecules get to her cells.

Chapter 3: How do molecules in the cell get to the mitochondria?

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 explore the effects of activity on cellular respiration, read an article, and participate in a Classroom Body Systems game to understand how molecules get to the mitochondria.

Chapter 4: Students apply what they learn to increase his cellular respiration and improve his performance.

Students consider cellular respiration in the context of a controversial practice called blood doping, which is used in a competitive bike race last year and 1st in a similar alternative claims and review the available evidence to student-led discourse routine called a Science Seminar.

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

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 ...

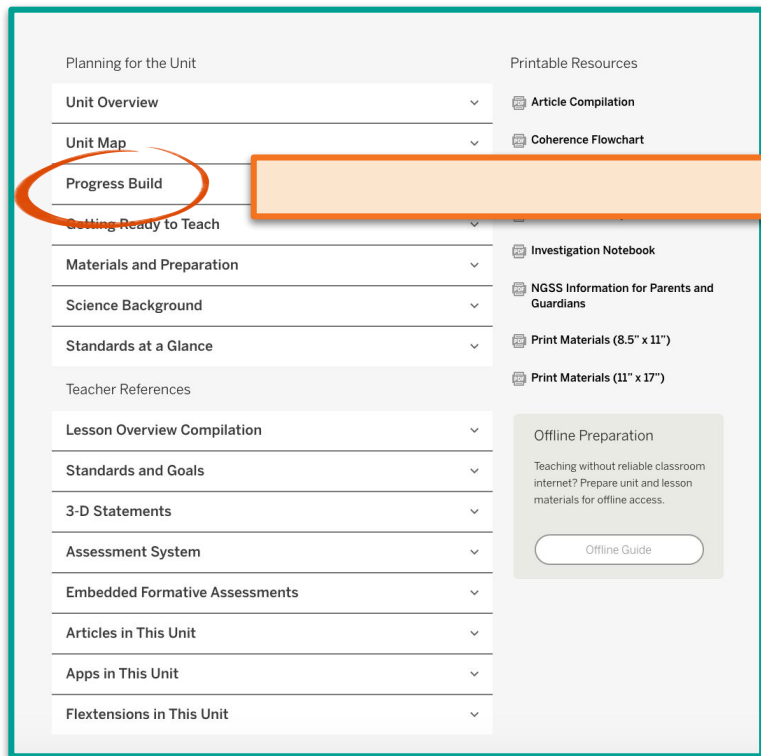
Elisa's diabetes causes her cells not to get glucose, so they can't release energy.

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



Progress Build

Pages 5-6



Planning for the Unit

- Unit Overview
- Unit Map
- Progress Build**
- Setting Ready to Teach
- Materials and Preparation
- Science Background
- Standards at a Glance
- Teacher References
- Lesson Overview Compilation
- Standards and Goals
- 3-D Statements
- Assessment System
- Embedded Formative Assessments
- Articles in This Unit
- Apps in This Unit
- Flextensions in This Unit

Printable Resources

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

Offline Preparation

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

Offline Guide



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.**

1

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2

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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.



Unit Level

Think - Type - Discuss

Share something you're excited about in teaching this unit to your students.





Questions?

Part 2: Chapter-level Internalization

Part 2: Chapter-level internalization

Directions: Complete the table below. If you plan to teach using the @Home Units, use the Teacher Overview. If you plan to teach using the @Home Videos, navigate to the Coherence Flowcharts in the Unit Guide.

| | |
|--|---|
| Chapter Question: | |
| What key concepts do students construct in this chapter? | How do students apply the key concepts to answer the Chapter Question? To solve the phenomenon? |

Unit Level Documents

Page 2

The screenshot shows a sidebar menu on the left and a main content area on the right. The sidebar menu has two sections: 'Planning for the Unit' and 'Teacher References'. In the 'Planning for the Unit' section, 'Unit Map' is circled in orange, and an orange arrow points from it to the right. In the 'Teacher References' section, 'Lesson Overview Compilation' is circled in orange, and an orange arrow points from it to the right. The main content area has a header 'Printable Resources' with a list of items: 'Article Compilation', 'Copymaster Compilation', 'Flextension Compilation', 'Investigation Notebook', 'NGSS Information for Parents and Guardians', 'Print Materials (8.5" x 11")', and 'Print Materials (11" x 17")'. Below this list is a button labeled 'Offline Guide'.

The document is titled 'Metabolism Planning for the Unit' and 'Unit Map'. It contains the following text:

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 see 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 set 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.

1

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The document is titled 'Lesson Overview Compilation'. It contains the following text:

Chapters at a Glance

Unit Question

How do the trillions of cells in the human body get what they need to stay alive?

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)

2

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Pages 3-4

Part 2: Chapter-level internalization

Directions: Complete the table below. If you plan to teach using the @Home Units, use the Teacher Overview. If you plan to teach using the @Home Videos, navigate to the Coherence Flowcharts in the Unit Guide.

Chapter Question:

Why does Elisa feel tired all the time?

What key concepts do students construct in this chapter?

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

How do students apply the key concepts to answer the Chapter Question? To solve the phenomenon?

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.

Chapter Level

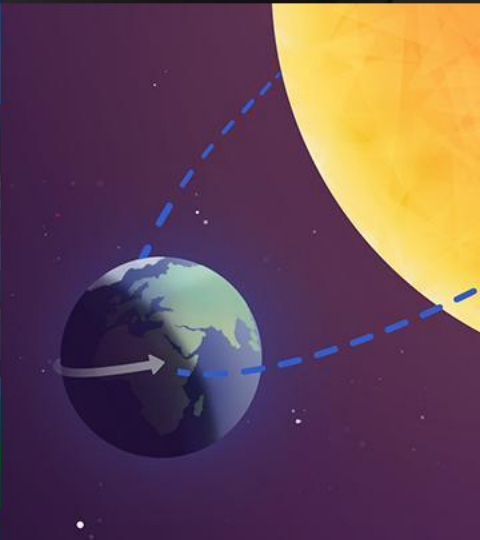
Think - Type - Discuss

What new scientific understandings do your students need to construct in the chapter to support them in figuring out the unit phenomenon?





Questions?



Plan for the day

- Framing the day
- Amplify Science Instructional Materials
- Unit Internalization
- **Planning to teach using @Home resources**
- Reflection and closing

Part 3: Lesson-level Internalization

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).

The background is a complex, abstract collage. On the right side, there is a profile of a human face rendered in a golden-yellow, textured style. The face has a detailed eye and a white highlight on the nose. To the left of the face, there are various geometric shapes: a large blue hexagon, a red hexagon, and a purple triangle. These shapes are overlaid with a network of dark red, swirling lines that create a sense of movement and interconnectedness. The overall color palette is dominated by warm tones like gold, red, and brown, with cooler blues and purples providing contrast.

Metabolism

@Home Lesson 1

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**.



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.



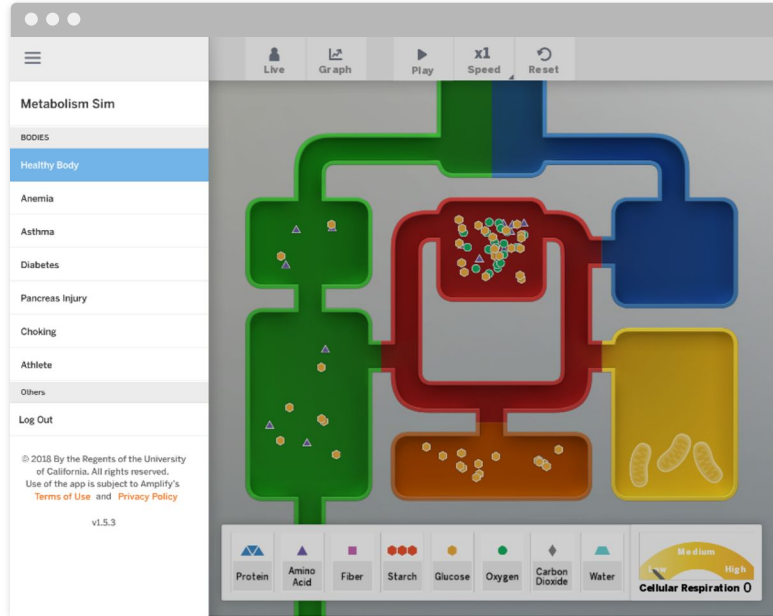
What are some things you know the human body needs to function?

Key Activities

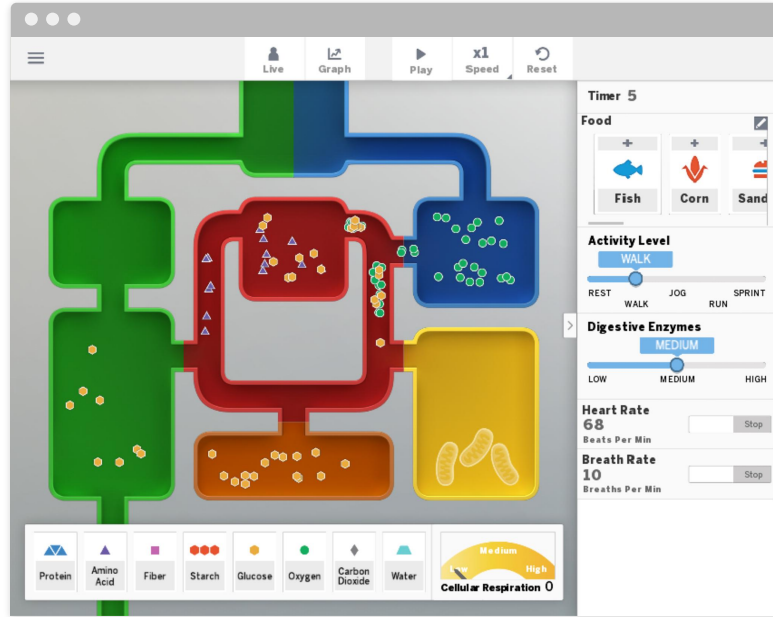
- **Introducing the *Metabolism* Unit:** Students are introduced to the unit problem and their role as medical students. They consider their initial ideas about why their patient Elisa is feeling tired all the time, and are introduced to the claims they will be investigating.
- **Do:** Students are introduced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



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.



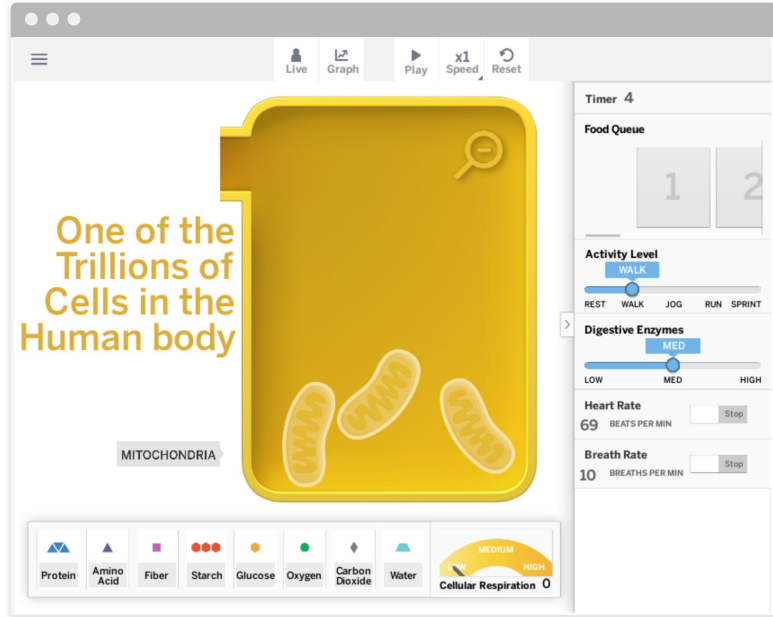
The *Metabolism* Sim is a scientific model that simulates many things that happen inside the human body.

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

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



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



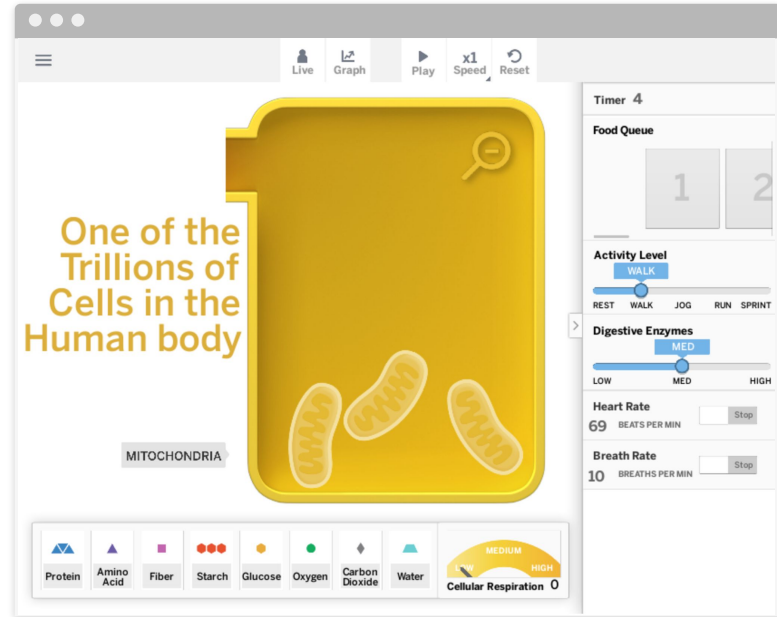
Think about this question.



Which **molecules** enter the cell?

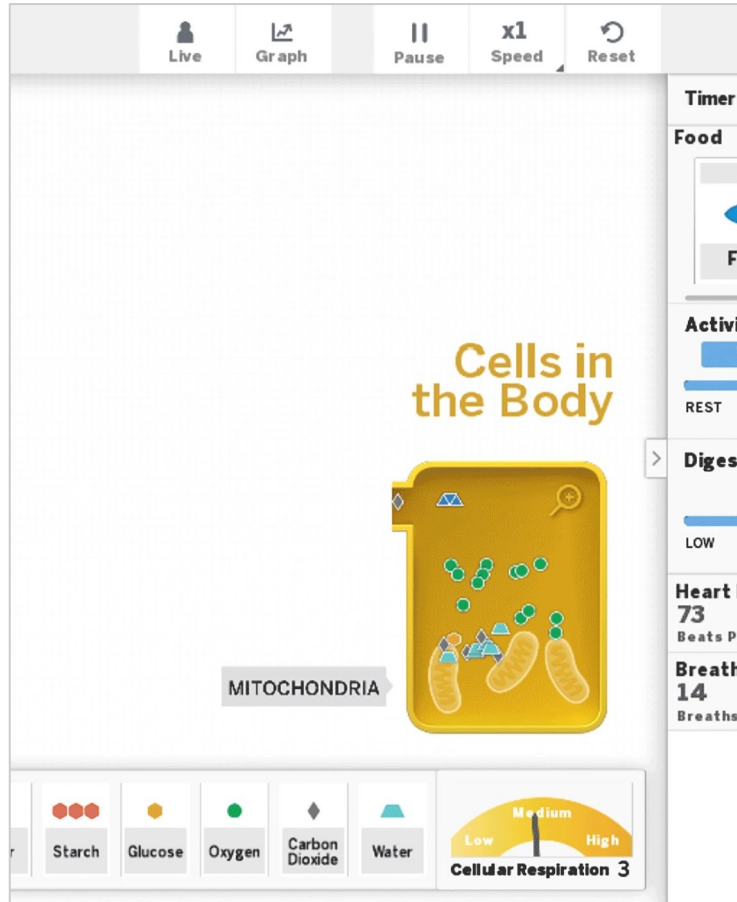
There are certain things we already know the human body needs to function. Two important things the human body needs to survive are **food** and **air**.

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:

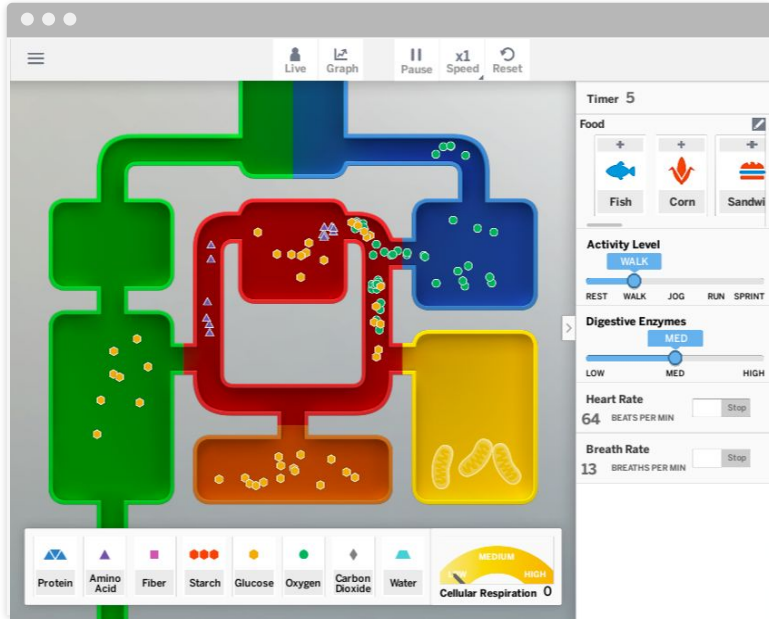
What happens to the food and air that enter this healthy Simulation body?

Which molecules are entering the cell?

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.



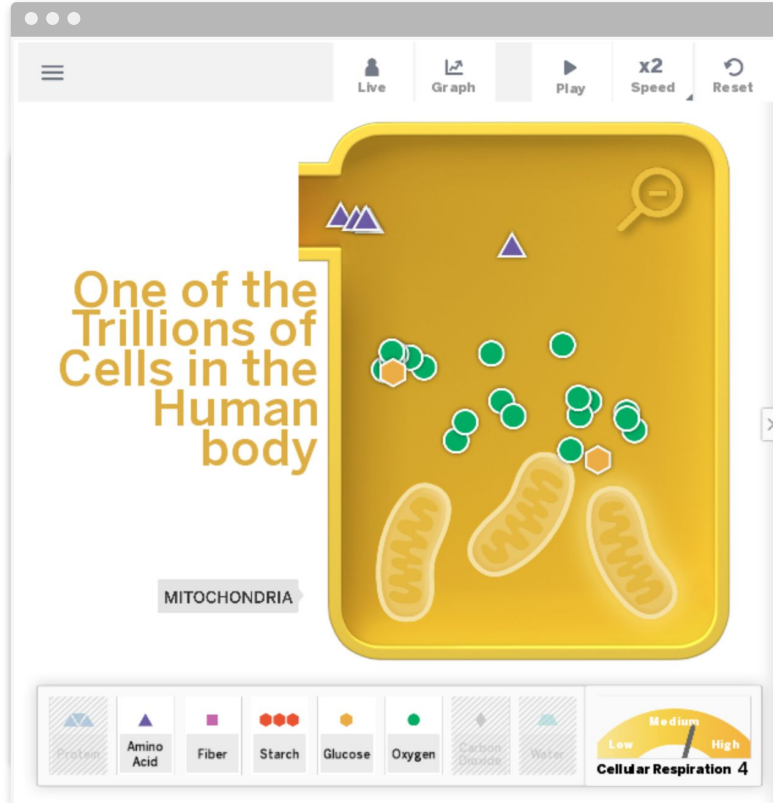
Think about this question.



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.
- **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).

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.



metabolism

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
dóxido 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

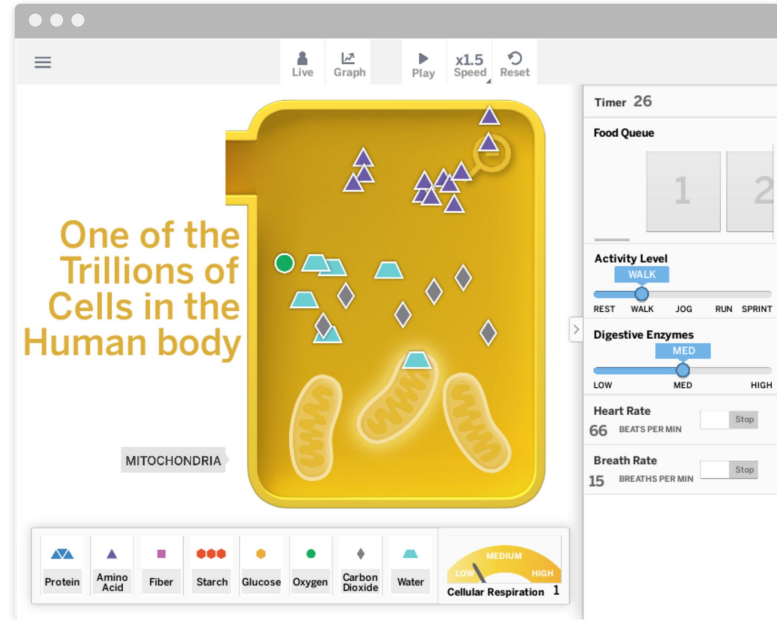
metabolism: the body's use of molecules for energy and growth
metabolismo: el uso de moléculas por el cuerpo para obtener energía y crecer

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
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Metabolism @Home Lesson 1
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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

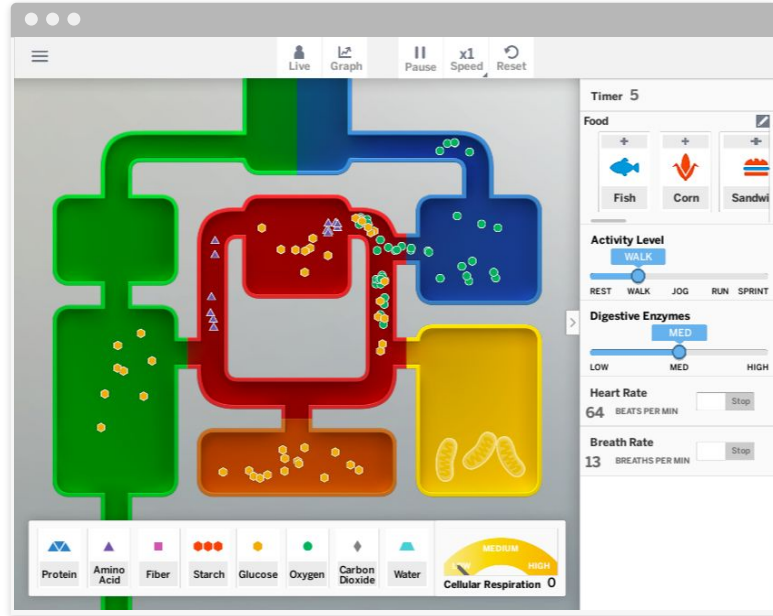
Elisa is feeling tired because she:

- 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



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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).

Suggestions for Online Synchronous Time



Online synchronous time

Online discussions: It's worthwhile to establish norms and routines for online discussions in science to ensure equity of voice, turn-taking, etc.

Digital tool demonstrations: You can share your screen and demonstrate, or invite your students to share their screen and think-aloud as they use a Simulation or other digital tool.

Interactive read-alouds: Screen share a digital book or article, and pause to ask questions and invite discussion as you would in the classroom.

Shared Writing: This is a great opportunity for a collaborative document that all your students can contribute to.

Co-constructed class charts: You can create digital charts, or create physical charts in your home with student input.



Day 1: @Home Lesson 1

Minutes for science: 15 min

Instructional format:



Asynchronous



Synchronous

Lesson or part of lesson:

@Home Lesson 1, video (slides 1-4)

Mode of instruction:



Preview



Review



Teach full lesson live



Teach using synchronous suggestions



Students work independently using:

☐ @Home Packet

☒ @Home Slides and @Home Student Sheets

☐ @Home Videos

Students will...

view the video and jot down their initial ideas about what could be causing Elisa to feel tired all the time.

Teacher will...

assign slides 1-4 in Schoology and provide direction for students to jot down their ideas when they get to slide 4 to share during the next lesson.

Minutes for science: _____

Instructional format:



Asynchronous



Synchronous

Lesson or part of lesson:

Mode of instruction:



Preview



Review



Teach full lesson live



Teach using synchronous suggestions



Students work independently using:

☐ @Home Packet

☐ @Home Slides and @Home Student Sheets

☐ @Home Videos

Students will...

Teacher will...

| | | | |
|---|---|---|--|
| Day 1: @Home Lesson 1 | | | |
| Minutes for science: 15 min | | Minutes for science: 30 min | |
| Instructional format: <input checked="" type="checkbox"/> Asynchronous <input type="checkbox"/> Synchronous | | Instructional format: <input type="checkbox"/> Asynchronous <input checked="" type="checkbox"/> Synchronous | |
| Lesson or part of lesson: @Home Lesson 1, video (slides 1-4) | | Lesson or part of lesson: @Home Lesson 1, discussion and simulation (slides 4-28) | |
| Mode of instruction: <input checked="" type="checkbox"/> Preview <input type="checkbox"/> Review <input type="checkbox"/> Teach full lesson live <input type="checkbox"/> Teach using synchronous suggestions <input checked="" type="checkbox"/> Students work independently using: <input type="checkbox"/> @Home Packet <input checked="" type="checkbox"/> @Home Slides and @Home Student Sheets <input type="checkbox"/> @Home Videos | | Mode of instruction: <input type="checkbox"/> Preview <input type="checkbox"/> Review <input type="checkbox"/> Teach full lesson live <input checked="" type="checkbox"/> Teach using synchronous suggestions <input type="checkbox"/> Students work independently using: <input type="checkbox"/> @Home Packet <input type="checkbox"/> @Home Slides and @Home Student Sheets <input type="checkbox"/> @Home Videos | |
| Students will... view the video and jot down their initial ideas about what could be causing Elisa to feel tired all the time. | Teacher will... assign slides 1-4 in Schoology and provide direction for students to jot down their ideas when they get to slide 4 to share during the next lesson. | Students will... engage in a discussion about their initial ideas, be introduced to the claims they will investigate, explore the simulation, and reflect on learning. | Teacher will... lead students through the lesson activities using slides 4-28. |



Look at the *Students will* columns. What are students working in the lesson(s) that you could collect, review, or provide feedback on?

See Some Types of Written Work in Amplify Science to the right for guidance.

If there isn't a work product listed above, do you want to add one? Make notes below.

Asynchronous: students jot notes about their initial ideas for why Elisa is feeling tired

Synchronous: record observations of molecules using the sim, jot new ideas about the claims after using the sim

How will students submit this work product to you?

See the Completing and Submitting Written Work tables to the right for guidance on how students can complete and submit work.

Asynchronous: students will bring handwritten notes to the synchronous lesson to share on a Jamboard and discuss

Synchronous: students will turn in the simulation worksheet in Schoology, and add new ideas to the Jamboard to reflect on their learning

Some Types of Written Work in Amplify Science

- Daily written reflections
- Homework tasks
- Investigation notebook pages
- Written explanations (typically at the end of Chapter)
- Diagrams
- Recording pages for Sim uses, investigations, etc

Completing Written Work

- Plain paper and pencil (videos include prompts for setup)
- (6-8) Student platform
- Investigation Notebook
- Record video or audio file describing work/answering prompt
- Teacher-created digital format (Google Classroom, etc)

Submitting Written Work

- Take a picture with a smartphone and email or text to teacher
- Through teacher-created digital format
- During in-school time (hybrid model) or lunch/materials pick-up times
- (6-8) Hand-in button on student platform

How will you differentiate this lesson for diverse learners? (Navigate to the lesson level on the standard Amplify Science platform and click on differentiation in the left menu.)

Chapter 1 Question

Why does Elisa feel tired all the time?

Key Concepts

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

Vocabulary

metabolism

glucose

molecule

oxygen

amino acid

18

ns. What are students working in the lesson(s) or provide feedback on?
mplify Science to the right for guidance.

above, do you want to add one? Make notes below.
jot notes about their initial ideas for

- I notice/observe ...
- I think this is important because ...
- I wonder ...

W have on a Jamboard and discuss

will turn in the simulation worksheet
w ideas to the Jamboard to reflect on

Some Types of Written Work in Amplify Science

- Daily written reflections
- Homework tasks
- Investigation notebook pages
- Written explanations (typically at the end of Chapter)

pages for Sim uses, investigations, etc

Written Work

and pencil
ude prompts

Submitting Written Work

- (6-8) Student platform
- Investigation Notebook
- Record video or audio file describing work/answering prompt
- Teacher-created digital format (Google Classroom, etc)

- Take a picture with a smartphone and email or text to teacher
- Through teacher-created digital format
- During in-school time (hybrid model) or lunch/materials pick-up times
- (6-8) Hand-in button on student platform

How will you differentiate this lesson for diverse learners? (Navigate to the lesson level on the standard Amplify Science platform and click on differentiation in the left menu.)

Supports:

- Make available the @Home Classroom Wall found in the @Home Student Packets to support discussions and writing. Students can add pictures to go with the vocabulary/key concepts to help them make meaning.
- Provide sentence starters for use in discussion and writing.

Extension:

- Write a critique of the simulation as a model of the human body.

Planning Resource

pages 9-12

| Day 2: _____ | | Day 3: _____ | |
|--|------------------------|--|------------------------|
| Minutes for science: _____ | | Minutes for science: _____ | |
| Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Synchronous | | Instructional format: <input type="checkbox"/> Asynchronous <input type="checkbox"/> Synchronous | |
| Lesson or part of lesson: | | Lesson or part of lesson: | |
| Mode of instruction: <input type="checkbox"/> Preview <input type="checkbox"/> Review <input type="checkbox"/> Teach full lesson live <input type="checkbox"/> Teach using synchronous suggestions <input type="checkbox"/> Students work independently using: <input type="checkbox"/> @Home Packet <input type="checkbox"/> @Home Slides and @Home Student Sheets <input type="checkbox"/> @Home Videos | | Mode of instruction: <input type="checkbox"/> Preview <input type="checkbox"/> Review <input type="checkbox"/> Teach full lesson live <input type="checkbox"/> Teach using synchronous suggestions <input type="checkbox"/> Students work independently using: <input type="checkbox"/> @Home Packet <input type="checkbox"/> @Home Slides and @Home Student Sheets <input type="checkbox"/> @Home Videos | |
| Students will... | Teacher will... | Students will... | Teacher will... |

| Types of Written Work in Amplify Science | |
|--|---|
| ten reflections rk tasks ion notebook pages explanations (typically at the end of Chapter) g pages for Sim uses, investigations, etc | |
| Written Work | Submitting Written Work |
| er and pencil lude prompts ent platform on Notebook leo or audio file vering prompt reated digital oogle , etc) | <ul style="list-style-type: none">• Take a picture with a smartphone and email or text to teacher• Through teacher-created digital format• During in-school time (hybrid model) or lunch/materials pick-up times• (6-8) Hand-in button on student platform |
| Science platform and click on differentiation in the left menu.) | |

Preparing to Teach Tips & Tricks

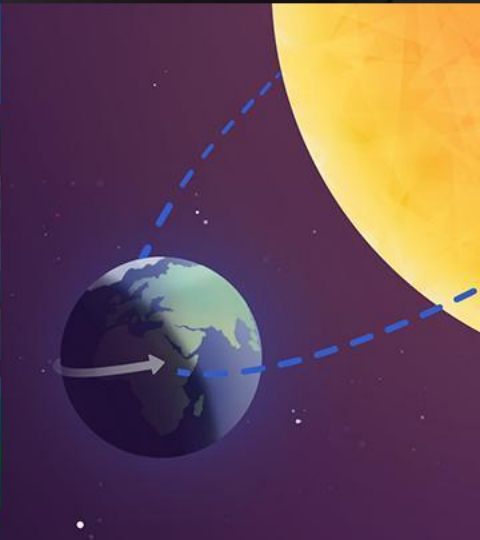
Use the standard Amplify Science TG alongside the @Home Resources to meet the needs of diverse learners.

Make sure you understand the big picture of the unit before diving into the lessons.

Be creative when it comes to student work.



Questions?



Plan for the day

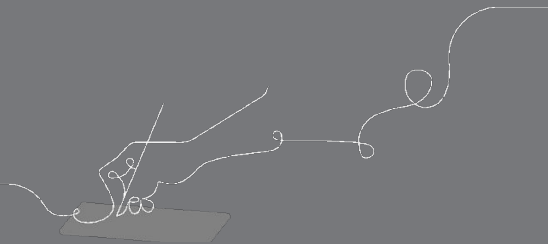
- Framing the day
- Amplify Science Instructional Materials
- Unit Internalization
- Planning to teach using @Home resources
- **Reflection and closing**

Reflecting on our goals

Are you able to:

- Leverage your understanding of your upcoming unit to make instructional decisions about remote learning using the Amplify Science@Home resources?
- Develop a multi-day plan for using @Home resources within your class schedule and instructional format?

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Welcome to Amplify Science!

This site contains supporting resources designed for the Los Angeles Unified School District Amplify Science adoption for grades TK–8.

All LAUSD schools have access to Amplify Science resources at this time.

Click here for [Remote Learning Resources for Amplify Science](#)

[Click here](#) to go back to the LAUSD homepage.

Click the button below to preview the digital Teacher's Guide, and check back for exciting updates to this site!



<https://amplify.com/lausd-science/>

Additional Amplify resources



Program Guide

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

<http://amplify.com/science/california/review>

Amplify Help

Find lots of advice and answers from the Amplify team.

my.amplify.com/help

Additional Amplify resources



Caregivers site

Provide your students' families information about Amplify Science and what students are learning

amplify.com/amplify-science-family-resource-intro/

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

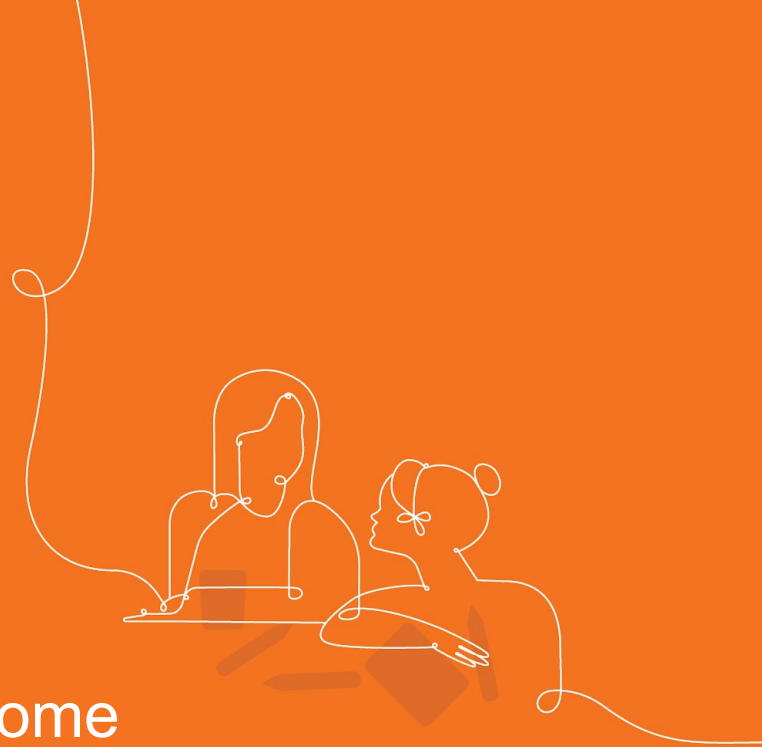
When contacting the customer care team:

- 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.

Thank you for your feedback!

Session: Unit Internalization with @Home Resources

Presenter: xx



Creating Assignments in Schoology

- Click Add Materials.
- Select Add Assignment.
- Fill out the Create Assignment form.
- Options. Use Options to turn on/off the following features: Use Individually Assign to only display the assignment to a specific member of the course or a grading group. ...
- Click Create to complete

LAUSD Shared Logins

AmplifyScience

Go to: my.amplify.com

A.

Log In with Amplify

| District Shared Logins | | |
|------------------------|---------------|-----------|
| Grade | Username | Password |
| Kindergarten | LAUSDscienceK | LAUSD1234 |
| 1 | LAUSDscience1 | LAUSD1234 |
| 2 | LAUSDscience2 | LAUSD1234 |
| 3 | LAUSDscience3 | LAUSD1234 |
| 4 | LAUSDscience4 | LAUSD1234 |
| 5 | LAUSDscience5 | LAUSD1234 |
| 6 | LAUSDscience6 | LAUSD1234 |
| 7 | LAUSDscience7 | LAUSD1234 |
| 8 | LAUSDscience8 | LAUSD1234 |

Elementary Student Apps Shared Logins

English

- Username: **ampsci123**
- Password: **ampsci123**

Spanish

- Username: **ampsci123sp**
- Password: **ampsci123sp**



**Elementary
Student Apps**