

**Do now:** Please login to your Amplify Science account. Let me know if you need support!

# Amplify Science

## Navigating Program Essentials

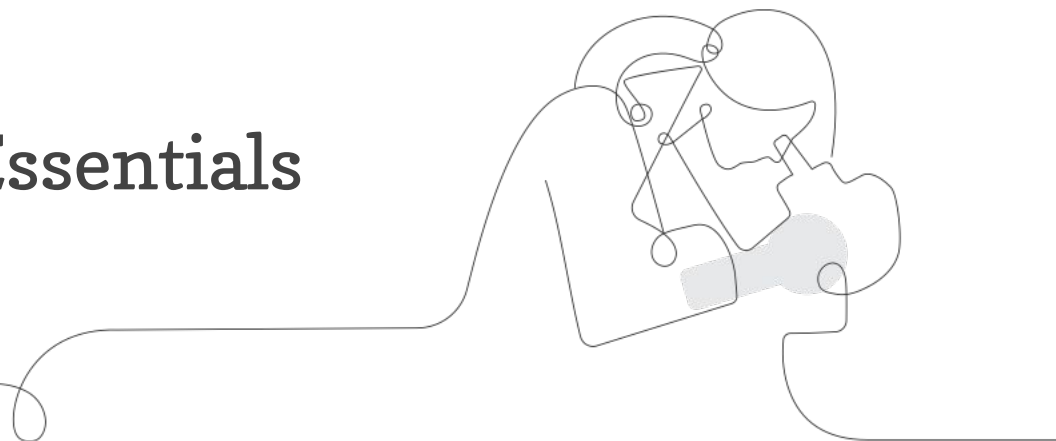
Grades 6-8

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NYC DOE

October 14 & October 15

Presented by



# New York City Resources Site

<https://amplify.com/amplify-science-nyc-doe-resources/>



Amplify.

## Amplify Science Resources for NYC (K-5)

Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades K-5.

UPDATE: Summer 2020

Introduction

Getting started resources

Planning and implementation resources

Admin resources

Parent resources

COVID-19 Remote learning resources 2020

Professional learning resources

Questions

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**Account Access:** It's an exciting time for Amplify Science! We have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS. You will have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

**Upcoming PL Webinars:** Join us for our Summer 2020 Professional Learning opportunities in July for NEW teachers and administrators and August for RETURNING teachers and administrators. Links to register coming soon!

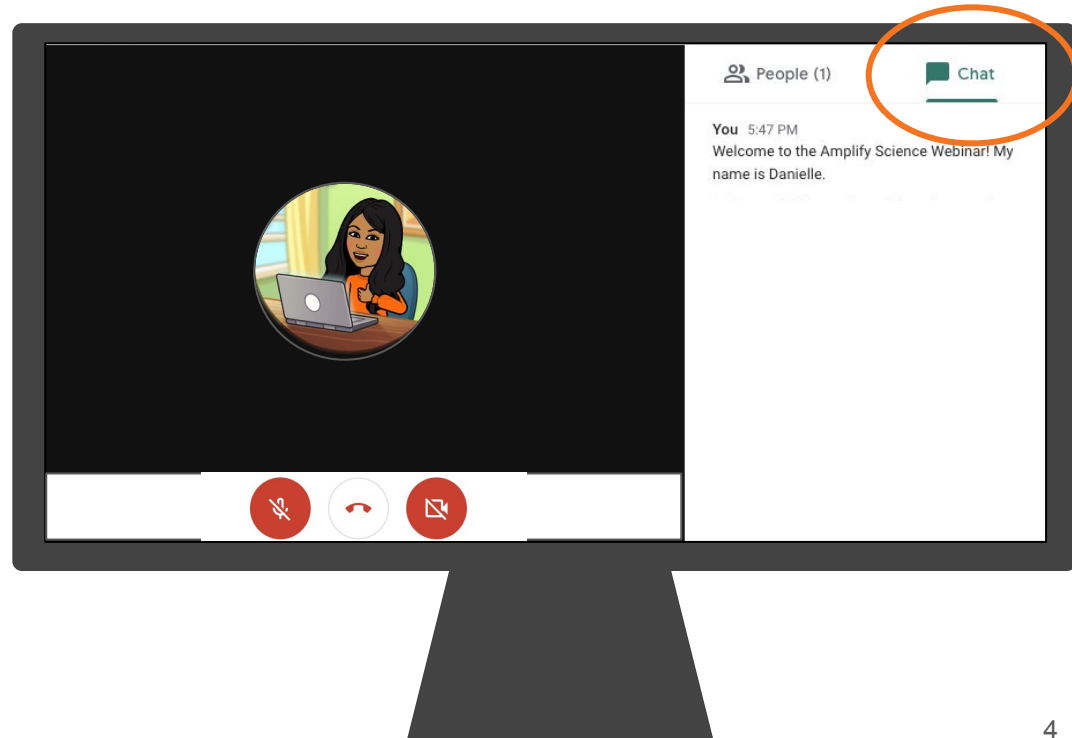
## Site Resources

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

# Introductions!

## Who do we have in the room today?

- **Question 1:** Which aspects of adopting a new science curriculum are you most excited or hopeful about?
- **Question 2:** What about adopting a new science curriculum to do you feel most hesitant about?

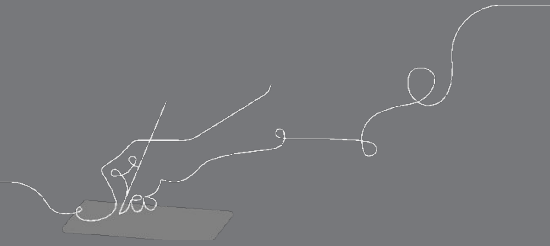


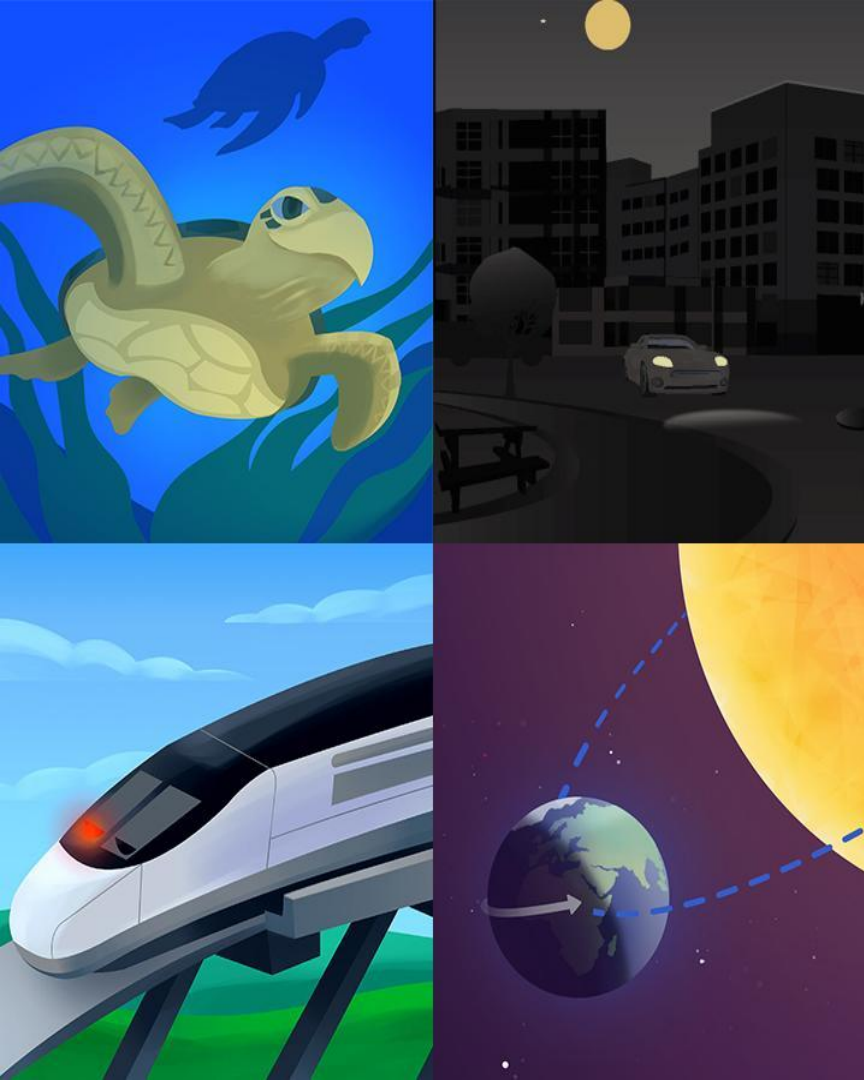
# Overarching goals

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

- Navigate the Amplify Science curriculum.
- Understand the program's phenomenon-based approach.
- Apply the program essentials to prepare to teach.

e





# Plan for the day

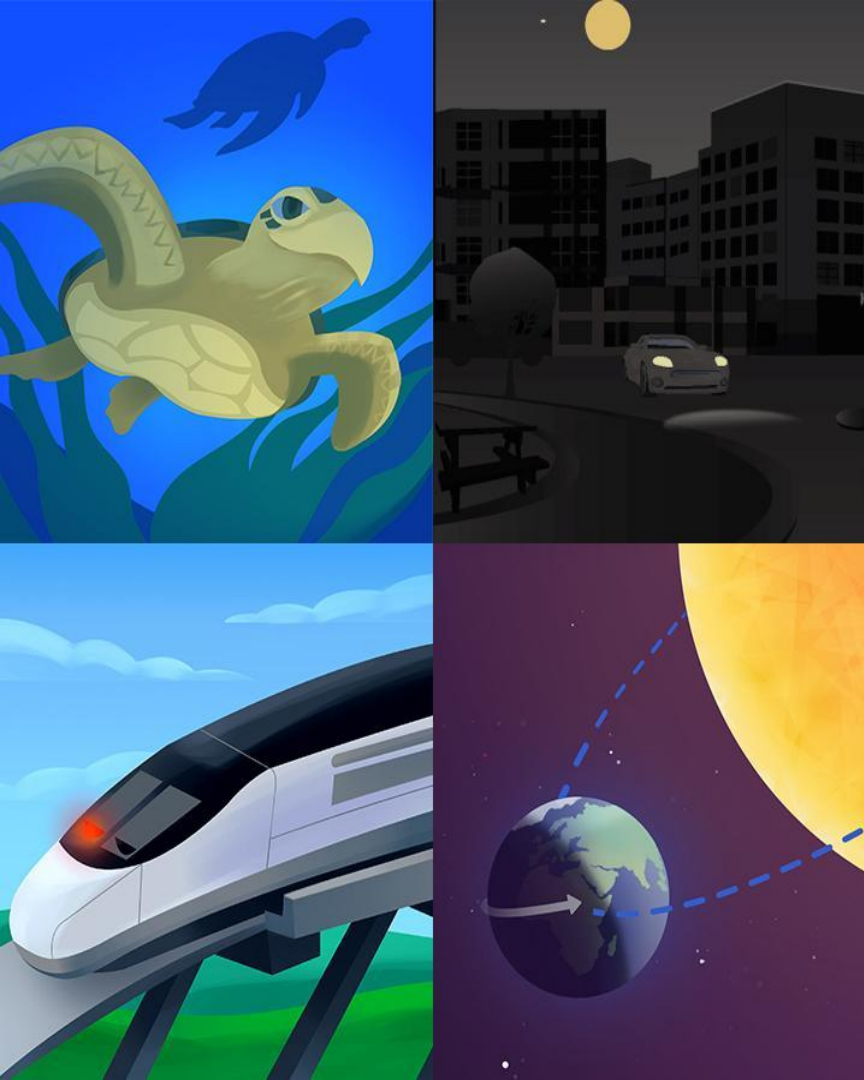
- Framing the day
  - What is Amplify Science?
- Preparing to teach
  - Phenomenon-based instruction
  - Navigation
  - 3-step method
- Teaching a lesson
  - Example lesson
  - Reflection
- Teaching a unit
  - Coherence
  - Unit Guide resources
- Reflection and closing

# Norms: Establishing a culture of learners

- **Take risks:** Ask any questions, provide any answers.
- **Participate:** Share your thinking, participate in discussion and reflection.
- **Be fully present:** Unplug and immerse yourself in the moment.
- **Physical needs:** Stand up, get water, take breaks.

# Capturing key takeaways!

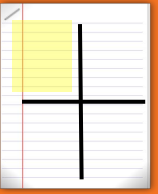
<i>Notes</i>	<i>Preparing to teach</i>
<i>Teaching a lesson</i>	<i>Teaching a unit</i>



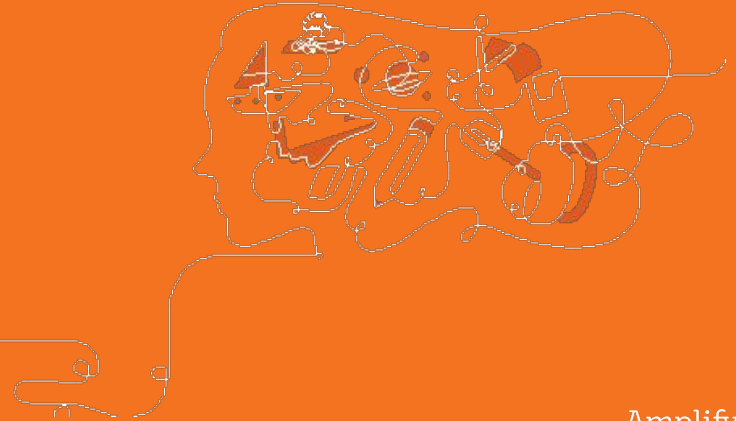
# Plan for the day

- **Framing the day**
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# What is Amplify Science?





THE LAWRENCE  
HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA, BERKELEY

+ Amplify.

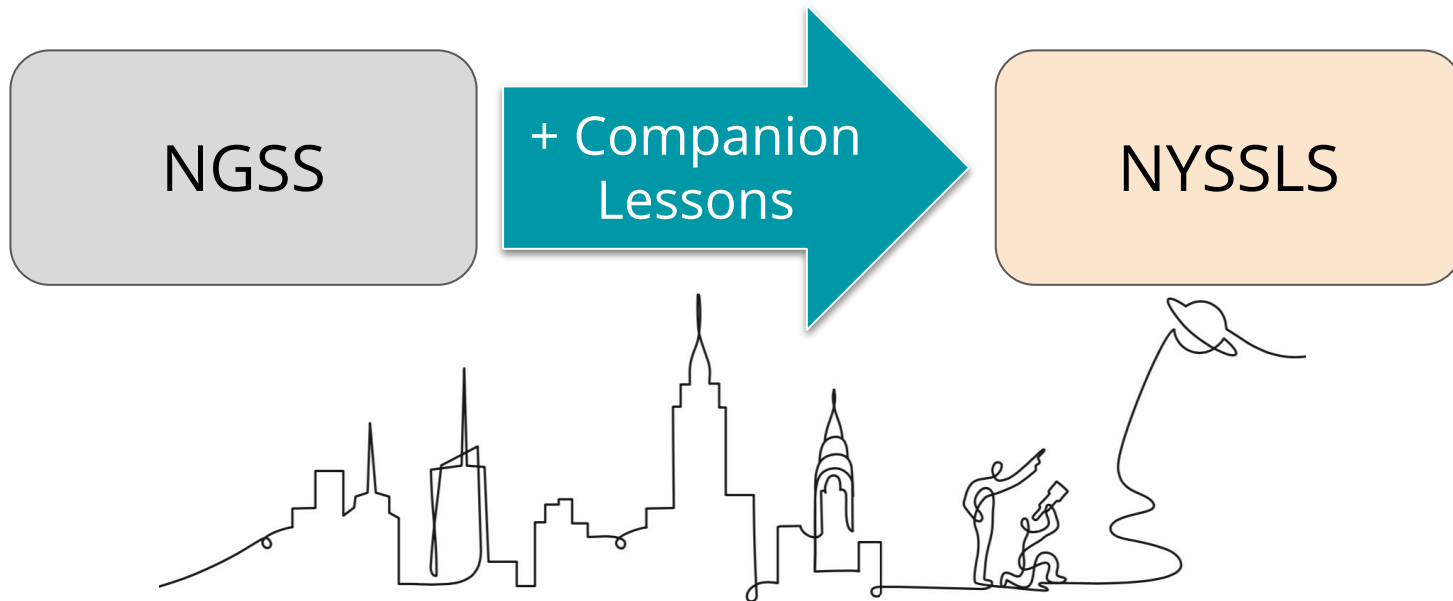
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Amplify Science

# NYC Companions

Amplify Science

Amplify Science NYC Edition



# NYC Companion Lesson Slides, Grade 6

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

Grade 6 lesson guides and copymasters

Harnessing Human Energy: Investigating Electrical Devices: >

Harnessing Human Energy: Investigating Non-Touching Forces: >

Harnessing Human Energy: Reading About Non-Touching Forces: >

Thermal Energy: Designing Hot and Cold Packs: >

Populations and Resources: Reading "The Amazing Variety of Life in a Coral Reef": >

Weather Patterns: Reading "What Makes Water Move?" >

Ocean, Atmosphere, and Climate: Investigating Deep Ocean Currents: >

Slides for the first unit will be available on the NYC Resources site in September.

# NYC Companion Lesson Slides, Grade 7

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

Grade 7 lesson guides and copymasters

Metabolism: Reading “How You Are Like a Sneezing Iguana” >

Metabolism: Plant Growth Investigations >

Metabolism: Reading “How Do Trees Grow So Huge Without Eating?” >

Phase Change: Reading “Icy Heat” >

Chemical Reactions: Identifying Substances >

Chemical Reactions: Mixtures, Properties, and Separation >

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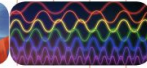



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## NYC Middle School Unit Pacing Calendar 20-21\*

	Sept.			Oct.			Nov.			Dec.			Jan.		Feb.		Mar.			Apr.			May			Jun.													
	9/14	9/21	9/28	10/5	10/12	10/19	10/26	11/2	11/9	11/16	11/23	11/30	12/7	12/14	12/21	1/4	1/11	1/18	1/25	2/1	2/8	2/15	3/1	3/8	3/15	3/22	3/29	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	
<b>6th Grade</b>																																							
	Launch Unit: Harnessing Human Energy			Thermal Energy			Ocean, Atmosphere, and Climate			Weather Patterns			Populations and Resources			Matter and Energy in Ecosystems			Earth's Changing Climate																				
<b>7th Grade</b>																																							
	Launch Unit: Microbiome			Metabolism			Phase Change			Chemical Reactions			Plate Motion			Engineering Internship Plate Motion:			Rock Transformations			Engineering Internship: Earth's Changing Climate																	
<b>8th Grade</b>																																							
	Launch Unit: 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														

\*Updated Sequence for the 2020-2021 School Year

# Middle School Curriculum New York City Edition

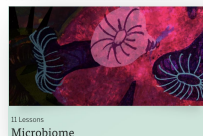
## Grade 6

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



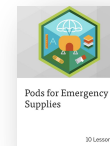
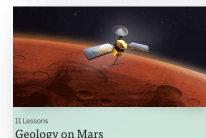
## Grade 7

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



## Grade 8

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





# Middle School curriculum: Unit types

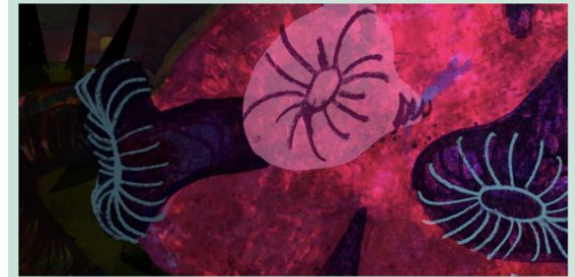
## Launch Units



11 Lessons  
Geology on Mars



11 Lessons  
Harnessing Human Energy



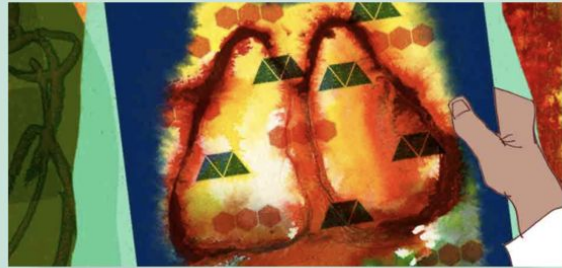
11 Lessons  
Microbiome

# 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



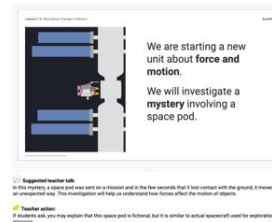
Investigation  
Notebooks or digital  
student experience



Articles  
(digital or print)



Simulations and other  
digital tools



Classroom Slides



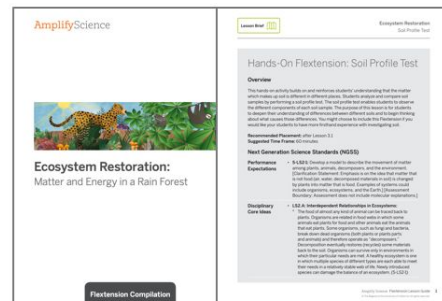
Teacher's Guide  
(digital or print)

DATE	TIME	LEVEL	STATUS
2/26/20	5:28 PM Wed. 4/13/20	0	3
2/26/20	5:20 PM Wed. 4/13/20	2	missing
2/26/20	4:57 PM Wed. 4/13/20	0	3
2/26/20	3:42 PM Thu. 4/14/20	0	3

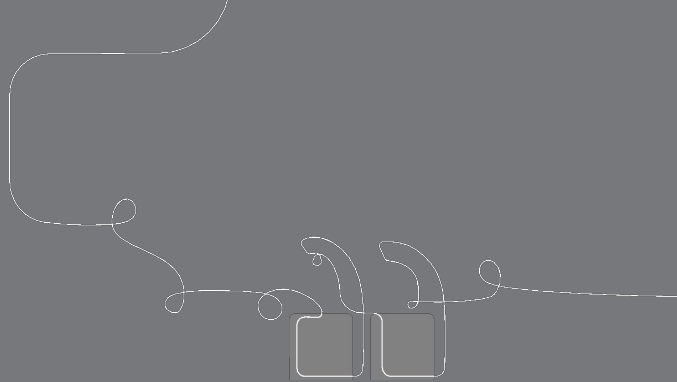
Assessments and  
Reporting



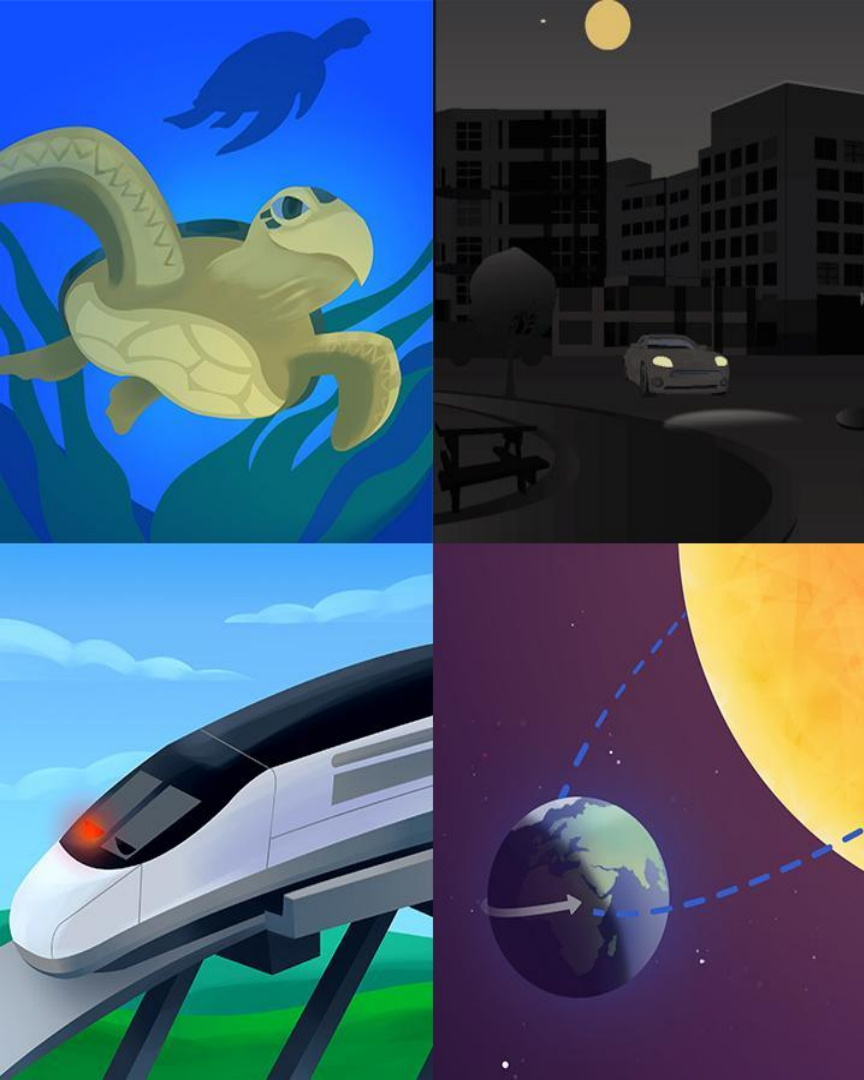
Hands-on and print  
materials



Hands-on Flextions

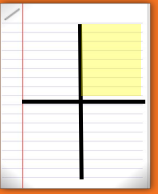


# Questions?

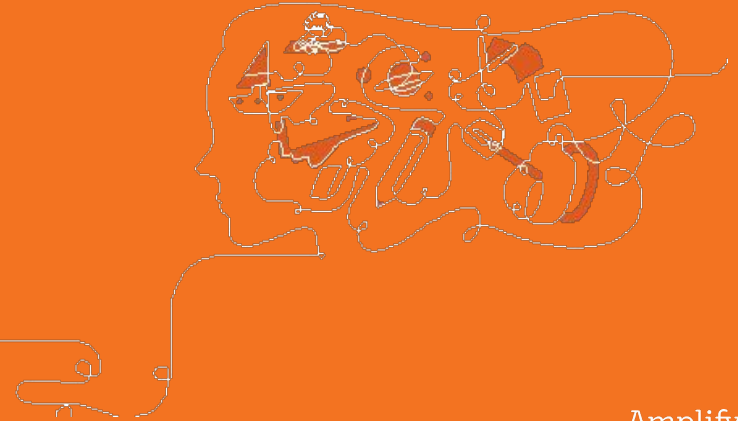


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# What is phenomenon-based instruction?



# NGSS/NYSSLS

## Phenomenon-based teaching and learning

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



# Comparing topics and phenomena

<b>Topic-based</b>	<b>Phenomenon-based</b>
Ocean habitats	A sea turtle can survive in an ocean habitat where sharks live

# NGSS/NYSSLS

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

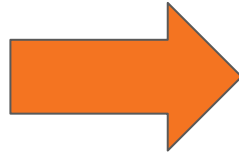
Topic-based	Phenomenon-based
What is the water cycle?	What caused the storms in this area to be severe?
What is an ecosystem?	Why are there suddenly so many moon jellies?
How does light energy interact with matter?	Why does Australia have an elevated skin cancer rate?

# Comparing topics and phenomena

## A shift in science instruction

from learning about

(like a student)



to figuring out

(like a scientist)

# Introducing a phenomenon

## Metabolism

Pay attention to the phenomenon, or **observable event**, that students are asked to figure out.



# Metabolism phenomenon



## Claims:

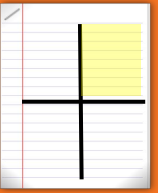
- Elisa isn't getting enough sleep.
- Elisa is not eating enough food or not eating the right foods.
- Elisa has a medical condition.

# Amplify Science

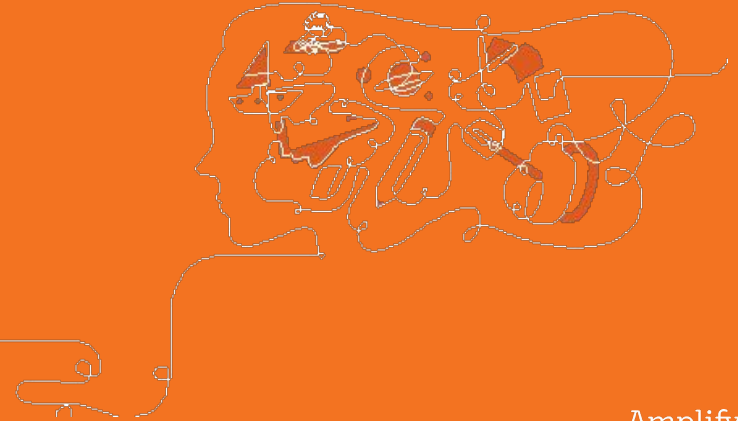
## Anchoring phenomenon

- Complex and rich
- Drives learning through a whole unit
- Specific and observable
- Relatable at students' developmental level





# Guided work time: Navigation



# Unit



## Chapters




## Lessons



## Activities




19 Lessons  
**Metabolism**




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

Lesson 3. 1:  
Learning About  
Energy Release in  
the Body

Lesson 3. 2:  
Exploring Chemical  
Reactions

Lesson 3. 3:  
Cellular Respiration,  
Growth, and Repair

Lesson 3. 4:  
"Blood Doping:  
Messing with  
Metabolism to Win  
Races"

Lesson 3. 5:  
Modeling Cellular  
Respiration in an  
Athlete's Body

WARM-UP Warm-Up		2 READING Examining Evidence About Jordan Jones's...		3 STUDENT-TO-STUDENT DISCUSSION Discussing Evidence About Jordan Jones's...		4 TEACHER-LED DISCUSSION Considering Claim 2
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# Logging in

If you have your login information please use that. If not, please use the NYC DOE Review site, below.

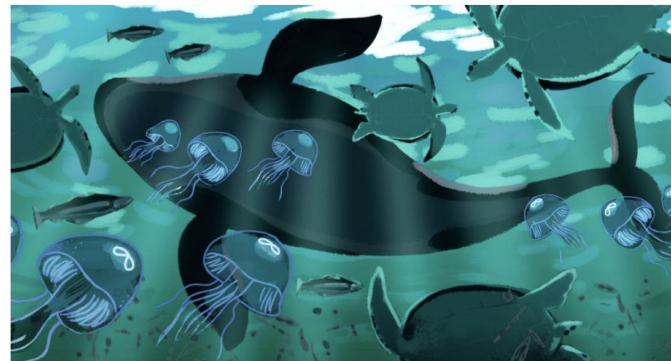
Amplify. <https://amplify.com/amplify-science-nyc-doe-review/>

Students take on the role of a scientist or engineer every day.

---

Amplify Science is a new blended curriculum developed to align to the New York City PK–8 Science Scope and Sequence 2018 that meets the New York State Science Learning Standards.

The middle school grades of our K–8 curriculum recently received the only all-green rating by EdReports.



Begin your review

What sets Amplify Science apart?

The Amplify Science approach

Components overview

Review grades K–5

Begin your review

Grades K–5

Click here

Grades 6–8

# Navigation summary

1. Click the caret to select your grade-level
2. Select your first unit
  - a. You are now on the Unit Landing Page.
3. Select **JUMP DOWN TO UNIT GUIDE**
4. Select **Unit Map** under **Planning for the unit**
5. Option to open **Printable Unit Map** in a second tab for ease of reading.



# Preparing to teach: Step 1

## Lesson Brief

1. Navigate to **Lesson 1.1** in a Launch unit or **Lesson 1.2** in Core unit
  - From the Unit Landing page, select Chapter 1, then select Lesson 1.1 or 1.2
2. Scroll down to the **Lesson Brief**
  - Read the **Lesson Overview** and consider:
    - What is the purpose of this lesson?
    - In which activity are students introduced to the anchor phenomenon they'll work to figure out?
  - Read the **Materials & Preparation** and consider:
    - What is one step of preparation you will need to do before this lesson?
3. Explore the other resources in the Lesson Brief: **Differentiation, Standards, Vocabulary, Unplugged**
4. Type **one noticing** from exploring the Lesson Brief into the chat.

# Classroom slides

Lesson 1.2: Describing Changes in Motion 10 min

## Activity 2

# Discussing What Happened to the Pod





Lesson 1.2: Describing Changes in Motion Activity 1



We are starting a new unit about **force and motion**.

We will investigate a **mystery** involving a space pod.

 **Suggested teacher talk:**  
In this mystery, a space pod was sent on a mission and in the few seconds that it lost contact with the ground, it moved in an unexpected way. This investigation will help us understand how forces affect the motion of objects.

 **Teacher action:**  
If students ask, you may explain that this space pod is fictional, but it is similar to actual spacecraft used for exploration missions.

# Preparing to teach: Step 3

## Digital Resources

1. Explore the **Digital Resources** in the lesson.
2. **Consider:**
  - What do you need to project?
  - Are there documents in Digital Resources that you need to review or set up? (e.g. Assessment Guide, Annotation Tracker, Articles)
  - Do you have any new questions after looking at Digital Resources? Where will you look to find more information?

The screenshot shows the Amplify Science interface for Lesson 1.2: Welcome to Medical School. The top navigation bar includes the Amplify Science logo and the path: Metabolism > Chapter 1 > Lesson 1.2. The main header features the lesson title and a colorful abstract graphic. Below the header is a navigation bar with tabs for Lesson Brief (4 Activities), Teacher (Introducing Medical Student Role), Warm-Up (Warm-Up), Teacher (Generating Claims About Elisa), and SIM (Introducing the Metabolism Simulation). The main content area includes a 'RESET LESSON' button, a 'GENERATE PRINTABLE LESSON GUIDE' button, and a 'Digital Resources' section. The 'Digital Resources' section is circled in orange and lists: All Projections, Video: Elisa's Condition, Completed Scientific Argumentation Wall Diagram, and Metabolism Investigation Notebook, pages 5-8. A 'Español' button is visible in the bottom left corner.

# Preparing to teach

## 3-step method

1. Lesson Brief
2. Instructional Guide
3. Digital Resources

The screenshot shows the AmplifyScience interface for Lesson 1.2. At the top, the breadcrumb navigation reads "AmplifyScience > Metabolism > Chapter 1 > Lesson 1.2". The main header area features a colorful abstract illustration of a person's face and molecular structures, with the text "Lesson 1.2: Welcome to Medical School". Below this is a navigation bar with three main sections: "TEACHER Introducing Medical Student Role" (labeled "Step 2"), "1 WARM-UP Warm-Up", and "TEACHER Generating Claims About Elisa" (labeled "Step 3"). A "2 SIM Introducing the Metabolism Simulation" is also visible. The main content area is divided into three columns: "Step 1" (Overview, Materials & Preparation, Differentiation, Standards, Vocabulary, Unplugged?), "Step 2" (Overview), and "Step 3" (Digital Resources). The "Digital Resources" column lists: "All Projections", "Video: Elisa's Condition", "Completed Scientific Argumentation Wall Diagram", and "Metabolism Investigation Notebook, pages 5-8". A "RESET LESSON" button is located at the top left of the content area, and a "GENERATE PRINTABLE LESSON GUIDE" button is at the top right. A "Español" button is at the bottom left.

# Navigation Temperature Check

Rate yourself on your comfort level accessing Amplify Science materials and navigating a digital curriculum.

1 = Extremely Uncomfortable

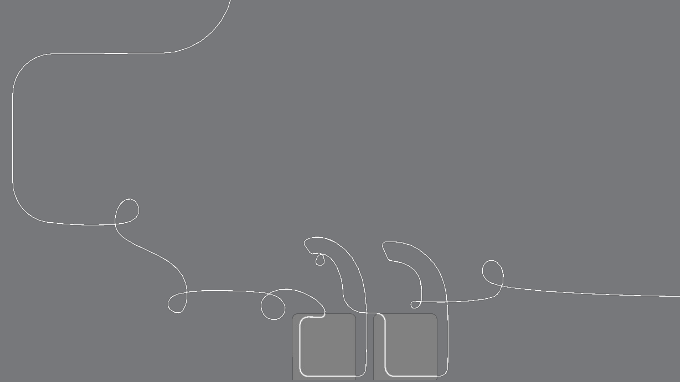
2 = Uncomfortable

3 = Mild

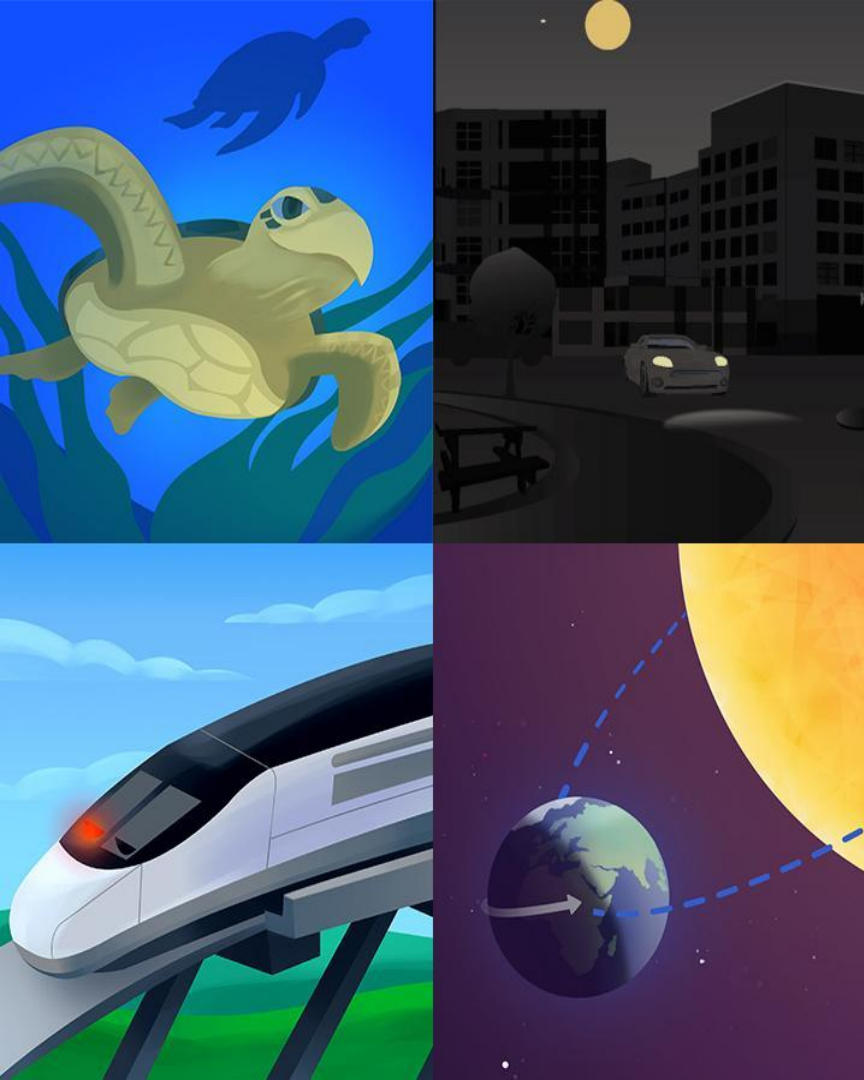
4 = Comfortable

5 = Extremely Comfortable

Questions?

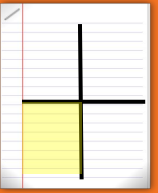




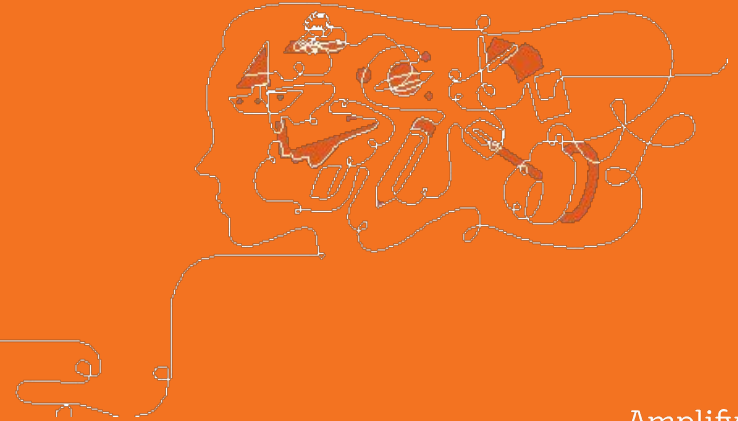


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# Example lesson



# Digital classroom wall

## 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?

Metabolism - Unit Question - Lesson 1.1 - AMP12022.1.1.MET  
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## Chapter 1 Question

Why does Elisa feel tired all the time?

Metabolism - Chapter 1 Question - Lesson 1.1 - AMP12022.1.1.MET  
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Which molecules do cells need to function?



## Key Concepts

Metabolism - Key Concepts - Lesson 1.1 - AMP12022.1.1.MET  
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## Vocabulary

Metabolism - Vocabulary - Lesson 1.1 - AMP12022.1.1.MET  
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**metabolism**

Metabolism - Vocabulary - Lesson 1.1 - AMP12022.1.1.MET  
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# Student volunteers



# Setting a purpose for the second read

- Where does the body get glucose, amino acids, and oxygen molecules?
- What might happen if the body doesn't take in one or all of these molecules?

## Molecules Cells Need

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

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

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

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

food → large protein molecule → small amino acid molecule

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

food → large starch molecule → small glucose molecule

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

# Digital classroom wall

## 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?

Metabolism: Unit Question - Lesson 1.1 - AMP10000.01.001  
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## Chapter 1 Question

Why does Elisa feel tired all the time?

Metabolism: Chapter 1 Question - Lesson 1.1 - AMP10000.01.001  
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Which molecules do cells need to function?



## Key Concepts

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

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## Vocabulary

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**metabolism**

Metabolism: Vocabulary - Lesson 1.1 - AMP10000.01.001  
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# Returning to Elisa's problem

## Claims:

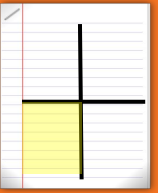
- ~~Elisa isn't getting enough sleep.~~
- ~~Elisa is not eating enough food or not eating the right foods.~~
- Elisa has a medical condition.

### Healthy Sleep Comparison

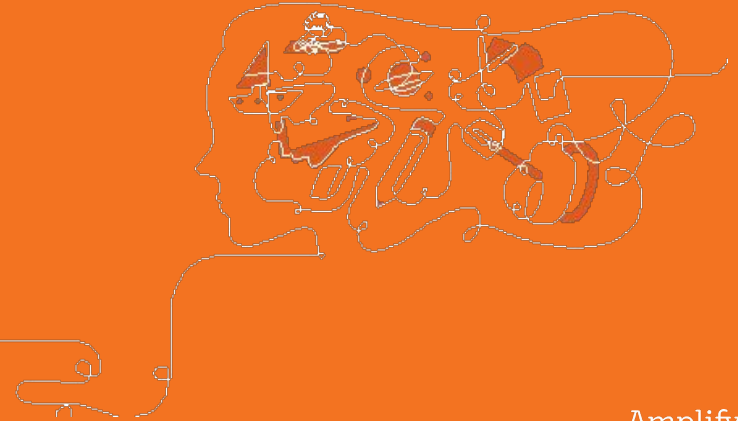
Average Teenage Sleep Patterns	Elisa's Sleep Pattern
Many scientific studies of teenagers show that most healthy teenagers get between 8 and 10 hours of sleep each night.	Elisa's sleep journal shows that she is getting about 9 hours of sleep every night.

### Healthy Eating Comparison

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



# Reflecting on phenomenon-based learning





# Example lesson reflection

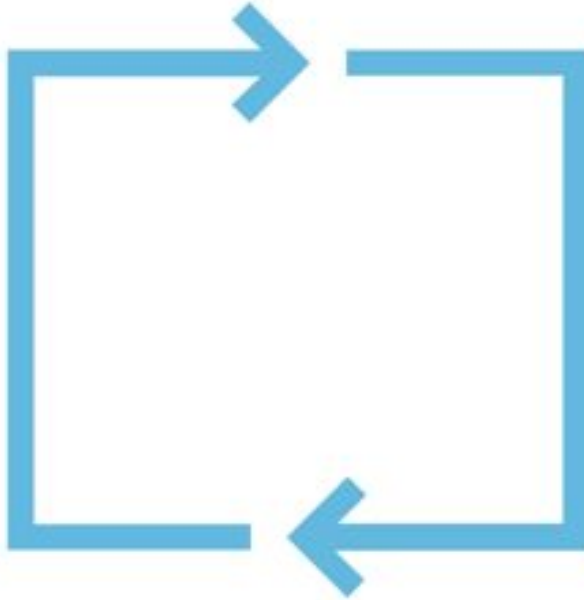
## Think-Type-Discuss

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



# Multimodal learning

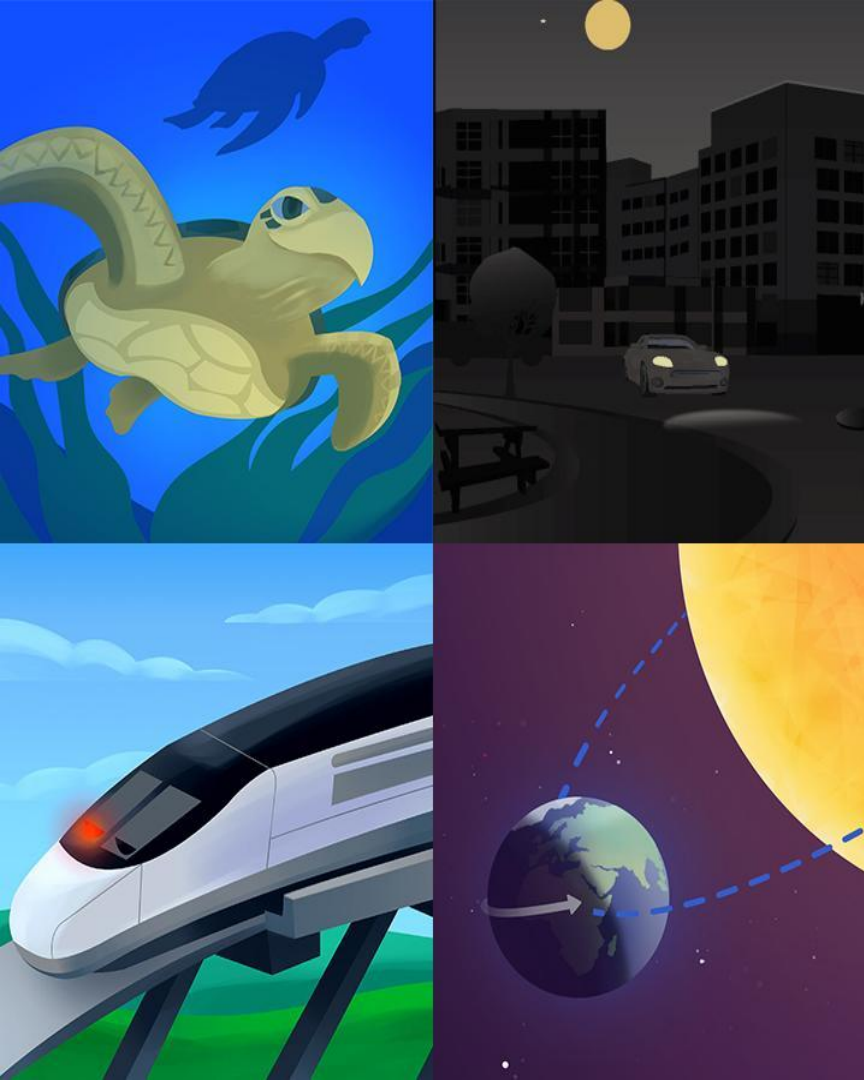
Gathering evidence over multiple lessons



**Do,  
Talk,  
Read,  
Write,  
Visualize**

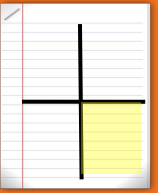
# Questions?



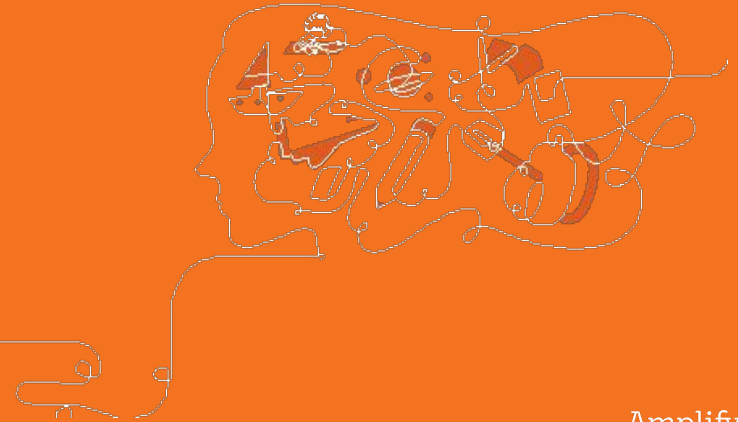


# Plan for the day

- Framing the day
  - What is Amplify Science?
- Preparing to teach
  - Phenomenon-based instruction
  - Navigation
  - 3-step method
- Teaching a lesson
  - Example lesson
  - Reflection
- **Teaching a unit**
  - **Coherence**
  - **Unit Guide resources**
- Reflection and closing

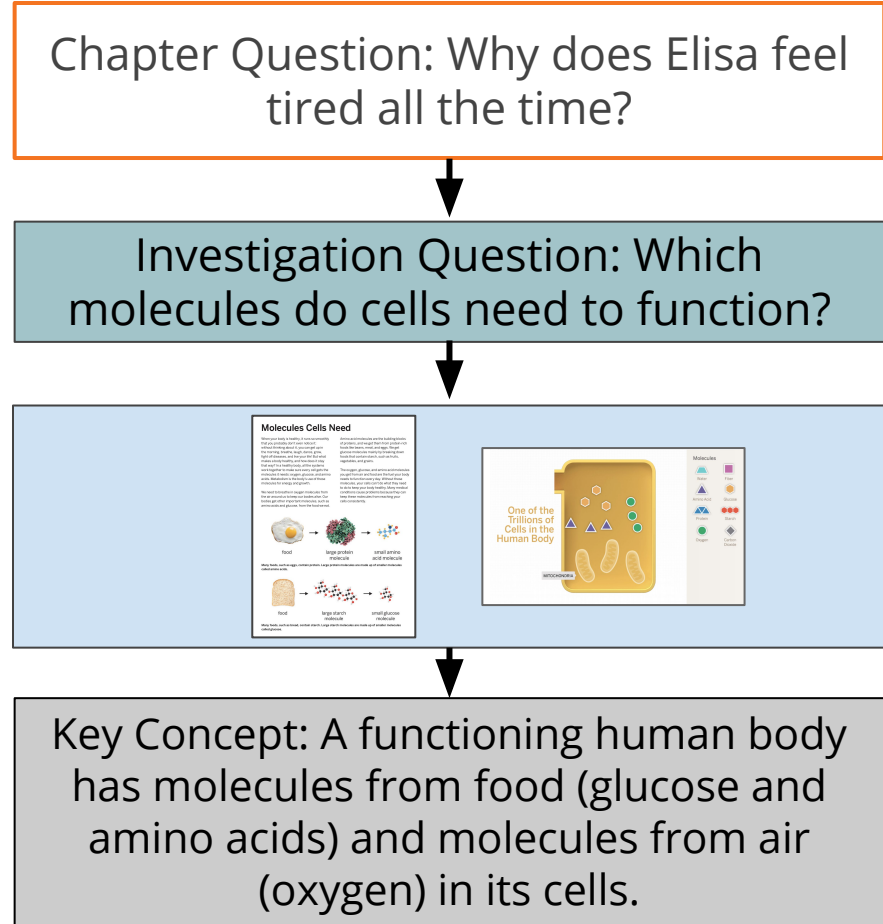
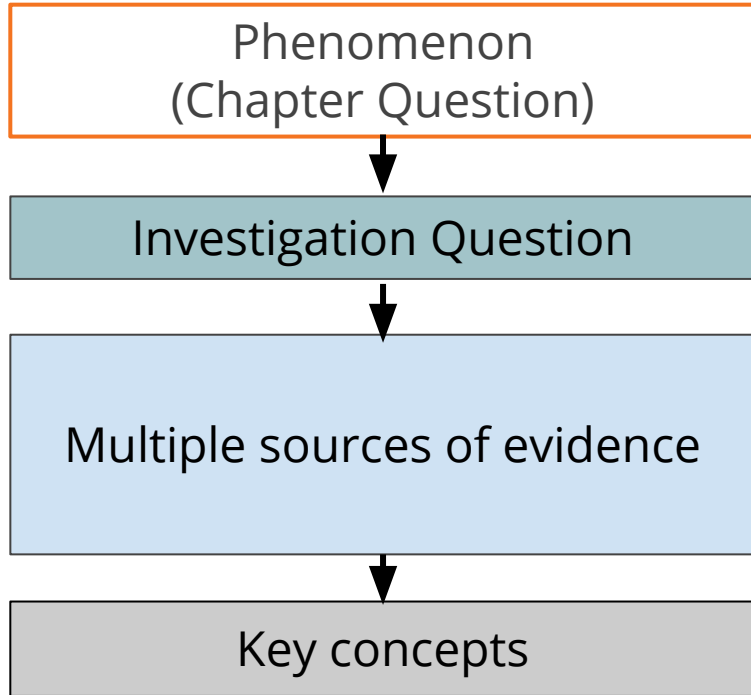


# Coherence



# Coherence flowchart

## A diagram of student learning



# Metabolism Chapter 1

AmplifyScience > Metabolism > Chapter 1

## Chapter 1: Molecules Needed by the Cells

▼ JUMP DOWN TO CHAPTER OVERVIEW

**Lesson 1.1:**  
Pre-Unit Assessment

⚙️ SETTINGS

**Lesson 1.2:**  
Welcome to Medical  
School

**Lesson 1.3:**  
Evaluating Initial  
Claims About Elisa

# Coherence flowchart

## Metabolism Chapter 1

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

Investigation Question

Multiple sources of evidence

Science ideas

Investigation Question: Which **molecules** do **cells** need to function?

Multiple sources of evidence

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



# Coherence flowchart

## Metabolism Chapter 1

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

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

- Evidence: Investigate molecules in the Sim
- Evidence: Test diets in the Sim

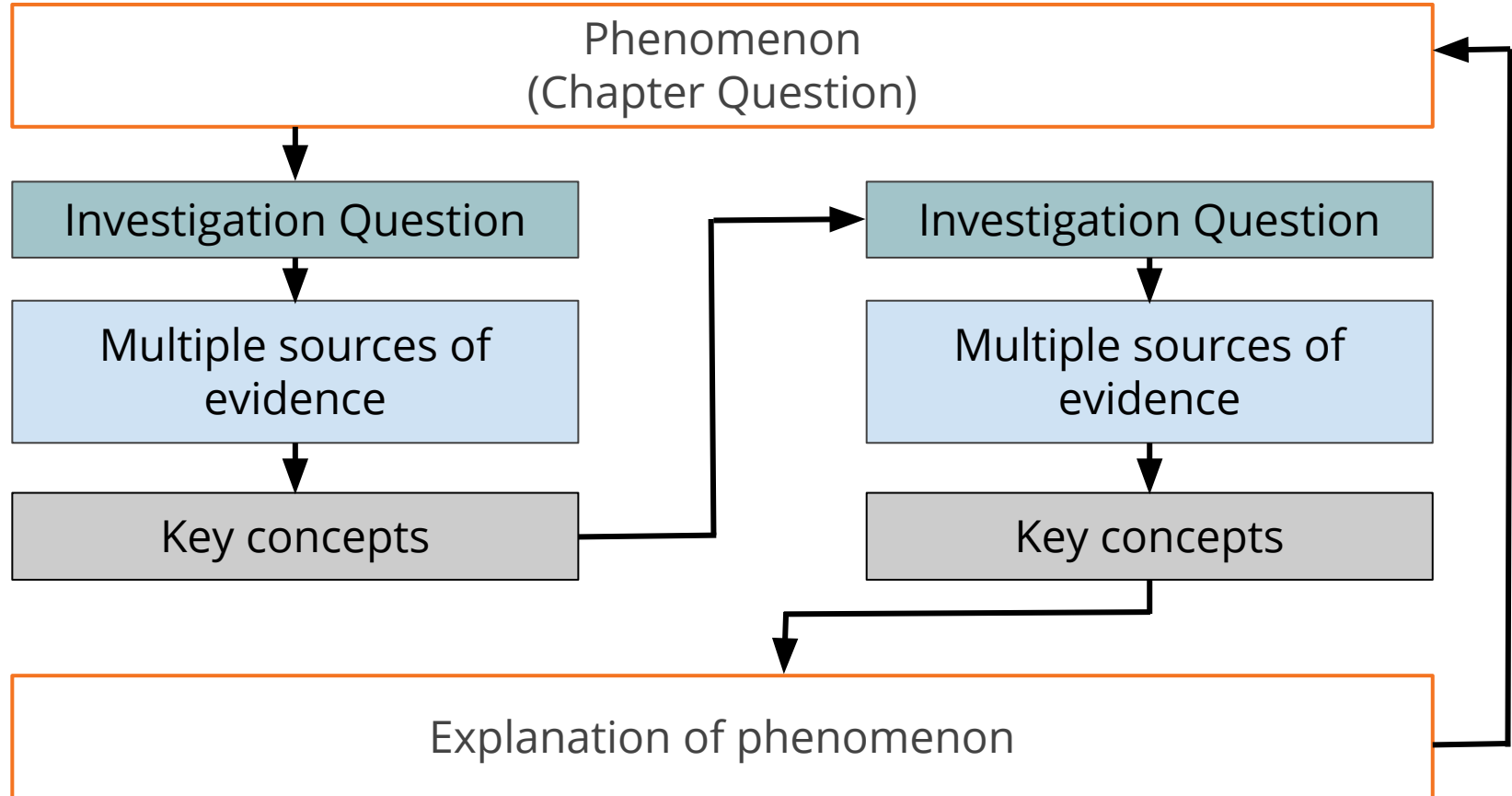
- The body takes in molecules by eating and breathing.
- Some of these molecules travel to the cells of the body.

Investigation Question: Which molecules do cells need to function?

- Evidence: Read "Molecules Cells Need"
- Evidence: Model a healthy cell in the modeling tool

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

# Coherence flowchart



# Metabolism: Making the Diagnosis

The problem students work to solve

Chapter 1 Question

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

Why does Elisa feel tired all the time?

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

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

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)

Which molecules do cells need to function? (1.3)

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

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

- Evaluate evidence and claims about Elisa (1.3)

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 the time her cells may not be getting what they need.

Investigation Question

Evidence Sources and reflection opportunities

Key Concepts

Applying back to the problem

The explanation that students can make to answer the Chapter 1 Question

# Navigate to your own coherence flowchart

1. From the Unit Landing Page, select **JUMP DOWN TO UNIT GUIDE**
2. Under Printable Resources, select **Coherence Flowchart**
3. Look over the coherence flowchart for **Chapter 1**.

The screenshot shows the AmplifyScience website interface for 'Energy Conversions'. The page is divided into several sections: 'Planning for the Unit', 'Printable Resources', and 'Offline Preparation'. An orange arrow points from the 'Unit Overview' link in the 'Planning for the Unit' section to the 'Coherence Flowcharts' link in the 'Printable Resources' section. The 'Unit Overview' link is highlighted with a white background. The 'Printable Resources' section lists various resources, including 'Coherence Flowcharts', 'Copymaster Compilation', 'Flexension Compilation', 'Investigation Notebook', 'Multi-Language Glossary', 'NGSS Information for Parents and Guardians', 'Print Materials (8.5" x 11")', and 'Print Materials (11" x 17")'. The 'Offline Preparation' section includes a link to the 'Offline Guide'.

AmplifyScience > Energy Conversions

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
- Books in This Unit
- Apps in This Unit

Printable Resources

- Coherence Flowcharts
- Copymaster Compilation
- Flexension Compilation
- Investigation Notebook
- Multi-Language Glossary
- NGSS Information for Parents and Guardians
- Print Materials (8.5" x 11")
- Print Materials (11" x 17")

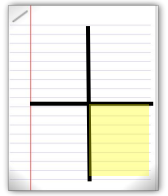
Offline Preparation

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

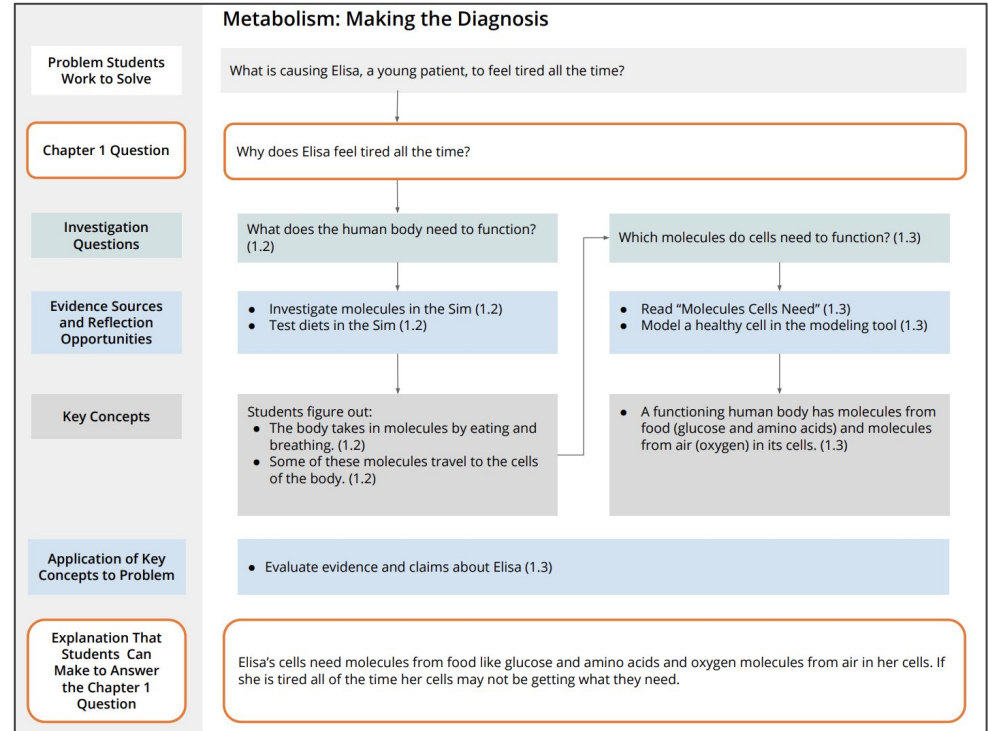
Offline Guide

Español

# Capture your thinking!

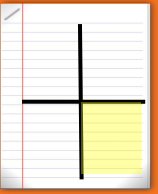


How can the coherence flowchart serve as a planning tool as you begin teaching Amplify Science?

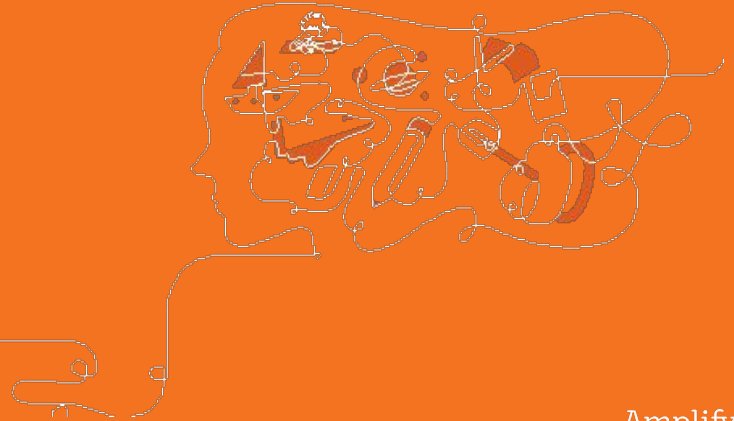


# Questions?





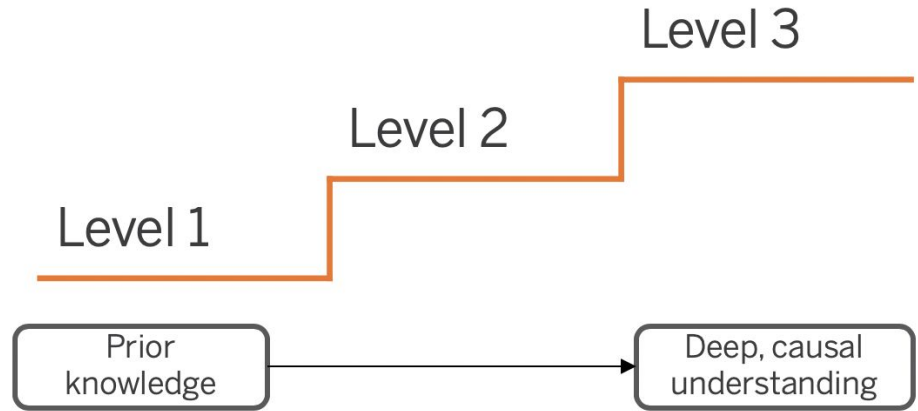
# Other Unit Guide resources



# Progress Build

## Teaching tip

Being familiar with your unit's Progress Build means you know what's coming. This will help you avoid giving ideas away too early in the unit!





# Unit Guide

## 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




Books in This Unit




## Printable Resources


 Coherence Flowcharts

 Copymaster Compilation


 Flexension Compilation

 Investigation Notebook

 Multi-Language Glossary

 NGSS Information for Parents and Guardians

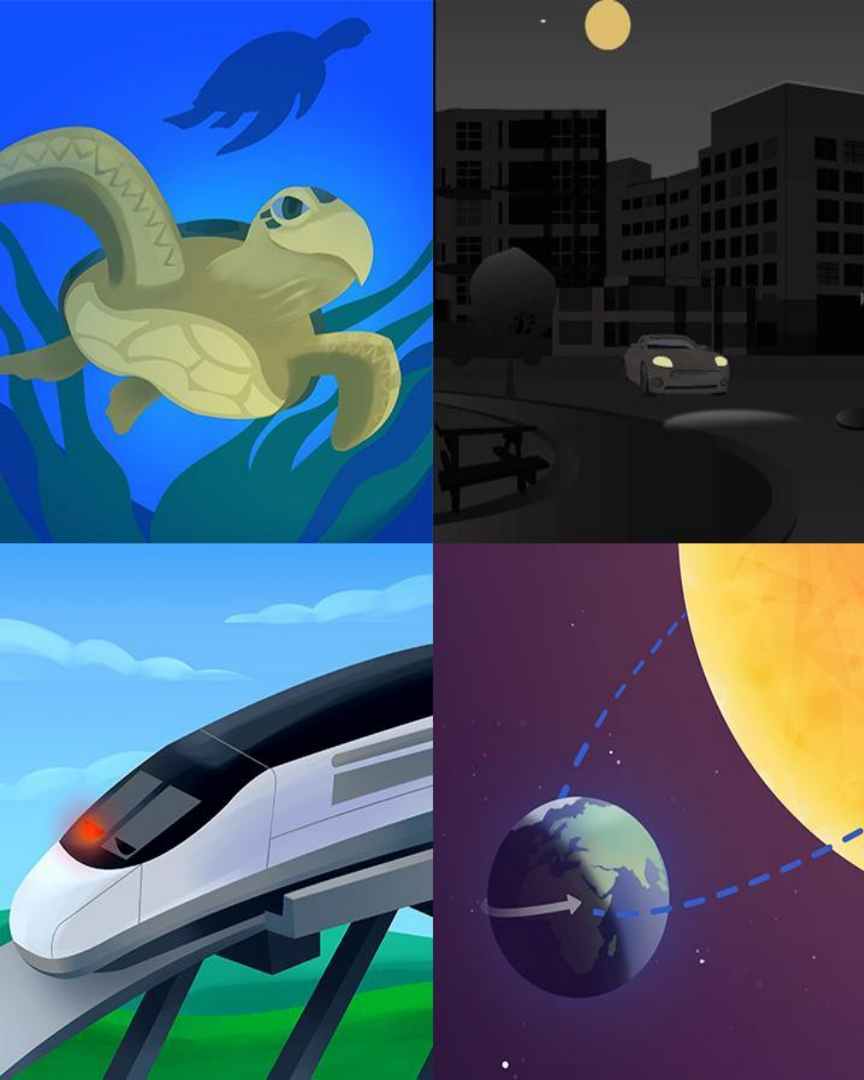
 Print Materials (8.5" x 11")

 Print Materials (11" x 17")

## Offline Preparation

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

Offline Guide



# Plan for the day

- Framing the day
  - What is Amplify Science?
- Preparing to teach
  - Phenomenon-based instruction
  - Navigation
  - 3-step method
- Teaching a lesson
  - Example lesson
  - Reflection
- Teaching a unit
  - Coherence
  - Unit Guide resources
- **Reflection and closing**

# Navigation Temperature Check

Rate yourself on your comfort level accessing Amplify Science materials and navigating a digital curriculum.

1 = Extremely Uncomfortable

2 = Uncomfortable

3 = Mild

4 = Comfortable

5 = Extremely Comfortable

Questions?

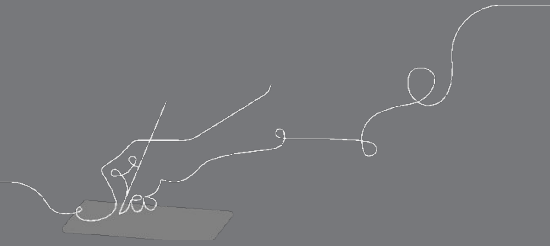


# Overarching goals

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

- Navigate the Amplify Science curriculum.
- Understand the program's phenomenon-based approach.
- Apply the program essentials to prepare to teach.

e



# New York City Resources Site

<https://amplify.com/amplify-science-nyc-doe-resources/>



Amplify.

## Amplify Science Resources for NYC (K-5)

Welcome! This site contains supporting resources designed for the New York City Department of Education Amplify Science adoption for grades K-5.

UPDATE: Summer 2020

Introduction

Getting started resources

Planning and implementation resources

Admin resources

Parent resources

COVID-19 Remote learning resources 2020

Professional learning resources

Questions

UPDATE: Summer 2020

**Account Access:** It's an exciting time for Amplify Science! We have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS. You will have access to the many updates and upgrades in our curriculum until late August/early September when we will update our rosters from STARS.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-823-1969) for access to your temporary login for summer planning.

**Upcoming PL Webinars:** Join us for our Summer 2020 Professional Learning opportunities in July for NEW teachers and administrators and August for RETURNING teachers and administrators. Links to register coming soon!

## Site Resources

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

# Additional Amplify resources



## **Program Guide**

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

**[my.amplify.com/programguide](https://my.amplify.com/programguide)**

## **Amplify Help**

Find lots of advice and answers from the Amplify team.

**[my.amplify.com/help](https://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/](https://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.

# AmplifyScience@Home

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



# 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%

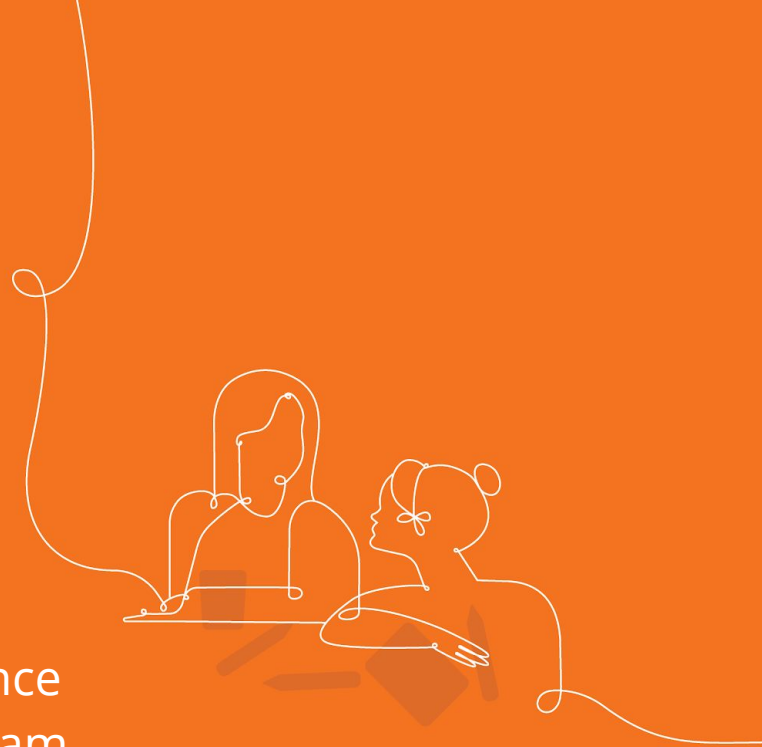
## @Home Videos

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



# @Home Units

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

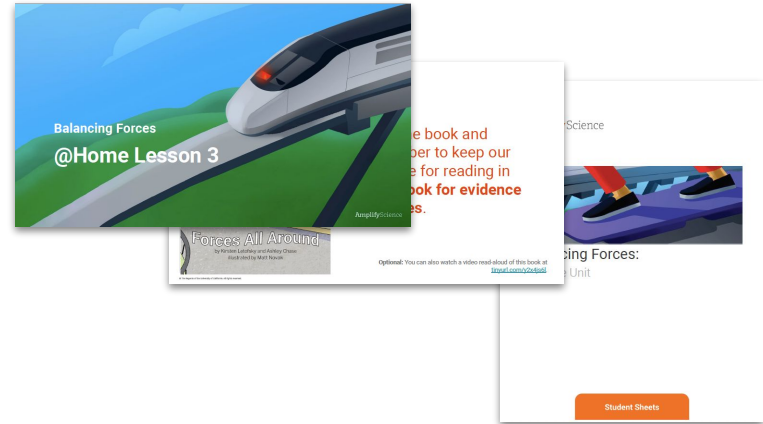


# @Home Units

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



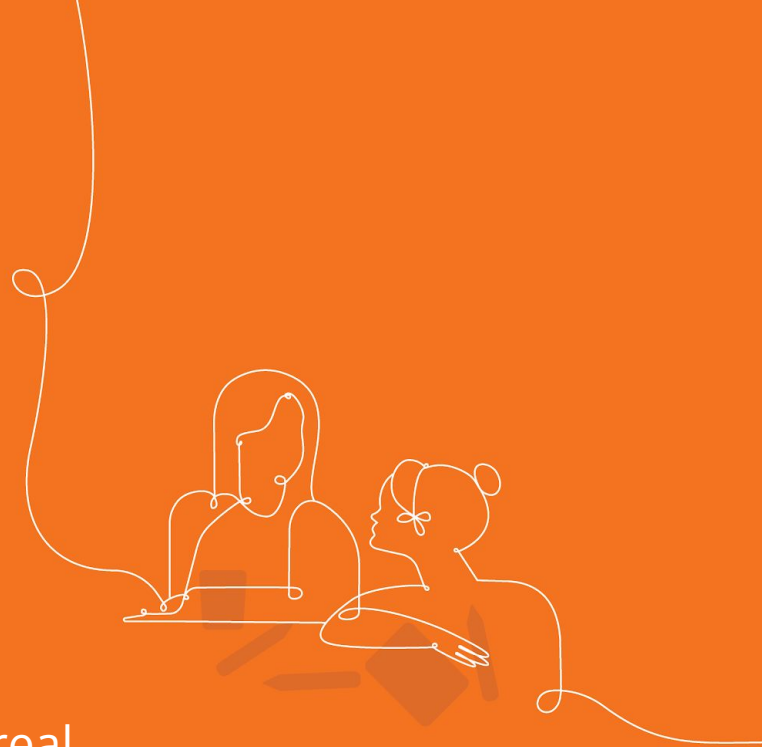
@Home Packets:  
print-based



@Home Slides and Student  
Sheets: tech-based

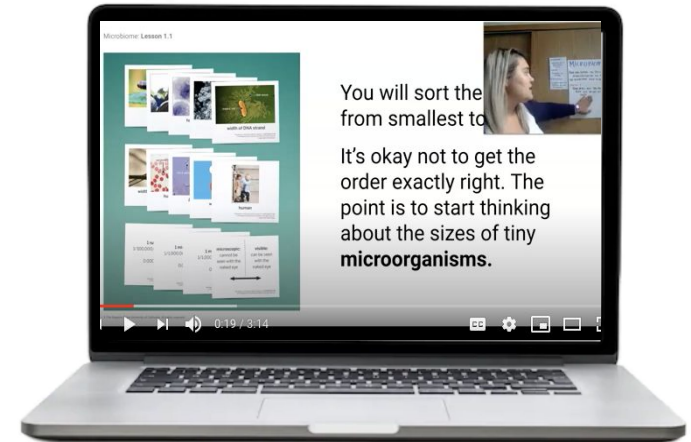
# @Home Videos

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
- Can be used as models for **creating your own videos**

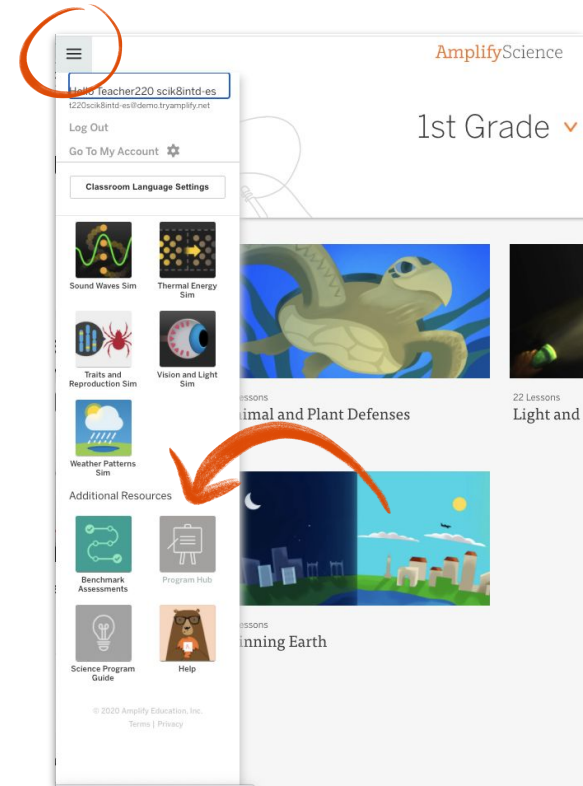




# Accessing Amplify Science@Home

## Amplify Science Program Hub

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



# Course curriculum structure

## Integrated model\*

### Grade 6

- Launch:  
**Microbiome**
- **Metabolism**
- Engineering Internship:  
**Metabolism**
- **Traits and Reproduction**
- **Thermal Energy**
- **Ocean, Atmosphere,  
and Climate**
- **Weather Patterns**
- **Earth's Changing Climate**
- Engineering Internship:  
**Earth's Changing Climate**

### Grade 7

- Launch:  
**Geology on Mars**
- **Plate Motion**
- Engineering Internship:  
**Plate Motion**
- **Rock Transformations**
- **Phase Change**
- Engineering Internship:  
**Phase Change**
- **Chemical Reactions**
- **Populations and Resources**
- **Matter and Energy  
in Ecosystems**

### Grade 8

- Launch:  
**Harnessing Human Energy**
- **Force and Motion**
- Engineering Internship:  
**Force and Motion**
- **Magnetic Fields**
- **Light Waves**
- **Earth, Moon, and Sun**
- **Natural Selection**
- Engineering Internship:  
**Natural Selection**
- **Evolutionary History**

**Amplify**Science

authored by



THE LAWRENCE  
HALL OF SCIENCE  
UNIVERSITY OF CALIFORNIA, BERKELEY

# Which resource should I choose?

<b>Use @Home Units if...</b>	<b>Use @Home Videos if...</b>
<ul style="list-style-type: none"><li>● You have reduced instructional time for science</li><li>● You need a print-based solution for some or all of your students</li></ul>	<ul style="list-style-type: none"><li>● You have about the same amount of instructional time for science</li></ul>
<b>As you explore the resources, you may decide to use both!</b>	

Questions?



# Back to school webinar series



## Now-October, topics include:

- Remote and hybrid learning support
- Navigation support
- What's new for 2020-2021
- Planning support
- Curriculum overview

**[bit.ly/BTSwebinars](https://bit.ly/BTSwebinars)**