Welcome to Amplify Science!

Do Now: Login and open your digital participant packet

1. Go to learning.amplify.com
2. Select Log in with Amplify
3. Enter teacher demo account credentials
   ○ nycdoe_middle@tryamplify.net
   ○ Password: AmplifyNumber1
4. Explore as we wait to begin
Use two windows for today’s webinar

Window #1

Window #2
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

Site Resources

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

UPDATE: Summer 2020

Account Access: It’s an exciting time for Amplify Science. All users within your district have access to the many updates and upgrades in the Amplify Science curriculum until late August/early September when your district will complete their rosters from STARS.

Any schools or teachers new to Amplify Science in 20/21 are encouraged to contact our Help Desk (1-800-821-1969) 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!
Remote Professional Learning Norms

- Orient yourself to the platform
  - “Where’s the chat box? Where’s the mute button?”

- Mute your microphone unless sharing with the group

- Use the chat box for posting questions or responses

- Have a note-catcher

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

Who do we have in the room today?

- **Question 1:** What do you love about teaching science?

- **Question 2:** What do you need to learn today and tomorrow to feel confident with this new curriculum?
Overarching goals

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

• Navigate the Amplify Science curriculum.
• Understand the program’s multimodal approach and instructional materials.
• Apply program essentials to prepare to teach an Amplify Science unit.
• Make an informed decision about which of the Amplify Science Hybrid Learning Resources will best support your students.
Day 1 Objectives

By the end of today you will be able to:

• Navigate the Amplify Science curriculum.

• Understand the program’s phenomenon-based approach and instructional materials.
Plan for the day

- What is Amplify Science?
- Navigation essentials
- Teaching a phenomenon-based lesson
- Unit Guide Resources
- Assessments
- Closing and reflection
What is Amplify Science?
NYC Companion Lesson Slides, Grade 7

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

<table>
<thead>
<tr>
<th>Topic</th>
<th>Slides Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metabolism: Reading “How You Are Like a Sneezing Iguana”</td>
<td><a href="#">Link</a></td>
</tr>
<tr>
<td>Metabolism: Plant Growth Investigations</td>
<td><a href="#">Link</a></td>
</tr>
<tr>
<td>Metabolism: Reading “How Do Trees Grow So Huge Without Eating?”</td>
<td><a href="#">Link</a></td>
</tr>
<tr>
<td>Phase Change: Reading “Icy Heat”</td>
<td><a href="#">Link</a></td>
</tr>
<tr>
<td>Chemical Reactions: Identifying Substances</td>
<td><a href="#">Link</a></td>
</tr>
<tr>
<td>Chemical Reactions: Mixtures, Properties, and Separation</td>
<td><a href="#">Link</a></td>
</tr>
</tbody>
</table>

Slides for the first unit will be available on the NYC Resources site in September.
Middle School Units: **Launch; Core; Internship**

- **11 Lessons**
  - Geology on Mars

- **19 Lessons**
  - Plate Motion

- **10 Lessons**
  - Plate Motion Engineering Internship
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
7th Grade Overview: Scope and Sequence

Microbiome

Sept

Oct-Nov

Nov-Dec

Chemical Reactions

Jan-Feb

Plate Motion

Feb-Mar*

Rock Transformations

Apr-May

Phase Change

Graphs depicting various topics throughout the academic year.
Unit at a Glance: Metabolism

Metabolism
16 lessons
45 minutes each
3 assessment days

Domain: Life Science

Unit type: Core

Student role: Medical Researchers

Phenomenon: Elisa, a young patient, feels tired all the time.
Middle School Unit Resources

Investigation Notebooks or digital student experience

Teacher’s Guide (digital or print)

Articles (digital or print)

Assessments and Reporting

Simulations and other digital tools

Hands-on and print materials

Classroom Slides

Hands-on Flextensions

NYC Print student editions
Classwork

8th Grade

UNIT | CHAPTER | LESSON | ACTIVITY TYPE | SUBMISSIONS | LAST SUBMISSION | FEEDBACK
--- | --- | --- | --- | --- | --- | ---
Force and Motion | 1 | Force and Velocity | All | 26/26 | 9:38 PM | Wed 4/3/19 | 0

CLASS | Written-Response Question #1 | Lesson 1 | 23/26 | 5:00 PM | Wed 4/3/19 | 2

CLASS | Written-Response Question #2 | Lesson 1 | 23/26 | 4:57 PM | Wed 4/3/19 | 0

WARM-UP | Warm-Up | Lesson 2 | 23/26 | 1:42 PM | Thu 4/18/19 | 0

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Easy advance to the next student
Use the feedback panel to input rubric scores, comments, and award badges.

Include emoji

Keep up the good work!
Stay right on track!

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Coming Soon for Back to School!

Classroom Slides

Each lesson will have a downloadable and editable PowerPoint file to help guide teachers and their students through the lesson.
Classroom Kits
Hands On Learning Materials
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 Question
Why does Elisa feel tired all the time?

Investigation Question
What does the human body need to function?

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
- molecule
- amino acid
Questions?
Plan for the day

☑️ What is Amplify Science?

- Navigation essentials
- Teaching a phenomenon-based lesson
- Unit Guide Resources
- Assessments
- Closing and Reflection

Amplify
Unit

Chapter 1: Molecules Needed by the Cells
Chapter 2: Body Systems
Chapter 3: Cellular Respiration
Chapter 4: Metabolism and Athletic Performance

Lessons

Lesson 3.1: Learning About Energy Release in the Body
Lesson 3.2: Exploring Chemical Reactions
Lesson 3.3: Cellular Respiration, Growth, and Repair
Lesson 3.4: "Blood Doping: Messing with Metabolism to Win Races"
Lesson 3.5: Modeling Cellular Respiration in an Athlete's Body

Activities

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

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3 Easy Steps for lesson preparation

Step 1: Read the lesson overview

Step 2: Read the Materials and Preparation section

Step 3: Read the Differentiation section
Welcome to Amplify Science!

Do Now: Login

1. Go to learning.amplify.com
2. Select Log in with Amplify
3. Enter teacher demo account credentials
   - xxxxxxx@pd.tryamplify.net
   - Password: xxxx
4. Explore as we wait to begin
Lesson Level Exploration

Scavenger Hunt

Lesson-level scavenger hunt

Goals:
- Practice navigating at the lesson level and deepen your understanding of the student role and anchor phenomenon in your unit.

PART 1: Lesson 1

Task

Navigate to Lesson 1.1 in your Launch unit. Scroll down to the Lesson Brief and scroll click to view the Overview. Click the section then answer the following questions:

What is the purpose of this lesson?

How many activities are in this lesson?

How long is the activity that introduces the student role? (If any in the unit?)
- Microbiology: Activity 1
- Harnessing Human Energy: Teacher-only activity between sessions
- Geology: Activity 3
- Teacher-only activity between activities 3 and 4.

Task

Scroll to view Materials & Preparation.

List the materials you need for this lesson.

Describe one step of preparation you will need to do before this lesson. Between sessions, and at the end of the day.

6-8 Lesson-level scavenger hunt cont.

Task

Navigate to the Lesson Maps. Select the activity in which the student role is introduced. (Note: use the arrow at the end of the lesson map to reveal all activities.) Read the steps for teaching the activity listed in the Step-by-Step to gain a better understanding of the activity.

What is the student role and how is it introduced?

Task

Try the following navigation features:
- Click on the Instructor Guide icon to see the student view of the lesson, and click on it again to toggle back to the teacher instructions.
- Click Next Activity or Next at the bottom to read the next activity in the lesson.

What additional resources can you find on each page of the guide? What links, tabs, and other supports do you notice?

PART 2: Introduction of the anchor phenomenon or design problem

Task

Use the breadcrumb (Unit-Chapter-Lesson) trail (top left) to navigate to the lesson and activity in which the anchor phenomenon is introduced.
- Microbiology: Lesson 2.2, Teacher-only activity involves videos and Activity 3 message from the Microbiology Research Institute
- Geology: Lesson 2.2, Activity 3 (the sun is back NEXT at the bottom)
- Harnessing Human Energy: Lesson 1.3, Teacher-only activity involves message (introduces both the student role and the design problem)

How does this design problem or anchor phenomenon introduced to students? What ideas or opinions do you think students will have about the problem they’re asked to solve?
Questions?

Ask in the chat feature
5 min break
Plan for the day

- What is Amplify Science?
- Navigation essentials
- Teaching a phenomenon-based lesson
- Unit Guide Resources
- Assessments
- Closing and Reflection
What is phenomenon-based instruction?
Next Generation Science Standards

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.
**Next Generation Science Standards**

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

<table>
<thead>
<tr>
<th>Topic-based</th>
<th>Phenomenon-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the water cycle?</td>
<td>What caused the storms in this area to be severe?</td>
</tr>
<tr>
<td>What is an ecosystem?</td>
<td>Why are there suddenly so many moon jellies?</td>
</tr>
<tr>
<td>How does light energy interact with matter?</td>
<td>Why does Australia have an elevated skin cancer rate?</td>
</tr>
</tbody>
</table>
Comparing topics and phenomena

A shift in science instruction

from learning about (like a student) to figuring out (like a scientist)
Teaching a phenomenon-based lesson
Go ‘Live’ to Model Preparing to Teach
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 Question
Why does Elisa feel tired all the time?

Investigation Question
What does the human body need to function?

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
- molecule
- amino acid
Transition to model lesson
Lesson 1.2: Welcome to Medical School
Warm-Up

Activity 1
Lesson 1.2: Welcome to Medical School

This activity can also be completed using page 6 of the Investigation Notebook

We will start with a Warm-Up each day to get us thinking about science ideas.

Complete the Warm-Up by writing your answers to the question.
Discuss your ideas about the Warm-Up question.

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

- because she isn’t getting enough sleep.
- because she is not eating enough food or not eating the right foods.
- because she has a medical condition.

Let’s summarize our ideas as a class.

What are possible reasons why Elisa feels tired?
Activity 2
Introducing the Metabolism Simulation
Quick Tip! Teacher Resource for Sims

Use ‘Apps in this Unit’ in the teacher Unit Guide

Apps in This Unit

Using the Metabolism Sim
- Begin by selecting one of the model Bodies (for example, Healthy Body) in the menu accessible from the navigation bar in the upper left-hand corner.
- Select either Observe Mode (which allows you to observe and manipulate without a time limit) or Test Mode (which allows you to set up and run controlled experiments for a certain length of time). Students should begin in Observe Mode the first time they use the Simulation.
- In Live View, where you can observe the body systems directly, try the following:
  - Feed the body by selecting Fish, Corn, or Sandwich.
  - Adjust the Activity Level or the Digestive Enzymes using the sliders on the right.
  - Stop or start the heart or breath rate by selecting “Stop.”
  - Hide or show molecules by selecting them in the lower bar.
  - Select a body system to isolate it and reveal the name of the system and labels for parts of the system.
  - Switch to Cell View by selecting the yellow Cell, then selecting the magnifying glass to zoom in.
  - Switch back and forth between Live View and Graph View by selecting their buttons on the top menu bar.
  - Speed up the Sim by selecting x1 and choosing a new speed.
We will use a Simulation to help us learn more about how human body systems function.

Let’s review the directions together.
1. Launch the *Metabolism Simulation*.

2. Select HEALTHY BODY from the menu.

3. Select OBSERVE.

4. Explore with your partner.

5. Think about these questions:
   - How does the Simulation work?
   - What do you notice?
First, you will work in pairs to explore **Observe** mode of the Sim.

How does the Simulation work?

What do you notice?

This activity can also be completed using **page 7 of the Investigation Notebook**.
Because Elisa feels tired all the time, this indicates that something might be wrong in her body.

To figure out what might be going wrong in her body, we first need to think about what we already know about how healthy bodies function. This will help us know what to look for in the Metabolism Simulation.
Partner Discussion

Discuss the following question with your partner.

1. What are some things you know the human body needs to function?
Partner Discussion

Discuss the next question with your partner.

2. What are signs you can observe when a human body is functioning properly?
You will now use the Sim to **observe** what happens to the food and air that enter this healthy Simulation body.
Activity 2

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 Question

Why does Elisa feel tired all the time?
Lesson 1.2: Welcome to Medical School

Activity 2

Cells in the Body

MITOCHONDRIA

Timer 38
Food
Fish
Corn
Sand

Activity Level
WALK
REST
WALK
JOG
SPRINT
RUN

Digestive Enzymes
MEDIUM
LOW
MEDIUM
HIGH

Heart Rate
74
Beats Per Min

Breath Rate
12
Breaths Per Min
Lesson 1.2: Welcome to Medical School

Activity 2
Lesson 1.2: Welcome to Medical School

You will now use the Sim to observe which molecules are entering the cell.

This activity can also be completed using page 7 of the Investigation Notebook.
Activity 3
Returning to the Patient
Vocabulary

Metabolism

The body’s use of molecules for energy and growth
Think about the claims we generated about the possible reasons why Elisa is feeling tired

Do you have any new insights or changes in thinking about these claims after observing the Simulation.
Activity 4

Homework
For homework, **experiment** with different diets in the Sim to see how the diet affects the number of molecules getting to the cells.
For homework, **experiment** with different diets in the Sim to see how the diet affects the number of molecules getting to the cells.
End of Lesson
End model lesson
I notice, I wonder...

What did you notice about the model lesson?

What do you now wonder?
Investigation Question:
What does the human body need to function?

Multiple sources of evidence

Simulation
Modeling tool
Article
Multimodal learning

Gathering evidence from different sources

Science Concept

Do

Read

Write

Talk

Visualize
Amplify Science approach

1. Introduce a real world problem
2. Collect evidence from multiple sources
3. Build increasingly complex explanations
4. Apply knowledge to solve a different problem
Questions?

Ask in the chat feature
Plan for the day

- What is Amplify Science?
- Navigation essentials
- Teaching a phenomenon-based lesson
- Unit Guide Resources
- Assessments
- Closing and reflection
# Unit Guide Resources

<table>
<thead>
<tr>
<th>Planning for the Unit</th>
<th>Printable Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Overview</td>
<td>Coherence Flowcharts</td>
</tr>
<tr>
<td>Unit Map</td>
<td>Copymaster Compilation</td>
</tr>
<tr>
<td>Progress Build</td>
<td>Flexextension Compilation</td>
</tr>
<tr>
<td>Getting Ready to Teach</td>
<td>Investigation Notebook</td>
</tr>
<tr>
<td>Materials and Preparation</td>
<td>Multi-Language Glossary</td>
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<tr>
<td>Science Background</td>
<td>NGSS Information for Parents and Guardians</td>
</tr>
<tr>
<td>Standards at a Glance</td>
<td>Print Materials (8.5&quot; x 11&quot;)</td>
</tr>
<tr>
<td>Teacher References</td>
<td>Print Materials (11&quot; x 17&quot;)</td>
</tr>
</tbody>
</table>

**Offline Preparation**

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

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**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.

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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Overview</strong></td>
<td>Describe what's in each unit, the rationale, and how students learn across chapters</td>
</tr>
<tr>
<td><strong>Unit Map</strong></td>
<td>Provides an overview of what students figure out in each chapter, and how they figure it out</td>
</tr>
<tr>
<td><strong>Progress Build</strong></td>
<td>Explains the learning progression of ideas students figure out in the unit</td>
</tr>
<tr>
<td><strong>Getting Ready To Teach</strong></td>
<td>Provides tips for effectively preparing to teach and reaching the unit in your classroom</td>
</tr>
<tr>
<td><strong>Materials and Preparation</strong></td>
<td>Lists materials included in the unit, i.e. items to be provided by the teacher, and Early Childhood preparation requirements for each lesson</td>
</tr>
<tr>
<td><strong>Science Background</strong></td>
<td>Adult-level preview of the science content students figure out in the unit</td>
</tr>
<tr>
<td><strong>Standards at a Glance</strong></td>
<td>Lists NGSS Standards (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</td>
</tr>
</tbody>
</table>

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**Teacher references**

- **Lesson Overview/Comprehensive**: Lesson overview of each lesson in the unit, including lesson summary: activity purpose, and timing
- **Standards and Goals**: Lists NGSS (Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts) and CCSS (English Language Arts and Mathematics) standards in the unit, explains how the standards are reached
- **3-D Statements**: Describes 3-D learning across the unit, chapters, and 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 in-text assessment opportunities in key learning in the unit
- **Articles in This Unit**: Summarizes each unit text and explores how the text supports instruction
- **Apps in This Unit**: Outlines functionality of digital tools and how students use them (2-4 grades 4-5)
- **Flexextension in This Unit**: Summarizes information about the Hands-On Flexextension resources in the unit

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**Printable Resources**

- **Coherence Flowcharts**: Visual representation of the storyline of the unit
- **Copymaster Compilation**: Compilation of all copymasters for the teacher to print and copy throughout the unit
- **Flexextension Compilation**: Compilation of all copies for Hands-on Learning lessons throughout the unit
- **Investigation Notebook**: Digital version of the Investigation Notebooks, for coping and projecting
- **Multi-Language Glossary**: Unit vocabulary words in 3D languages
- **NGSS Information for Parents and Guardians**: Information for parents about the NGSS and the skills for teaching and learning
- **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-Chapter Questions and Key Concepts provided in the kit
Scavenger Hunt

Unit Guide scavenger hunt

The purpose of this optional activity is to practice utilizing the Unit Guide resources to answer questions. Practicing now will help you determine which Unit Guide resources you use when questions arise in your teaching. Use the Unit Guide Resources document to help decide and record which resources you would use to answer each question. For additional practice, open the resources you’ve identified, and record your answer in the space provided.

What do students do in the first activity of Lesson 3?

Unit Guide document to reference: Answer:

Which lesson will take the most time to prepare for Chapter 3?

Unit Guide document to reference: Answer:

Describe one piece of evidence students can get using the simulation.

Unit Guide document to reference: Answer:

What is some background information pertaining to the science content of the unit?

Unit Guide document to reference: Answer:

Unit Guide scavenger hunt cont.

List some of the NGSS crosscutting concepts emphasized in the unit.

Unit Guide document to reference: Answer:

Describe one material you will print and make copies of during this unit.

Unit Guide document to reference: Answer:

What is one article that students read in this unit?

Unit Guide document to reference: Answer:

Which lessons in Chapter 2 include On-the-Fly Assessments?

Unit Guide document to reference: Answer:
5 min break
Plan for the day

- What is Amplify Science?
- Navigation essentials
- Teaching a Lesson
- Unit Guide Resources
- Assessments
- Closing and Reflection
Progress Build
A unit-specific learning progression
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!
Metabolism

How do these ideas relate to one another?

- 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.
Chapter 1
Cells in the body need molecules from outside to function.

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

A unit-specific learning progression

Level 1: Prior knowledge

Level 2

Level 3: Deep, causal understanding
Level 1
Cells in the body need molecules from outside to function.

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

Level 3
Cells can use these molecules to release energy for the body to function.
5 min break
Assessment System

Think to yourself: How do your students show you what they know?
Pre- and End-of-Unit Assessments

- Pre-Unit Assessment
- Level 1
- Level 2
- Level 3
- End-of-Unit Assessment
Critical Juncture Assessments

Pre-Unit Assessment \[\Rightarrow\] Critical Juncture \[\Rightarrow\] End-of-Unit Assessment

Level 1 \[\Rightarrow\] Level 2 \[\Rightarrow\] Level 3
On-the-Fly Assessments

- Pre-Unit Assessment
- Critical Juncture
- Pre-Unit Assessment
- Level 1
- Level 2
- Level 3
- End-of-Unit Assessment
Student Self-Assessments

Level 1

Pre-Unit Assessment

Critical Juncture

End-of-Unit Assessment

Level 2

Level 3
6-8 Assessment System

Pre-Unit Assessment → Critical Juncture → End-of-Unit Assessment

Level 1 → Level 2 → Level 3

Pages 11-12
Capture your thinking!

- How will you use these embedded assessment opportunities?
Unit Level Assessment Documents

Assessment System:
- explains the organization of the assessment system
- lists out each assessment in the unit with key information
- goes into an explanation of each type of assessment found in the unit

Embedded Formative Assessments:
- explains what to look for at each assessment opportunity
- gives guidance for instructional next steps

### Assessment Opportunity

| Lesson 1.1: 3-D Performance Task: Scientific Explanation |
| Assessment Type: Pre-Unit Assessment | Evaluation Guidance: |
| Assessment Guide (in Digital Resources for Lesson 1.1), with support for revealing students’ prior knowledge, preconceptions, and to gauge their facility for using the SEPs and CCCs. |
| Possible Student Responses |

### Next Generation Science Standards

**DCE:**
- PS3.A: Definitions of Energy

**SEP:**
- Practice 1: Asking Questions and Defining Problems
- Practice 6: Constructing Explanations and Designing Solutions

**CCC:**
- Systems and System Models

### Standards and Goals

- 3-D Statements
- Assessment System
- Embedded Formative Assessments
- Books in This Unit
- Apps in This Unit
- Flexextensions in This Unit

### Embedded Formative Assessments

#### Lesson 1.2, Activity 4
**On-the-Fly Assessment 1: Synthesizing Information**

**Look for:** This lesson provides students’ first opportunity to learn about and discuss how to synthesize information as a reading strategy. They will continue to develop facility with this strategy throughout the unit through repeated practice. As you circulate, make note of what students are connecting to the reading and what deeper understanding they come to as a result. Are they connecting together relevant pieces of information from different sources? Are they using these connections to help them better understand systems?

**Now what?** If students are having trouble getting started with synthesizing, or if they are connecting the reading to unrelated information, provide some additional models. You may wish to provide examples that combine information from the first section of Systems with information from other sources. Depending on how many students need this support, you could either coach a few students individually during the reading or you could work with a small group or the whole class. Be sure to remind students to keep in mind the goal of connecting pieces of information in order to come to a deeper understanding of the concept of systems.

### Printable Resources
- Coherence Flowcharts
- Copymaster Compilation
- Flexextension Compilation
- Investigation Notebook
- Multi-Language Glossary
- NGSS Information for Parents and Guardians
Go ‘live’ to show assessment resources and assessments
Part 1: Choose an Assessment Opportunity

1. Navigate to the *Assessment System* reference in the Unit Guide.

2. Choose an ‘Assessment opportunity’ to preview. *i.e.* Pre-Unit, On-the-Fly, Critical Juncture, or End-of-Unit.

3. Navigate to the lesson and review the assessment.

Part 2: Review the Assessment

4. As you review the assessment, answer these questions:

   a. What are students doing?

   b. What would student performance tell me about student understanding?

   c. How could I adjust instruction based on student performance?

   d. How could I record student data?
Classwork and Reporting

Pre-Unit Assessment

- PB 0: 87%
- PB 1: 0%
- PB 2: 7%
- PB 3: 7%

Bulk Export

- Lesson 3
- 1/15
- 11:25 AM
- 1/31/20
Go ‘live’ to show classwork and reporting tool
Questions?
Plan for the day

- What is Amplify Science?
- Navigation essentials
- Teaching a phenomenon-based lesson
- Unit Guide Resources
- Assessments

Closing and reflection
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?
Revisiting Day 1 Objectives

Are you able to...

- Navigate the Amplify Science curriculum?
- Understand the program’s phenomenon-based approach and instructional materials?
Day 2 Objectives

By the end of day 2 you will be able to:

• Understand the purpose of Launch Units.

• Apply program essentials to prepare to teach an Amplify Science Launch Unit.

• Make an informed decision about which of the Amplify Science Hybrid Learning Resources will best support your students.
Overarching goals

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

• Navigate the Amplify Science curriculum.
• Understand the program’s multimodal approach and instructional materials.
• Apply program essentials to prepare to teach an Amplify Science unit.
• Make an informed decision about which of the Amplify Science Hybrid Learning Resources will best support your students.
Closing reflection

Based on our work today, share:

**Brain:** something you’ll keep in mind

**Heart:** something you’re feeling

**Feet:** something you’re planning to do
Additional Amplify resources

Program Guide
Gather additional insight into the program’s structure, intent, philosophies, supports, and flexibility.

my.amplify.com/programguide

Amplify Help
Find advice and answers from the Amplify team.

my.amplify.com/help
Additional Amplify support

Customer Care
Access 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
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 participation in day 1. See you tomorrow for day 2!