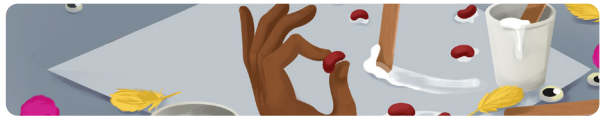
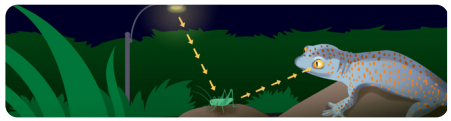
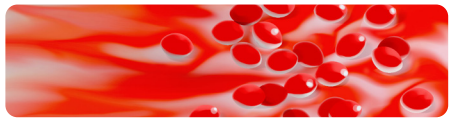
Amplify Science

2025-26 NYC K–5 Unit Pacing Calendar

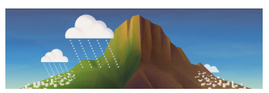
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.
GK	 Needs of Plants and Animals				 Pushes and Pulls			 Sunlight and Weather		
G1	 Animal and Plant Defenses				 Light and Sound			 Spinning Earth		
G2	 Plant and Animal Relationships				 Properties of Materials			 Changing Landforms		
G3	 Balancing Forces			 Inheritance and Traits		 Environments and Survival		 Weather and Climate		
G4	 Energy Conversions			 Vision and Light		 Earth's Features		 Waves, Energy, and Information		
G5	 Patterns of Earth and Sky			 Modeling Matter		 The Earth System		 Ecosystem Restoration		

Implementation considerations:

- The lesson and activity sequence needs to be followed within a unit.
- Pacing in this guide assumes three lessons taught each week.
- Lessons can be taught either by a classroom teacher or through a collaboration between cluster teacher and classroom teacher.

Amplify/NYSED Elementary Level Investigations Alignment and Guidance Document

Amplify Unit	Brief Description of the Unit	Performance Expectation addressed in both the unit and NYSED Investigation	NYSED Investigation aligned to the unit When to teach this Investigation?
 **Inheritance and Variation of Traits Grade 3**	**Anchor Phenomenon**: Students dive deep into exploring patterns in the traits of organisms to answer the question of how a diversity of traits come to be.	**Circle of Life** Main PE addressed: 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction, and death.	Students should complete the entire unit prior to engaging in the Investigation "Circle of Life". Throughout the unit, students will use and develop models, use patterns and examine similarities and differences while investigating variation of traits in different organisms. It is strongly encouraged that students consistently use the Handbook of Traits as used in lessons throughout the entire unit, so that they become familiar with many examples of the life cycles and variations of different organisms.
 **Energy Conversions Grade 4**	**Anchor Phenomenon:** Students take the role of systems engineers for Ergstown, a fictional town that experiences frequent blackouts.	**Light It Up** Main PE addressed: 4-PS3-4: Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.	The unit covers the topics of definitions of energy, energy conversions, and energy transfer, as well as engineering design. These topics are necessary to understand and apply through the Investigation titled "Light It Up". It is recommended students complete the entire unit before they engage in this NYSED Investigation. Students will benefit from completing the hands-on activity described at the **Flextension,** titled "Energy Conversions Stations". This station hands-on activity will provide students with more examples of transformations and transference of energy.
 **Weather and Climate Grade 3**	**Anchor Phenomenon**: In the role of meteorologists working for the fictional Wildlife Protect Organization (WPO), students investigate weather patterns as they solve the problem of where to establish an orangutan reserve.	**Cloud in a Bottle** Main PE addressed and created by NYSED 3-ESS2-3: Plan and conduct an investigation to determine the connections between weather and water processes in Earth systems.	Please note that the main Performance Expectation addressed in the Investigation is an NYSED created standard, therefore, it is NOT addressed in the unit of study. Teachers need to use the Supplemental Guiding Document created to address this standard once finished with the unit. Once teachers ensure students have mastered all concepts in the unit and supplemental materials, they will facilitate the Investigation - Cloud in a Bottle. The Implementation and Planning Guide for NYC Department of Education - Grade 3 can be used to plan and deliver standards-based instruction that addresses all NYSSLS.

Amplify Unit	Brief Description of the Unit	Performance Expectation addressed in both the unit and NYSED Investigation	NYSED Investigation aligned to the unit When to teach this Investigation?
 **The Earth System Grade 5**	**Anchor Phenomenon:** Students take the role of water resource engineers to investigate what makes East Ferris, a city on one side of the fictional Ferris Island, prone to water shortages while a city on the other side is not.	**Cloud in a Bottle** Main PE addressed and created by NYSED 3-ESS2-3: Plan and conduct an investigation to determine the connections between weather and water processes in Earth systems.	Teachers may facilitate instruction of the Investigation Cloud in a Bottle between or after Chapters 2 and 3, after students learn about the "Nanoscale View of Condensation", "Investigating Evaporation", and read about "How Rain Forms". The **Flextension** titled "Investigating Water Drop Formation", can be used to replace lessons 2.1 and 2.2, which provides with examples of how condensation forms in open systems such as a glass of water, and provides opportunities to discuss the conditions necessary for water condensation, which is the foundation for students to understand the formation of clouds. Teachers may also facilitate instruction of the Investigation at the end of the unit, to ensure students have mastered the understanding of the ways the hydrosphere interacts with the atmosphere (5-ESS2-1), use amounts and percentages of water and fresh water as evidence about the unequal distribution of water on Earth (5-ESS2-2), and know how to obtain and combine information about ways individual communities use science ideas to protect natural resources (5-ESS3-1).
 **Modeling Matter Grade 5**	**Anchor Phenomenon:** Students take the role of food scientists to identify a food dye in a mixture that is potentially hazardous for public safety and to create a salad dressing that will have no sediment and is visually appealing.	**What's In the Bag?** Main PE addressed: 5-PS1-4: Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	Students gain an understanding of the interactions of substances while mixing them, however, this unit does not help students in understanding the interactions for the formation of new substances, hence does not address chemical reactions. Teachers may facilitate the Investigation "What's In the Bag?" once students have completed the unit and have demonstrated proficiency of the topics addressed. It is recommended to continue the conversation about mixing substances and introduce the topic of chemical reactions as the interactions of substances that create new ones.
 **The Earth System Grade 5**	**Anchor Phenomenon:** Students take the role of water resource engineers to investigate what makes East Ferris, a city on one side of the fictional Ferris Island, prone to water shortages while a city on the other side is not.		Teachers can facilitate the Investigation "What's In the Bag?" right after completing Chapter 5 - "How can East Ferris turn wastewater into clean freshwater?", which addresses all aspects about chemical reactions that grade 5 students need to learn to achieve PE 5-PS1-4.