Survival and Change: Lesson 26

Phenomenon (Essential) Question: How do butterflies survive over time in a changing environment?		
Objective: Explain how organisms survive over time in changing environments. (Socratic Seminar)	**Materials:** Pencil	**Projected Slides:** 427–432

Share the following items with families in advance of the lesson.

- Links: Lesson 26 Daily Video, Science Journal Lesson 26
- Materials list
- Assignment: After watching the video, students review their learning throughout the module and use evidence from the anchor chart and anchor model to answer the Essential Question: **How do butterflies survive over time in a changing environment?**

Remote Learning Recommendations

Type	Pacing	Activity	Notes
Hybrid (in-class synchronous and remote asynchronous) / Asynchronous (in Sync)	10–15 minutes	Daily Video	Video description: Students revisit the Essential Question in an End-of-module debrief.
	10 minutes	Assignment	The video asks students to use evidence from the anchor chart, the anchor model, and their learning throughout the module to answer the Essential Question: **How do butterflies survive over time in a changing environment?**
	15 minutes	Virtual Class Meeting (Optional): Science Discourse	Ideally this meeting occurs after students watch the video and complete the assignment: • *Engage in Socratic Seminar Remote Alternative* Tell students they will share their understanding of the Essential Question with one another through a Socratic Seminar discussion. Review the expectations for participating in a Socratic Seminar, and set guidelines for collaborative conversation strategies in a virtual classroom setting. Display and read aloud the Essential Question to prompt the discussion: **How do butterflies survive over time in a changing environment?** In the Socratic Seminar, students respond to one another directly, with minimal teacher facilitation. Students can remind one another of conversation norms, ask for evidence, and pose questions to extend the conversation. If needed, spur conversation by using guiding questions such as these: ○ What can fossils tell us about the past environment of a region? ○ What characteristics make butterflies suited to the environments in which they live? ○ How does living in a group help each individual member of the group survive?

				○ How do different kinds of butterflies respond when their environment experiences a seasonal change? ○ How can development by humans, such as the building of parking lots and other structures, impact butterflies and other organisms? If students express misconceptions about how organisms survive over time in changing environments, meet with them individually or in a small group before the End-of-Module Assessment. Provide additional hands-on investigation of phenomena related to their misunderstanding, and help students use precise language to construct explanations of those phenomena.
	Synchronous	7 minutes	Launch	Refer to Teacher Edition to conduct the lesson Launch (Projected slides 427–428). Give all students a chance to participate either in-person or virtually.
		33 minutes	Learn	Refer to Teacher Edition to conduct the lesson Learn (Projected slides 429–431). • Prepare for Socratic Seminar • Engage in Socratic Seminar Give all students a chance to participate either in-person or virtually.
		5 minutes	Land	Refer to Teacher Edition to conduct the lesson Land (Projected slide 432). Give all students a chance to participate either in-person or virtually.
Additional Instruction			Extension (Optional)	Students can research or investigate new questions independently at work stations or as optional homework.

Asynchronous	Synchronous	Hybrid
Remote students using in Sync with optional virtual class meeting	Some students in-class and some remote but all participating live	In-class students are synchronous and remote students asynchronous