inquisitive

GRADE 4 · LIFE SCIENCES · FAST PATH

Unit: Structure, Function, and Information Processing

Lessons in unit: 5 · 18 days · 25–30 min per day · 531 min total · ↳ Time-saving teaching move · ★ Checkpoint

1. Plantific!	DAY 1 · 30 MIN	DAY 2 · 30 MIN	DAY 3 · 30 MIN	DAY 4 · 30 MIN
PHENOMENON QUESTION **How can vegetables be the same and different?** **OUTCOME** **I can identify different plant structures and describe how they help a plant survive.** **TIME** **4 days · 30 min per day** **120 min total**	**PREP** Prepare five vegetable samples per group.	**PREP** Prepare peas, hand lenses and celery cross-sections for pairs.	15 MIN **Activity 6: Plant structure functions** ↳ Provide the printed Plant Parts diagram. Watch the Plant Structure video and discuss functions as a class.	10 MIN **Activity 8: Plant as a System** ↳ Label the poster and discuss how the structures connect as a class.
	7 MIN **Activity 1: Phenomenon + vegetable observation** ↳ Use prepared plates, discuss as a class.	15 MIN **Activity 4: A Growing Plant video + Pea Pod Investigation**	15 MIN **Activity 7: ★ Checkpoint 1**	15 MIN **Activity 9: ★ Checkpoint 2**
	8 MIN **Activity 2: Plant Parts Chart** ↳ Complete the chart as a class.	15 MIN **Activity 5: Seed Embryo & Celery**		5 MIN **Activity 12: Vocabulary**
	15 MIN **Activity 3: Build a Plant**			

2. Survivors!

PHENOMENON QUESTION
What helps animals survive?

OUTCOME
I can identify different animal structures and describe how they help an animal survive.

TIME
4 days · 25–30 min per day
113 min total

DAY 5 · 30 MIN

- 2 MIN — Activity 1: Phenomenon video
- 9 MIN — Activity 2: Connect, Extend, Challenge
  ↳ Discuss all three prompts as a class. Students record their ideas.
- 11 MIN — Activities 3–4: Animal Features and Functions
- 8 MIN — Activity 5: External Structures Interactive
  ↳ Complete as a class.

DAY 6 · 30 MIN

- 6 MIN — Activity 6: Behavior Features
  ↳ Watch both clips and discuss as a class.
- 24 MIN — Activity 7: ★ Checkpoint: Part 1 of 2
  ↳ Choose from bald eagle, gray wolf or sea otter. Use the provided research links to draft ideas for the template.

DAY 7 · 28 MIN

- 28 MIN — Activity 7: ★ Checkpoint: Part 2 of 2

DAY 8 · 25 MIN

PREP Set out sticky notes and large paper.

- 20 MIN — Activity 8
- 5 MIN — Activity 11: Vocabulary

3. The Inside Story!

PHENOMENON QUESTION
What is under an animal's skin?

OUTCOME
I can describe how internal structures work together to help an animal survive.

TIME
3 days · 30 min per day
90 min total

DAY 9 · 30 MIN

- 2 MIN — Activity 1: Phenomenon video
- 8 MIN — Activity 2: See, Hear, Think, Wonder
  ↳ Discuss as a class.
- 5 MIN — Activity 3: Find Your Pulse
- 15 MIN — Activity 4: What Is Your Pulse?

DAY 10 · 30 MIN

- 10 MIN — Activity 5: Internal Systems
  ↳ Complete activities and discussions as a class.
- 10 MIN — Activity 6: Animals Compared
- 10 MIN — Activity 7: What's Inside? eBook: Part 1 of 2
  ↳ Begin the class true-or-false game. Mark your stopping point.

DAY 11 · 30 MIN

- 10 MIN — Activity 7: What's Inside? eBook: Part 2 of 2
  ↳ Finish the game. Partners teach each other three new facts.
- 15 MIN — Activity 8: ★ Checkpoint
  ↳ Support the provided claim with evidence, using writing or labeled diagrams.
- 5 MIN — Activity 11: Vocabulary

4. Sensing Information

PHENOMENON QUESTION
What does a service dog do?

OUTCOME
I can draw a model to show how an animal receives information from its environment, and responds to that information.

TIME
3 days · 30 min per day
90 min total

DAY 12 · 30 MIN

PREP Prepare mystery objects for small groups.

3 MIN — Activity 1: Phenomenon video

7 MIN — Activity 2: Dog's Perspective
↳ Complete and discuss the speech bubbles as a class.

20 MIN — Activity 3: Mystery senses investigation
↳ Play the sound video as a class, then let groups feel, smell and discuss the objects.

DAY 13 · 30 MIN

8 MIN — Activity 4: Animal Senses
↳ Discuss the pictured scenes as a class, using more than one sense for each.

7 MIN — Activity 5: Dog's Five Senses
↳ Explore the poster as a class.

15 MIN — Activity 6: Sense and Respond Interactive

DAY 14 · 30 MIN

PREP Add labels to large paper: information, receptors, perception, memory.

15 MIN — Activity 7: Owl Hunting Model
↳ Provide pre-labeled diagram.

13 MIN — Activity 8: ★ Checkpoint
↳ Students choose a situation and use the model to describe all five steps.

2 MIN — Activity 11: Vocabulary

5. Eye, Eye!

PHENOMENON QUESTION
Why do we see things?

OUTCOME
I can explain how light travels from an object to the eye.

TIME
4 days · 28–30 min per day
118 min total
Assessment: Anchor Maps and Autogradable Summative Assessments are not included within this pacing guide.

DAY 15 · 30 MIN

PREP Prepare group materials: flashlight, tissue paper, dark cardboard.

5 MIN — Activity 1: Phenomenon video + questions
↳ Discuss the provided questions as a class.

25 MIN — Activity 2: Flashlight Investigation

DAY 16 · 30 MIN

5 MIN — Activity 3: Ray Model Intro

7 MIN — Activity 4: Children Seeing
↳ Discuss both examples and the questions as a class.

18 MIN — Activity 5: Outdoor Model
↳ Use a nearby outdoor spot, use printouts of the diagram from part 2 of 2.

DAY 17 · 28 MIN

8 MIN — Activity 6: ★ Checkpoint 1
Students respond individually before discussing as a class.

20 MIN — Activity 7: ★ Checkpoint 2: Model, share and explain
↳ Use the drawing option. Students plan and draw their model, share with a partner and answer all three questions.

DAY 18 · 30 MIN

15 MIN — Activity 8
↳ Complete the interactive as a class; students complete both sentence stems individually.

10 MIN — Activity 9
↳ Trace the light path as a class, then students draw and explain their own model.

5 MIN — Activity 12: Vocabulary