
All About Owls



Third-Grade Teacher Resource Guide

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All About Owls: Lesson Summary and Vocabulary

Lesson Summary: The *All About Owls* program allows students to touch and examine samples of the owl order while learning about their characteristics and development. The presentation focuses on both instructor-led discussion and hands-on activities. Students will work as a group to experiment with types of ‘beaks’, observing the functions and variations in each. Discussion will continue as the instructor presents live examples, covering the owls’ physical adaptations, diets, habitats, and roles both in nature and with humans. Students will get more hands-on experience dissecting an owl pellet and learning about what and how owls eat. Throughout the program, students will be challenged to use their critical thinking skills to answer a wide range of open-ended questions and expand their understanding of owls and birds as a whole.

Vocabulary: Below are words and concepts that relate to the *All About Owls* program.

Adaptation: A change in either the structure or functions of an organism over time that better enables it to survive and reproduce in its environment. An adaptation can be structural (e.g., talons for seizing prey), physiological (e.g., ability to change color), or behavioral.

Beak: The hard projecting mouthpart that birds use to eat their food

Camouflage: Something (such as color or shape) that protects an animal from attack by making the animal difficult to see in the area around it

Diurnal: Awake during the day and asleep during the night

Ecosystem: A community of living things, together with their environment

Gizzard: A pouch at the back of a bird’s stomach that helps grind down food with the aid of grit

Native: Belonging to or originating from a specific location or habitat; local

Nocturnal: Awake during the night and asleep during the day

Owl: A predatory bird belonging to the order *Strigiformes*

Pellet: In birds, a mass of regurgitated food formed in the gizzard that contains the inedible portions of their meal

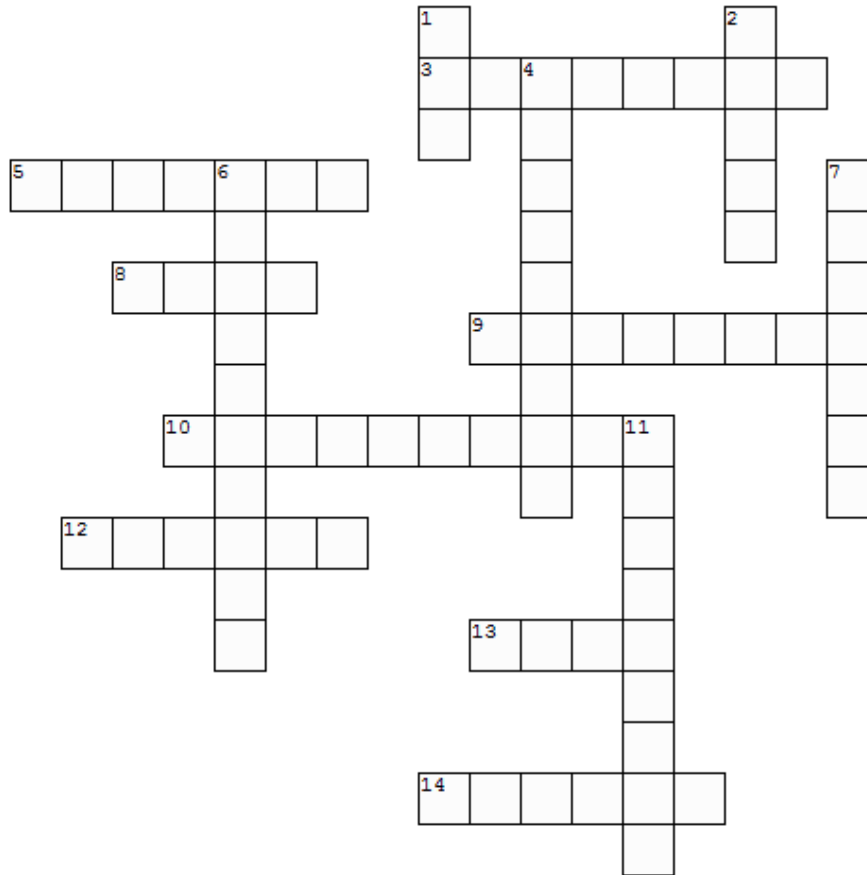
Predator: An animal that hunts and eats other animals

Prey: An animal that is hunted or killed by another animal for food

Talon: A sharp hooked claw of a bird of prey or other predator

Wingspan: The distance between the tips of a bird’s extended wings

All About Owls Language Arts Crossword Puzzle



PREY	ECOSYSTEM	PREDATOR	CAMOUFLAGE	PREDATOR	WINGSPAN	GIZZARD	
BEAK	OWL	ADAPTATION	NATIVE	TALON	PELLET	NOCTURNAL	DIURNAL

Down

1. A nocturnal predatory bird belonging to the order *Strigiformes*.
- 2 A sharp hooked claw of a bird of prey or other predator
4. Awake during the night and asleep during the day
6. In biology, a change in an organism over time that better enables it to survive and multiply
7. Awake during the day and asleep during the night
11. A community of living things, together with their environment

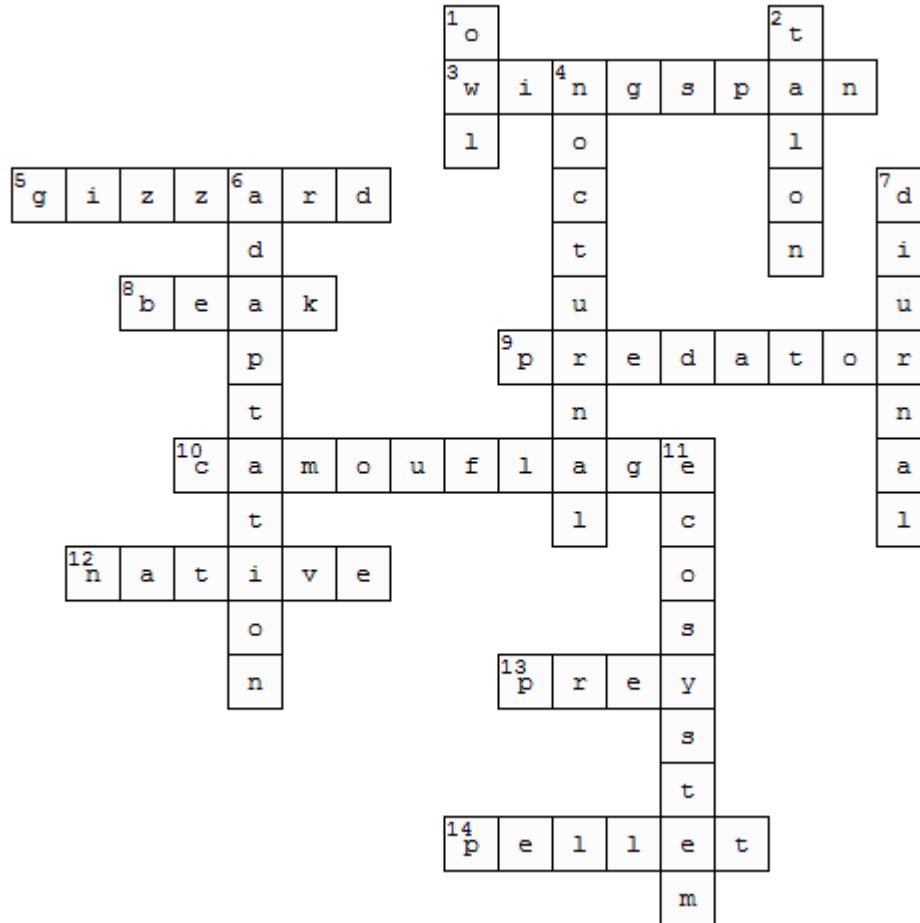
Across

3. The distance between the tips of a bird's extended wings
5. A pouch at the back of a bird's stomach that helps grind down food with the aid of grit
8. The hard projecting mouthpart that birds use to eat their food
9. An animal that hunts and eats other animals
10. Something that helps an animal blend in with the place where it lives
12. Belonging to or originating from a specific location or habitat; local
13. The object of a hunt or pursuit, usually one animal caught and eaten by another.
14. In birds, a mass of regurgitated food formed in the gizzard that contains the inedible portions of their meal

Answer Key

All About Owls

Language Arts Crossword Puzzle



Down

1. A nocturnal predatory bird belonging to the order *Strigiformes* (**owl**)
2. A sharp hooked claw of a bird of prey or other predator (**talon**)
4. Awake during the night and asleep during the day (**nocturnal**)
6. In biology, a change in an organism over time that better enables it to survive and multiply (**adaptation**)
7. Awake during the day and asleep during the night (**diurnal**)
11. A community of living things, together with their environment (**ecosystem**)

Across

3. The distance between the tips of a bird's extended wings (**wingspan**)
5. A pouch at the back of a bird's stomach that helps grind down food with the aid of grit (**gizzard**).
8. The hard projecting mouthpart that birds use to eat their food (**beak**)
9. An animal that hunts and eats other animals (**predator**)
10. Something that helps an animal blend in with the place where it lives (**camouflage**)
12. Belonging to or originating from a specific location or habitat; local (**native**)
13. The object of a hunt or pursuit, usually one animal caught and eaten by another (**prey**)
14. In birds, a mass of regurgitated food formed in the gizzard that contains the inedible portions of their meal (**pellet**)

All About Owls Language Arts Word Search

Circle the vocabulary in the word search below. Can you find all the animal-related words?

B	T	E	V	O	J	W	C	T	Y	G	M	K	L	H	J
B	E	C	I	S	X	Y	I	R	T	J	V	O	C	N	G
D	P	O	R	M	P	R	E	Y	B	U	E	V	N	J	O
Q	N	S	N	B	P	K	X	J	P	J	N	A	J	C	Y
G	X	Y	O	E	C	J	S	E	A	U	P	K	G	D	C
A	H	S	T	A	F	D	L	V	C	S	O	D	F	E	R
L	O	T	Y	K	I	L	C	A	G	T	I	D	A	O	O
B	E	E	R	U	E	O	M	N	J	D	N	R	D	M	T
Y	N	M	R	T	K	O	I	O	V	Y	A	A	A	T	A
N	B	N	R	D	U	W	L	C	Y	G	F	Z	P	M	D
R	A	B	Q	F	G	D	Y	T	K	B	N	Z	T	S	E
L	T	T	L	P	L	W	O	U	H	S	O	I	A	G	R
D	T	A	I	W	Z	K	U	R	K	Q	L	G	T	C	P
V	G	S	U	V	Q	G	H	N	Y	V	A	P	I	C	Z
E	I	G	M	U	E	U	S	A	N	M	T	R	O	T	B
H	T	N	X	W	T	A	S	L	U	J	L	N	N	C	T

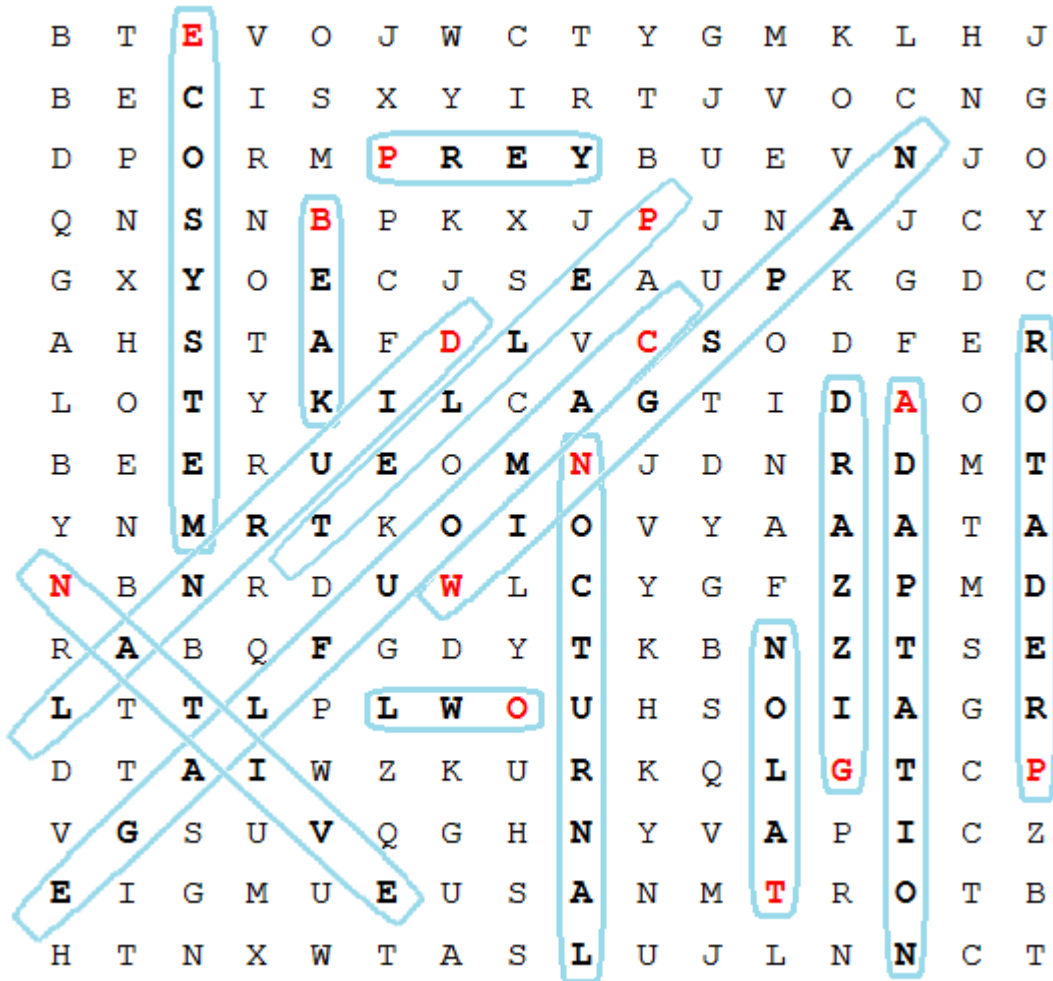
Word Bank

ADAPTATION
BEAK
CAMOUFLAGE
DIURNAL
ECOSYSTEM

GIZZARD
NATIVE
NOCTURNAL
OWL
PELLET

PREDATOR
PREY
TALON
WINGSPAN

Answer Key
All About Owls
Language Arts Word Search



Word Bank

ADAPTATION
BEAK
CAMOUFLAGE
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GIZZARD
NATIVE
NOCTURNAL
OWL
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PREDATOR
PREY
TALON
WINGSPAN

All About Owls: Extension Activities

The extension activities listed below are from RAFT (Resource Area For Teaching). RAFT educational content is available online (www.raftbayarea.org) at no cost and is aligned to California Science Standards and Next Generation Science Standards. Below is a selection of post-visit activities from RAFT to build on student learning about animals and adaptations.

[RAFT Idea: Nesting Like a Birdbrain - Resource Area For Teaching](#)

Grades Covered: 3 through 8

Subjects Covered: Life Science

Curriculum Topics: Ecology, Adaptations, Natural Selection

Description: In this activity, students try to build the best nests using only their ‘beaks’

<http://www.raftbayarea.org/ideas/Nesting%20Like%20a%20Birdbrain.pdf>

[RAFT Idea: What Makes a Bird - Resource Area For Teaching](#)

Grades Covered: Pre-K through 3

Subjects Covered: Life Science

Curriculum Topics: Animals, Environments, Sorting & Classifying

Description: In this activity primary learners learn how to sort animals into two categories.

www.raftbayarea.org/ideas/What%20Makes%20a%20Bird.pdf

[RAFT Idea: Camouflage - Resource Area For Teaching](#)

Grades Covered: K through 12

Subjects Covered: Life Science

Curriculum Topics: Natural Selection, Ecosystems, Probability, Design

Description: In this activity, students will see the benefits of taking a closer look at the world around them.

www.raftbayarea.org/ideas/Camouflage.pdf

All About Owls: Education Standards

This page shows California Science Content Standards, Common Core, and Next Generation Science Standards, which students will be exposed to during the program.

California Science Content Standards Third Grade:

Life Sciences: 3. Adaptations in physical structure or behavior may improve an organism's chance for survival. As a basis for understanding this concept:

- a. Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.
- b. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.
- c. Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.
- d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

Investigation and Experimentation: 5. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

- a. Repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
- b. Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
- c. Use numerical data in describing and comparing objects, events, and measurements.
- d. Predict the outcome of a simple investigation and compare the result with the prediction.
- e. Collect data in an investigation and analyze those data to develop a logical conclusion.

Excerpted from CA State Standards <http://www.cde.ca.gov/>

Common Core Third Grade:

Speaking and Listening Standards: Students will...

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
 - b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
 - c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
 - d. Explain their own ideas and understanding in light of the discussion.
2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Excerpted from Common Core Standards <http://www.corestandards.org/>

All About Owls: Education Standards

Next Generation Science Standards Third Grade:

Inheritance and Variation of Traits: Life Cycles and Traits

- **3-LS3-2:** Use evidence to support the explanation that traits can be influenced by the environment.
 - **Science and Engineering Practices:**
 - **Constructing explanations and designing solutions:** Builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.
 - Use evidence (e.g., observations, patterns) to support an explanation. (3-LS3-2)
 - **Disciplinary Core Ideas:**
 - **LS3.A: Inheritance of Traits** Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3-LS3-2)
 - **LS3.B: Variation of Traits** The environment also affects the traits that an organism develops. (3-LS3-2)
 - **Crosscutting Concepts:**
 - **Cause and Effect:** Cause and effect relationships are routinely identified and used to explain change. (3-LS3-2)

Interdependent Relationships in Ecosystems: Animals, Plants, and the Environment

- **3-LS4-3:** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
 - **Science and Engineering Practices**
 - **Engaging in Argument from Evidence:** builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds
 - Construct an argument with evidence. (3-LS4-3)
 - **Disciplinary Core Ideas**
 - **LS4.C: Adaptation** For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)
 - **Crosscutting Concepts**
 - **Cause and Effect:** Cause and effect relationships are routinely identified and used to explain change. (3-LS4-3)
 - **Interdependence of Science, Engineering and Technology:** Knowledge of relevant scientific concepts and research findings is important in engineering. (3-LS4-3)
 - **Science is a Human Endeavor:** Most scientists and engineers work in teams. (3-LS4-3)

Excerpted from NGSS <http://www.nextgenscience.org/>