
Five Senses Nature Walk



Fourth-Grade Teacher Resource Guide

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Five Senses Nature Walk: Lesson Summary and Vocabulary

Lesson Summary: YSI's *Five Senses Nature Walk* takes students outdoors for a chance to physically explore nature in the Bay Area. Students will discuss their five senses and go over trail rules with their YSI instructor before heading off to see, hear, touch, smell, and taste their way through a short hike. Just under an hour will be spent on the trail. Natural features vary strongly by program site, but an emphasis is placed on native plants and animals, wilderness safety, and experiencing nature in ways that are often overlooked. Students will learn to avoid poison oak, identify common uses of their local flora, and understand the way a landscape changes over time. All hikes will focus on observation and critical thinking skills and use group discussion to share and build on student discoveries.

Vocabulary: Below are words and concepts that relate to the YSI *Five Senses Nature Walk* program.

Adaptation: In biology, a change in an organism over time that better enables it to survive and multiply. An adaptation can be structural, physiologic, or behavioral.

Camouflage: blending in with an environment

Creek: a flowing body of water smaller than a river; stream

Deciduous: a type of tree that loses its leaves at a certain time of year

Decomposer: an animal that feeds on dead matter and breaks it down into simpler compounds

Ecosystem: a community of living things (organisms) interacting with each other as well as with their environment

Environment: the sum of everything that surrounds animals and humans in the natural world, including the air, the water, and the soil

Evergreen: a type of plant that keeps its leaves or needles all year round

Habitat: the natural environment of a plant or animal

Niche: the part of an ecological system occupied by a particular organism, or the functions of that organism in the system

Oak Tree: a tree belonging to the beech family that has acorns as its fruit

Poison Oak: a common West Coast plant that causes itching and has leaves in groups of three

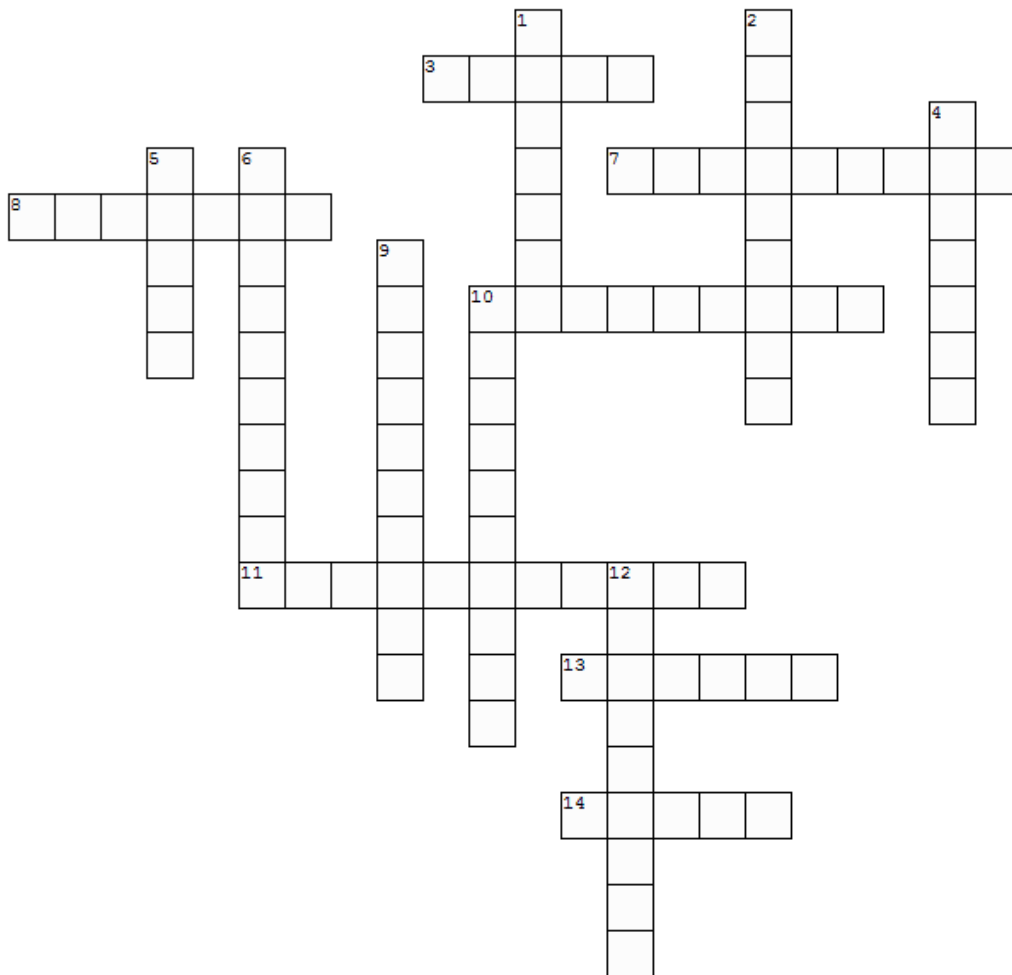
Redwood: an extremely tall species of tree with red bark; any tree in the *Sequoia* genus

Senses: the parts and functions of our body that make us keenly aware of our environment; seeing, hearing, smelling, touching, and tasting

Trait: a distinguishing feature or characteristic, as of one's appearance, personality, or nature

Definitions based on www.dictionary.reference.com

Five Senses Nature Walk Language Arts Crossword Puzzle



- | | | | | | | |
|------------|-----------|-----------|-------------|----------|-----------|------------|
| CAMOUFLAGE | DECIDUOUS | EVERGREEN | POISON OAK | OAK TREE | ECOSYSTEM | |
| TRAIT | NICHE | REDWOOD | ENVIRONMENT | CREEK | SENSES | DECOMPOSER |
| ADAPTATION | | | HABITAT | | | |

Down

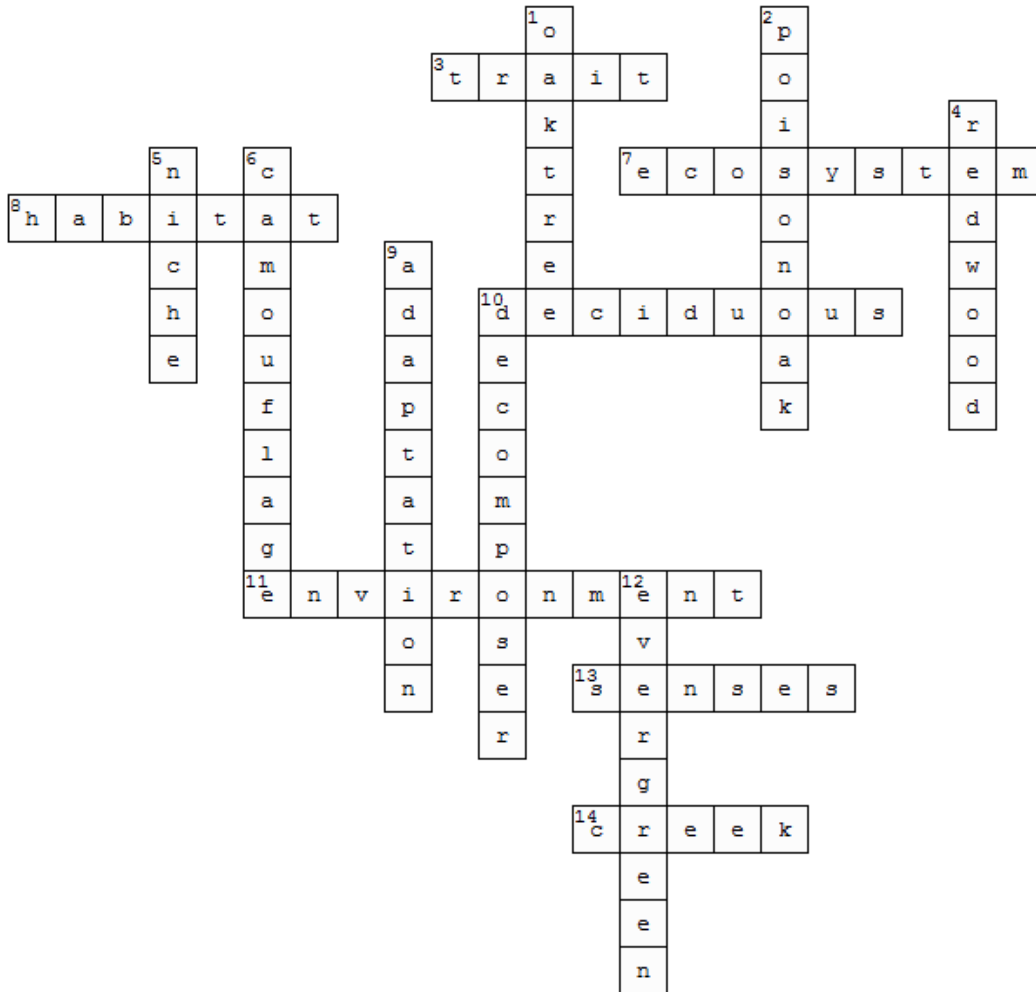
1. A tree belonging to the beech family that has acorns as its fruit.
2. A common West Coast plant that causes itching and has leaves in groups of three.
4. An extremely tall species of tree with red bark; any tree belonging to the *Sequoia* genus.
5. The part of an ecosystem occupied by an organism or how it helps the system.
6. Blending in with the surrounding environment.
9. In biology, a change in an organism over time that better enables that type of organism to survive and multiply.
10. An animal that feeds on dead matter and breaks it down into parts of the soil.
12. A plant that has leaves or needles all year round.

Across

3. Something about an organism's appearance or behavior that makes it different than others.
7. A community of living things together with their environment.
8. The natural environment of a plant or animal.
10. A tree that loses its leaves once a year, usually in the fall.
11. Everything that surrounds animals and humans in the natural world, including the air, the water, and the soil.
13. Seeing, hearing, smelling, touching, and tasting.
14. A flowing body of water smaller than a river, similar to a stream.

Answer Key

Five Senses Nature Walk Language Arts Crossword Puzzle



Down

1. A tree belonging to the beech family that has acorns as its fruit (**oak tree**).
2. A common West Coast plant that causes itching and has leaves in groups of three (**poison oak**).
4. An extremely tall species of tree with red bark; any tree belonging to the *Sequoia* genus (**redwood**).
5. The part of an ecosystem occupied by an organism or how it helps the system (**niche**).
6. Blending in with the surrounding environment (**camouflage**).
9. In biology, a change in an organism over time that better enables that type of organism to survive and multiply (**adaptation**).
10. An animal that feeds on dead matter and breaks it down into parts of the soil (**decomposer**).
12. A plant that has leaves or needles all year round (**evergreen**).

Across

3. Something about an organism's appearance or behavior that makes it different than others (**trait**).
7. A community of living things together with their environment (**ecosystem**).
8. The natural environment of a plant or animal (**habitat**).
10. A tree that loses its leaves once a year, usually in the fall (**deciduous**).
11. Everything that surrounds animals and humans in the natural world, including the air, the water, and the soil (**environment**).
13. Seeing, hearing, smelling, touching, and tasting (**senses**).
14. A flowing body of water smaller than a river, similar to a stream (**creek**).

Five Senses Nature Walk Language Arts Word Search

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

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

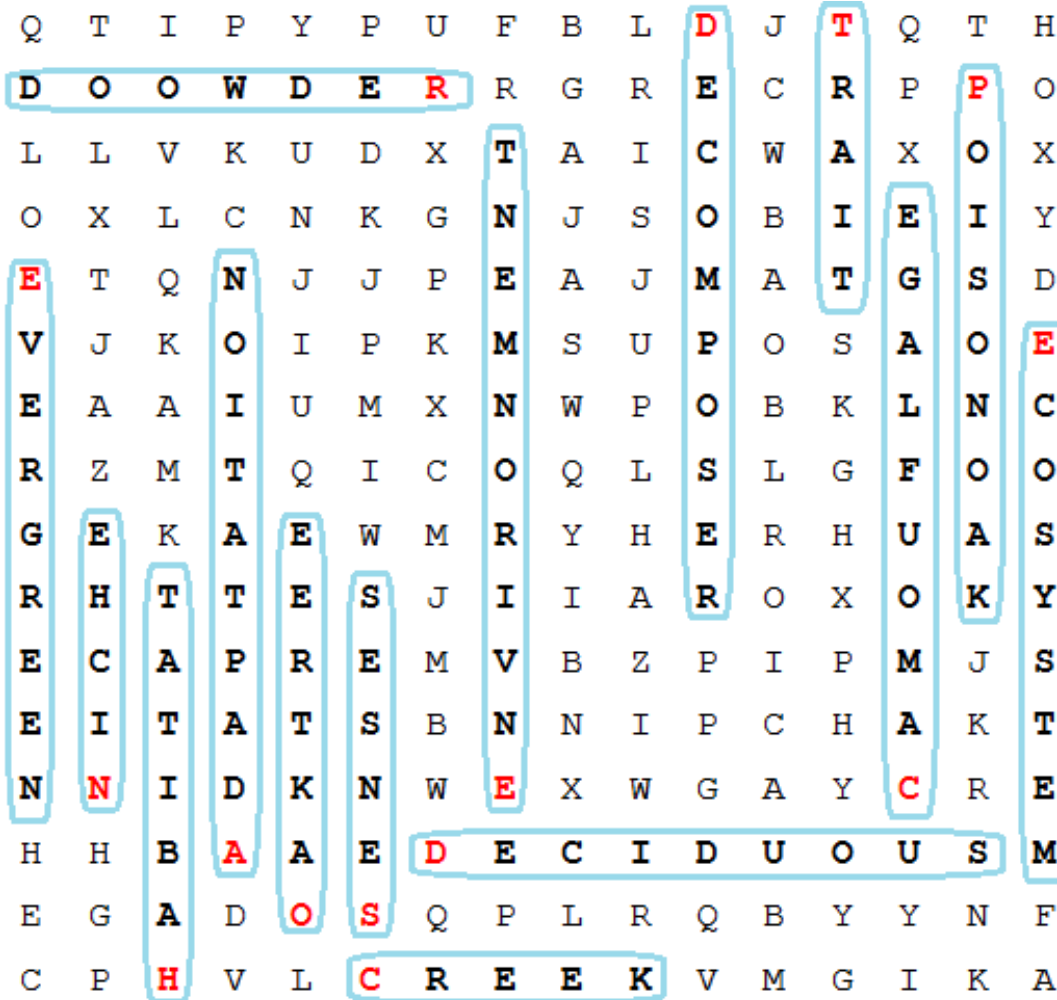
Word Bank

ADAPTATION
CAMOUFLAGE
CREEK
DECIDUOUS
DECOMPOSER

ECOSYSTEM
ENVIRONMENT
EVERGREEN
HABITAT
NICHE

OAK TREE
POISON OAK
REDWOOD
SENSES
TRAIT

Answer Key
Five Senses Nature Walk
Language Arts Word Search



Word Bank

ADAPTATION
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Five Senses Nature Walk: 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 extend student learning about the five senses and their local ecosystems.

[RAFT Idea: Nature Book - Resource Area For Teaching - RAFT Bay Area](#)

Grades Covered: K through 12

Subjects Covered: Life Science, Earth/Space Science, Language Arts, Art

Curriculum topics: Journaling, Bookmaking, Observing

Create this artistic and outdoorsy book from easily found materials.

<http://www.raftbayarea.org/ideas/Nature%20Book.pdf>

[RAFT Idea: The Germinator - Resource Area For Teaching - RAFT Bay Area](#)

Grades Covered: K through 8

Subjects Covered: Life Science

Curriculum topics: Botany, Plant Growth, Scientific Method

Create a reusable germinator that gives students an unobstructed view of sprouting seeds.

<http://www.raftbayarea.org/ideas/The%20Germinator.pdf>

[RAFT Idea: Be Prepared - Resource Area For Teaching - RAFT Bay Area](#)

Grades Covered: 3 through 8

Subjects Covered: Earth/Space Science, Social Studies

Curriculum topics: Natural Hazards, Emergency Preparedness, Community Studies

Evaluate potential natural hazards and develop plans to address the dangers.

<http://www.raftbayarea.org/ideas/Be%20Prepared.pdf>

[RAFT Idea: Reason for the Seasons - Resource Area For Teaching - RAFT Bay Area](#)

Grades Covered: 3 through 8

Subjects Covered: Physical Science, Earth/Space Science

Curriculum topics: Seasons, Angle of the Earth's Axis to the Sun, Concentration of Sunlight

Description: Use a flashlight to simulate the angle of the sun...

<http://www.raftbayarea.org/ideas/Reason%20for%20the%20Seasons.pdf>

Five Senses Nature Walk: Education Standards

The following pages cite California Science Content Standards, Common Core Standards, and Next Generation Science Standards which students will be exposed to during the program.

California Science Content Standards Fourth Grade:

Life Sciences: 2. All organisms need energy and matter to live and grow. As a basis for understanding this concept:

- a. *Students know* plants are the primary source of matter and energy entering most food chains.
- c. *Students know* decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.

3. Living organisms depend on one another and on their environment for survival. As a basis for understanding this concept:

- a. *Students know* ecosystems can be characterized by their living and nonliving components.
- b. *Students know* that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.
- c. *Students know* many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.

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

Common Core Fourth Grade:

Speaking and Listening Standards: Students will...

1. Engage effectively in a range of collaborative discussions with diverse partners on *grade four topics*, building on each 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 and carry out assigned roles.
 - c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
 - d. Review key ideas expressed and explain their own ideas and understanding in light of the discussion.
2. Paraphrase portions of information presented orally.
3. Identify the reasons and evidence a speaker provides to support particular points.

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

Next Generation Science Standards Fourth Grade:

Five Senses Nature Walk: Education Standards

Structure, Function, and Information Processing

- **4-LS1-1:** Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
 - **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, data, and/or a model. (4-LS1-1)
 - **Disciplinary Core Ideas**
 - **LS1.A: Structure and Function:** Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)
 - **Crosscutting Concepts**
 - **Systems and System Models:** A system can be described in terms of its components and their interactions. (4-LS1-1)

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