# Five Senses Nature Walk



## Third-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

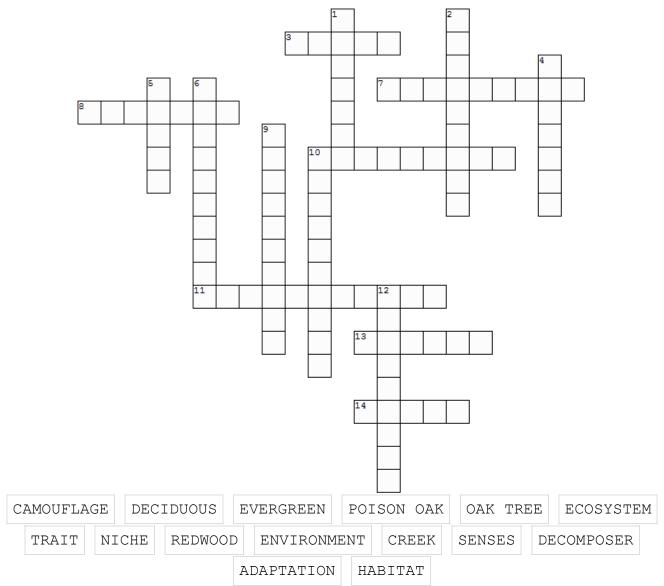
**Trait:** a distinguishing feature or characteristic, as of one's appearance, personality, or nature

Definitions based on www.dictionary.reference.com

Name			



### Five Senses Nature Walk Language Arts Crossword Puzzle



#### **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.

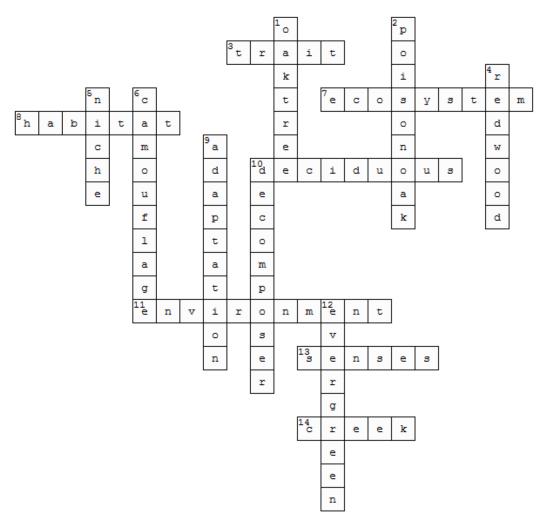
#### Across

- **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 particular natural environment (place) where an animal or plant is usually found.
- **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 particular natural environment (place) where an animal or plant is usually found (habitat).
- **10.** A tree that loses its leaves at a certain time of year (**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**).

Name:
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## 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	Т	I	P	Y	P	U	F	В	L	D	J	T	Q	Т	Н
D	0	0	W	D	E	R	R	G	R	E	С	R	P	P	0
L	L	V	K	U	D	Х	T	A	I	С	W	A	Х	0	Х
0	Х	L	С	N	K	G	N	J	S	0	В	I	E	I	Y
E	Т	Q	N	J	J	P	E	A	J	М	A	Т	G	S	D
V	J	K	0	I	P	K	М	S	U	P	0	S	A	0	E
E	A	A	I	U	М	Χ	N	W	P	0	В	K	L	N	C
R	Z	Μ	Т	Q	I	С	0	Q	L	S	L	G	F	0	0
G	E	K	A	E	W	М	R	Y	Н	E	R	Н	U	A	S
R	Н	Т	Т	E	S	J	I	I	A	R	0	Χ	0	K	Y
E	С	A	P	R	E	M	V	В	Z	P	I	P	М	J	S
E	I	Т	A	Т	S	В	N	N	I	P	C	Н	A	K	Т
N	N	I	D	K	N	W	E	Х	W	G	A	Y	С	R	E
Н	Н	В	Α	A	E	D	E	С	I	D	U	0	U	S	М
E	G	A	D	0	S	Q	P	L	R	Q	В	Y	Y	N	F
С	Р	Н	V	L	С	R	E	E	K	V	М	G	I	K	Α

## **Word Bank**

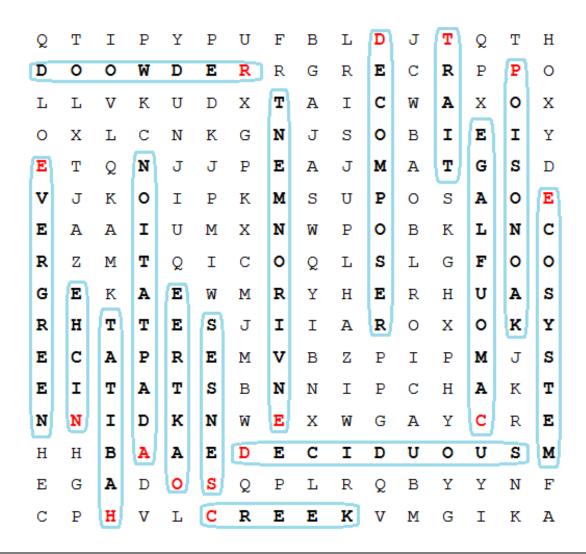
ADAPTATION CAMOUFLAGE CREEK DECIDUOUS DECOMPOSER ECOSYSTEM
ENVIRONMENT
EVERGREEN
HABITAT
NICHE

OAK TREE POISON OAK REDWOOD SENSES TRAIT



### **Answer Key**

## Five Senses Nature Walk Language Arts Word Search



## **Word Bank**

ADAPTATION	ECOSYSTEM	OAK TREE
CAMOUFLAGE	<b>ENVIRONMENT</b>	POISON OAK
CREEK	EVERGREEN	REDWOOD
DECIDUOUS	HABITAT	SENSES
DECOMPOSER	NICHE	TRAIT



## Five Senses Nature Walk: Extension Activities

The extension activities listed below are from RAFT (Resource Area For Teaching). RAFT educational content is available online (<a href="www.raftbayarea.org">www.raftbayarea.org</a>) 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 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* 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.

**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:

- **c.** Use numerical data in describing and comparing objects, events, and measurements.
- 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 with diverse partners on grade 3 topics, building on others' ideas and expressing their own clearly.
  - a. Come to discussions prepared, having read or studied 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.
  - 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 information presented 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/



# Five Senses Nature Walk: Education Standards

#### **Next Generation Science Standards Third Grade:**

#### **Interdependent Relationships in Ecosystems**

- **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 an argument from evidence: Engaging in argument from evidence in 3–5 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.
      - Use materials 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)

#### Inheritance and Variation in 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 Constructing explanations and designing solutions in 3–5 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)
  - O 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)

Excerpted from NGSS: <a href="http://www.nextgenscience.org/">http://www.nextgenscience.org/</a>