Five Senses Nature Walk



Second-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

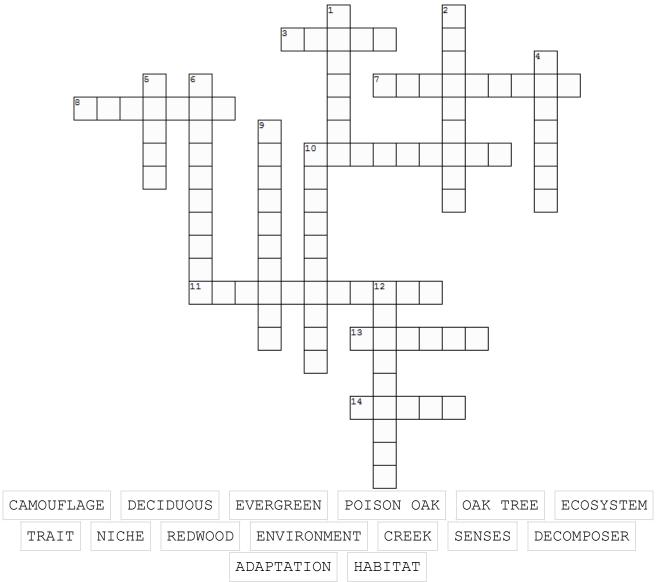
Trait: a distinguishing feature or characteristic, as of one's appearance, personality, or nature

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.

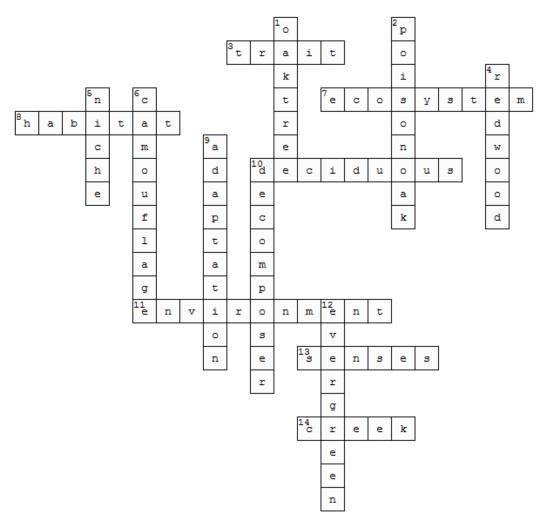
Across

- **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 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 or 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**).

Name:				



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	Χ	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	M	Χ	N	W	P	0	В	K	L	N	C
R	Z	М	Т	Q	I	С	0	Q	L	S	L	G	F	0	0
G	E	K	A	E	W	Μ	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

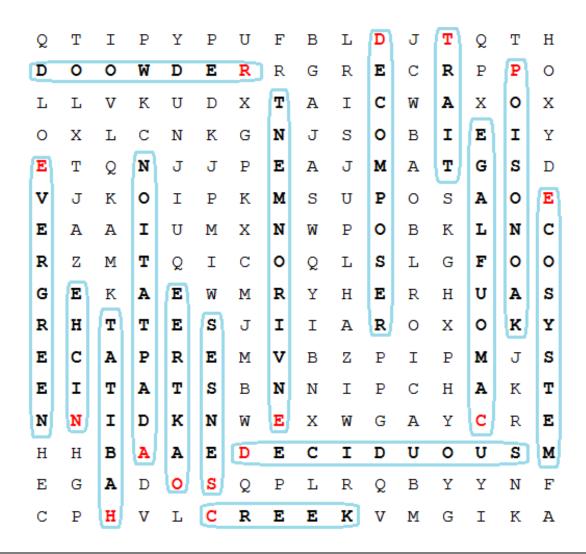
ADAPTATION CAMOUFLAGE CREEK DECIDUOUS DECOMPOSER ECOSYSTEM
ENVIRONMENT
EVERGREEN
HABITAT
NICHE

OAK TREE POISON OAK REDWOOD SENSES TRAIT



Answer Key

Five Senses Nature Walk Language Arts Word Search



Word Bank

ADAPTATION	ECOSYSTEM	OAK TREE
CAMOUFLAGE	ENVIRONMENT	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 (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: Guess What - Resource Area For Teaching - RAFT Bay Area

Grades Covered: Pre-K through 3

Subjects Covered: Physical Science, Language Arts

Curriculum topics: Senses, Physical Properties, Descriptive Words

A fun way for kids to practice description and communication while learning about physical

properties.

http://www.raftbayarea.org/ideas/Guess%20What.pdf

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



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 Second Grade:

Physical Sciences: 1. The motion of objects can be observed and measured. As a basis for understanding this concept:

a. *Students know* the position of an object can be described by locating it in relation to another object or the background.

Life Sciences: 2. Plants and animals have predictable life cycles. As a basis for understanding this concept:

- **a.** *Students know* that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
- **c.** *Students know* many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
- **d.** Students know there is variation among individuals of one kind within a population.
- **e.** *Students know* light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants.

Earth Sciences: 3. Earth is made of materials that have distinct properties and provide resources for human activities. As a basis for understanding this concept:

- **b.** *Students know* that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants.
- **e.** *Students know* rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.

Investigation and Experimentation: 4. 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.** Make predictions based on observed patterns and not guessing.
- **c.** Compare and sort common objects according to two or more physical attributes (e.g. color, shape, texture, weight).

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

Common Core Second Grade:

Speaking and Listening Standards: Students will...

- 1. Participate in collaborative conversations with diverse partners about grade 2 topics with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions.



Five Senses Nature Walk: Education Standards

- b. Build on others' talk in conversations by linking their topics to the remarks of others.
- c. Ask for clarification and further information as needed about the topics under discussion.
- 2. Recount or describe key information from information presented orally.
- 3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or clarify something that is not understood.

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

Next Generation Science Standards Second Grade:

Structure and Properties of Matter

- **2-LS4-1:** Make observations of plants and animals to compare the diversity of life in different habitats.
 - Science and Engineering Practices:
 - Planning and Carrying Out Investigations: Planning and carrying out investigations to answer questions or test solutions to problems in K-2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions.
 - -Make observations (firsthand or from media) to collect data $\,$ which can be used to make comparisons. (2-LS4-1)
 - Scientific Knowledge is Based on Empirical Evidence: Scientists look for patterns and order when making observations about the world. (2-LS4-1)
 - o Disciplinary core ideas:
 - **LS4.D: Biodiversity and Humans:** There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1)

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