Content 1
Observation

Lesson Overview:

- **Purpose:**
  - To prepare the students' knowledge and vocabulary for the content they will be learning at IslandWood
- **Objectives:**

  2.1.1 The students will be able to make and record observations of their surroundings

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **Student Outcomes:**
  - Recording observations of an event
  - Create a list of places where a certain color was observed
  - Completion of journaling activities

Activities:

1. Making a Scene

Teacher Information:

- **Objectives:**

  2.1.1 The students will be able to make and record observations of their surroundings

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **EALR:** SCIENCE 1; COMMUNICATION 1
- **Duration:** 30 minutes
- **Materials:**
  - Various articles of clothing and accessories
  - Object with a distinctive odor (deodorizing spray, cologne, perfume, garbage, potpourri, etc)
  - Books (or other object to drop)
  - IslandWood Journals
- **Prep:**
  - Create a master chart on the board to list student observations of the event and what senses were used to make observations

- Have an adult from the building:
  - Visit you at your desk while the students are working silently
  - Wear bright colors and accessories (hat, sunglasses, pin, nametag, shorts over their pants, etc.)
  - Wear a distinctive smell (bathroom deodorizing spray, heavy cologne or perfume, etc.) or carry something with a distinctive smell (potpourri, flowers, smelly garbage, etc.)
  - Walk in a distinctive and somewhat loud manner
  - Talk to you in an loud voice
  - Trip and drop something that will make a noise (stack of books, trash can, etc.)
  - Stumble to pick the object off the floor
  - Say something to a student near the spot where the object fell
  - Scurry out of the room and slam the door

- Tell the students that they are going to test out their observation skills
    - Ask the students what part of their bodies they use to make observations and copy down the students' answers on the board
    - Ask the students what parts of our bodies help us make observations
        - Have the students name the five senses and the part of the body used for each
    - Have the students copy the following chart in their IslandWood Journal

Touch	Smell	Taste	Hear	See

- Tell the students that they are going to test out their observations by filling out the chart for the visit they just had
    - Give the students ten minutes to write their observations in their IslandWood Journals, placing the observations under the sense they used to make it. Tell the students to imagine they are giving a statement to detectives who are trying to figure out **exactly** what happened in the classroom.
        - It may be helpful to have the students think about the following questions:
            - What was the person wearing?
            - Where and how did the person walk?
            - What sounds did you hear?
            - Did you smell anything?
            - How tall was the person?
            - What did the person say?
            - Who did the person talk to?
            - What time was it when the person entered the room?
            - How long was the person in the room?
    - Have the class share their observations
        - List all student responses on a master chart
            - There will likely be contradictions in what the students observed
- **Reflection Questions & Projects:**
    - What sense did the class use the most? Why do you think there were many observations for this sense?
    - What sense did the class use the least? Why do you think there were not many observations for this sense?
    - Did people have differing observations? Why do you think people observed the same event different ways?
    - Who was surprised by how much they did not observe about the event?
    - Who was surprised about how much they did observe about the event?
    - How would you like to be a detective trying to figure out exactly what happened?
    - In what professions is observation an important skill?
    - Why might observation be an important skill to have at IslandWood?
    - Why might observation be an important skill to have when exploring your community?

Created by Joseph Petrick, Spring 2004

2. Color Search

Teacher Information:

- **Objectives:**
  - 2.1.1 The students will be able to make and record observations of their surroundings
  - 5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*
  - 5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **EALR:** ARTS 3.1
- **Duration:** 25 minutes
- **Venue:** Outside or in the classroom
- **Materials:** paint chips (from a paint store) or colored paper
- **Prep:**
  - Prepare multiple color paint chips (or pieces of colored paper) for each student

- Give each student one paint chip (or piece of colored paper)
  - Tell the students to write the name of the color in their IslandWood Journal
  - Tell the students to make a guess in their IslandWood Journals of how many different places they will be able to find the color in their surroundings
  - Tell the students to try to find their color in as many different places as they can
    - Tell the students to write a description, in their IslandWood Journal, of each location where they find their color
    - Encourage the students to be creative when looking for their color
  - Periodically have the students freeze and share creative methods they developed to find their color
- Have the students trade colors and search again
- **Reflection Questions & Projects:**
  - Did you find your color more or less then your thought you would? Why?
  - Was one color harder to find than the other? Why?
  - Write a poem about your color.
  - What colors do you think you will see at IslandWood?
  - What can color tell you about the health of a community?

Adapted from a lesson by Lee Ann Woolery, Arts Coordinator at IslandWood, by Joseph Petrick, Spring 2004

.

Content 2
Reduce, Reuse, Recycle

Lesson Overview:

- **Purpose:**
  - To prepare the students' knowledge and vocabulary for the content they will be learning at IslandWood
- **Objectives:**

  2.1.4 The students will differentiate between the terms REDUCE, REUSE and RECYCLE

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **Student Outcomes:**
  - Reduce, reuse, or recycle an item from the class garbage can
  - Create poster that teaches others about the terms reduce, reuse, and recycle

Activities:

1. Trash Sort

Teacher Information:

- **Objectives:**

  2.1.4 The students will differentiate between the terms REDUCE, REUSE and RECYCLE

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **EALR:** ARTS 3.2; SS SKILLS 1
- **Duration:** 1 hour
- **Materials:** Trash bin filled with trash and *The IslandWood Times* article (p. 14)
- **Prep:**
  - Fill trash can with trash items and place it in the usual spot
  - Write the following information on the board:
    REDUCE ==> make less garbage. For example, instead of buying juice boxes for lunch, buy a large container of juice and use a washable single serving container to take it to school.
    REUSE ==> use an item more than once. For example, when you get a plastic bag from the grocery store put it in your car and use it again the next time you go shopping.
    RECYCLE ==> turn an item into another useful item. For example, scrap paper from the classroom might be turned into newspaper or paper bags when sent to the recycling plant.

- Ask the students if they know what happens to garbage after they put it in the garbage can
  - Write their thoughts on the board. Explain to the students that garbage goes to a garbage dump (landfill) and that once one landfill gets full, room for another one must be found
  - Ask the students to imagine what it would be like if the city ran out of room for garbage
  - Read the students the make believe news story from the year 2025
- Tell the student that it is the class's job to develop an alternative to turning school playgrounds into landfills
  - Introduce the concept of the 3 r's (REDUCE, REUSE, and RECYCLE) using the examples on the board
  - Ask the students what they can do today to keep the news story from coming true

- Draw the following 3R's chart on the board and have the students classify their ideas into the appropriate columns:

Reduce	Reuse	Recycle	Other

- Have students take an item out of the garbage can and move to their own area of the room
  - Have each student write down and draw a picture of how they could:
    - Reduce the item they chose
    - Reuse the item they chose
    - Recycle the item they chose
  - Have each student choose one of their ideas and do it
  - Have the students get into small groups and share their ideas
  - Have each group share a few of their ideas
- Tell the students that there is a specific order to the 3R's
  - Tell the students that environmentalists were concerned that recycling might be a bad thing. Environmentalists worried that the idea people could recycle would make them forget to reduce and reuse. This could lead to our resources being used up faster than they would be if we only had 2 R's. It's important that we try to reduce and reuse **FIRST** and recycle only if we can't do the other two. That's why the 3 R's come in the order REDUCE, REUSE, RECYCLE. They're listed in the order we should try to do them.
  - Have the students work in small groups to create posters for the hallway or cafeteria. Tell the student that the posters should teach others the importance of the 3R's and that there is an order to the 3R's
- Extension Activities:
  - Have the students write a short story about what it might be like in the year 2025 if the city runs out of room for garbage. How would you feel? What would you suggest the mayor do to solve the problem?
  - Have the students write editorials to the IslandWood Times about alternatives the city has to turning school playgrounds into landfills.
- **Reflection Questions & Projects:**
  - How can you reduce the waste you produce at home by reducing, reusing, and recycling?
  - What can you use the soil for?
  - At IslandWood you will separate your food waste into two buckets. How do you think they are separated?

Adapted from a Reduce, Reuse and Recycle (before we run out of space at the dump!) a lesson plan on KidZone http://www.kidzone.ws/plans/view.asp?i=150, by Joseph Petrick, Spring 2004

MAYOR ANNOUNCES THAT THE CITY HAS RUN OUT OF ROOM FOR GARBAGE.

TRASH BINS OVERFLOWING!

In a news conference yesterday, the Mayor announced that the garbage dumps have started to overflow. Despite the mayor's efforts to find a suitable location for a new dump, the garbage crisis has not been resolved. An emergency meeting has been called for this evening to discuss final plans for dumping the city's garbage.

During the news conference, the mayor said, "Er, our best plan so far is to **eliminate school playgrounds**. If we dumped the garbage in the space currently occupied by all school monkey bars and fields we should be able to resolve the problem for another year or two. And hey, the kids will still have their gyms to play in... " Parents and students began protesting the proposed action but stopped when they realized that the next best plan was to dump garbage in everyone's backyards.

Content 3
Food Waste Management

Lesson Overview:

- **Purpose:**
  - To prepare the students' knowledge and vocabulary for the content they will be learning at IslandWood
- **Objectives:**

  2.1.5 The students will be able describe the process of composting food waste

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **Student Outcomes:**
  - Create a compost jar
  - Record observations of compost jar
  - Complete journaling activities

Activities:

1. Compost in a Jar

Teacher Information:

- **Objectives:**

  2.1.5 The students will be able describe the process of composting food waste

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **EALR:** SCIENCE 1, 2, 3
- **Duration:** 45 minutes
- **Materials:** 1 large glass jar (per student or group), food scraps (banana peel, orange, apple, bread), leaves, grass clippings, soil, thermometers, and water
- **Prep:**
  - Each student can make their own jar or students can work in groups

- Tell the students that they are going to turn their leftover lunch into rich soil that can be used to start a garden
  - Tell the students that they are going to make a compost jar. Tell the students that "**compost**" is soil made from the decaying of dead things. Since decaying animal products (meat and dairy) attract rodents, most people use decaying plant products (fruits, vegetables, leaves, and grass) to make compost
  - Tell the students that when dead things decay we say they "**decompose**." Decomposing means breaking down and rotting into tiny parts
- Have each group follow these steps:
  - Collect various food scraps that can be composted from their lunch (no meat or dairy)
  - Collect a handful of leaves and grass from outside
  - Place a small layer (about 2 inches) of soil in the bottom of the jar for aerations
  - Place a mixture of food, leaves, and grass on top of the soil
  - Keep the jar as moist as a rung out sponge; do not soak the compost

    - Leave the jar open and place on the windowsill
- Have the students guess how long it will take their compost jar to produce fresh compost
- Have the students record the following daily observations of their compost jar in their IslandWood Journal:
    - A sketch of what the jar and its contents look like
    - A description of the smell of the jar's contents
    - The temperature of the jar
    - Any changes made to the jar
- **Possible Science Experiments:** groups of students can vary one of the following aspects of their compost and compare their results: water, sunlight, mixing, soil, leaves, or grass
    - The groups that varied the same factor can compare daily observations, the daily temperature of their compost, how long it takes for the compost to mature, and the quality of the soil produced
- The finished compost will take up only 25 - 40% of the space occupied by the original pile. When the individual materials can no longer be identified and the pile resembles dark rich soil, the compost is completed. It will smell sweet, woodsy, and earthy. It will crumble through your fingers.
- **Reflection Questions & Projects:**
    - How can we use what we learned about composting to help reduce food waste in landfills?
    - What can you use the soil for?
    - At IslandWood you will separate your food waste into two buckets. How do you think they are separated?

2. **Wade - The IslandWood Food Weigh Station:** Extension activities can be found by visiting the IslandWood Food Weigh Station website at http://learn.islandwood.org

Created by Joseph Petrick, Spring 2004

Content 4
IslandWood Vocabulary Olympics

Lesson Overview:

- **Purpose:**
  - To prepare the students' vocabulary for the content they will be learning at IslandWood
- **Objectives:**
  - *2.1.6* The students will be able to recognize and use vocabulary central to the *IslandWood School Overnight Program Curriculums*
- **Student Outcomes:**
  - Create a vocabulary superhero
  - Act out at least one vocabulary word
  - Draw pictures that represent the meaning of at least two vocabulary words
  - Create flash cards for all the vocabulary words
  - Completion of the *IslandWood Word Search* and *Crossword Puzzle*

Activities:

1. Vocabulary Olympics

Teacher Information:

- **Objectives:**
  - *2.1.6* The students will be able to recognize and use vocabulary central to the *IslandWood School Overnight Program Curriculums*
- **EALR:** ARTS 3.1, 3.2
- **Duration:** each rotation should be about 10 minutes; can do it all in one session or over the coarse of a few days
- **Materials:**
  - One copy of each of the *Student Directions* (see below) for each event
  - Event 1: paper for flash cards (can be the back of used paper cut into squares) and pen/pencil
  - Event 2: markers, crayons, or colored pencils and two sheets of paper per student
  - Event 3: Copy of *IslandWood Crossword Puzzle* (p. 27) per two students and pen/pencil
  - Event 5: Copy of *IslandWood Word Search* (p. 30) per two students and pen/pencil
  - Event 6: Markers, crayons, or colored pencils and a sheets of paper per student
- **Prep:**
  - Give each student a copy of the IslandWood Vocabulary Words
  - Post a list of the IslandWood Vocabulary Words in a visible location in the classroom
  - Choose a location for each event
  - Put S*tudent Directions* (see below) at each event location
  - Make sure each event location has the materials needed

- Tell the students that they are all Olympians in the IslandWood Vocabulary Olympics
  - Split the class into six groups
    - Have each group start at a different event
  - Give a brief overview of each event and where the each event is located
    - **Event 1: Flash Cards:** Have each student use the list of IslandWood vocabulary words to make flash cards. Once the flash cards are complete have the students quiz each other.
    - **Event 2: PICTURE IT:** Have each student Choose 2 words and draw a detailed picture to represent each word. Tell the students to keep the word they are drawing secret and to write the word and their name on the back of the picture. Collect all of the students' pictures and hang them on the wall.

        - **<u>Event 3: Crossword Puzzle</u>:** Have the students work in pairs to complete the IslandWood crossword puzzle.
        - **<u>Event 4: Charades</u>:** Have one student choose an IslandWood vocabulary word and act it out without talking or making any noise. Tell the other students to guess the word. Whoever guesses correctly gets to act out the next word.
        - **<u>Event 5: Word Search</u>:** Have the students work in pairs to complete the IslandWood word search.
        - **<u>Event 6: Superhero</u>:** Tell the students to choose one IslandWood vocabulary word and draw a picture of a superhero whose superpower relates to the meaning of the word. The picture should include:
            1. A picture of the superhero
            2. A description of the superhero's superpower
            3. A name for the superhero that includes the vocabulary word
            4. The definition of the vocabulary word at the bottom of the picture
    - Tell the students that they will have about 10 minutes at each station
- After each group has completed all the events have the students try to guess the words of each of the pictures drawn in Event 2.

<u>Vocabulary Olympics Student Directions</u>

<u>Event 1: Flash Cards</u>: Use the list of IslandWood vocabulary words to make flash cards. Once you finish your flash cards quiz another student in your group.

<u>Vocabulary Olympics Student Directions</u>

<u>Event 2: PICTURE IT</u>: Choose 2 words and draw a detailed picture to represent each word (do each word on a separate sheet of paper). Keep the word you are drawing secret. Write the word and your name on the back of each picture.

<u>Vocabulary Olympics Student Directions</u>

<u>Event 3: Crossword Puzzle</u>: Work with a partner to complete the IslandWood crossword puzzle.

<u>Vocabulary Olympics Student Directions</u>

<u>Event 4: Charades</u>: Choose one person to act out an IslandWood vocabulary word without talking or making any noise. Everyone else will try to guess the word. Whoever guesses correctly gets to act out the next word.

<u>Vocabulary Olympics Student Directions</u>

<u>Event 5: Word Search</u>: Work with a partner to complete the IslandWood word search.

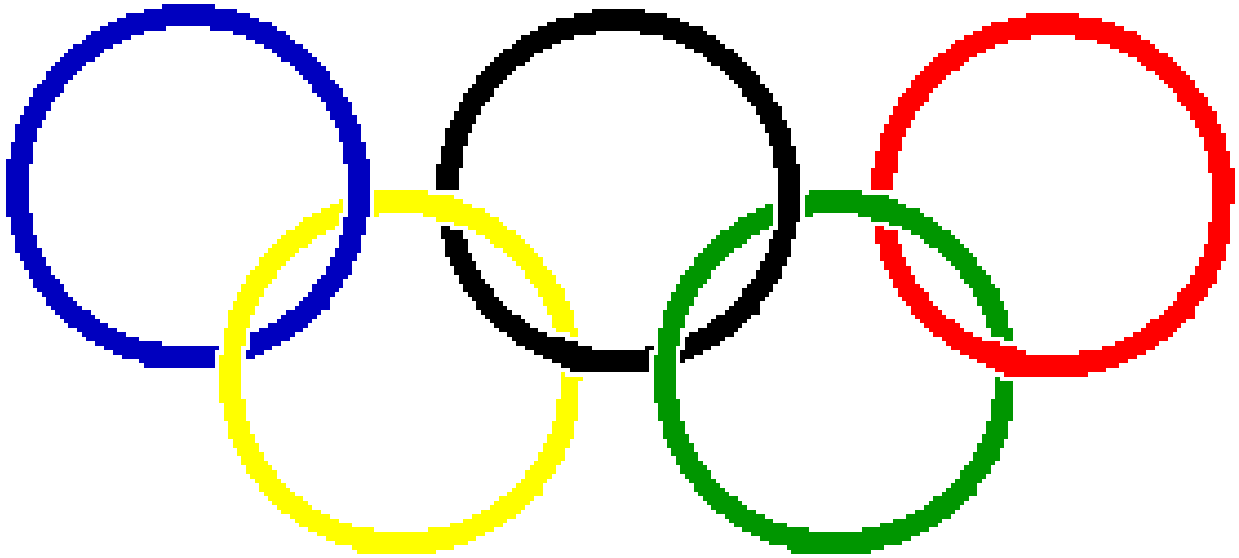
<u>Vocabulary Olympics Student Directions</u>

<u>Event 6: Superhero</u>: Choose one IslandWood vocabulary word and draw a picture of a superhero whose superpower relates to the meaning of the word. The picture should include:

2. A picture of the superhero
3. A description of the superhero's superpower
4. A name for the superhero that includes the vocabulary word
5. The definition of the vocabulary word at the bottom of the picture

- **Reflection Questions & Projects:**
    - Create a picture book using the IslandWood vocabulary words. Each page should include at least one word and a picture that shows readers the definition of the word
    - Create an art project that can be used to teach others the meaning of at least five of the IslandWood Vocabulary words
    - Create a vocabulary test and answer key for the IslandWood vocabulary words

Created by Joseph Petrick, Spring 2004



IslandWood Vocabulary Olympics

IslandWood Vocabulary

Abiotic	**The non-living parts of an ecosystem. You can remember by thinking about the "L.A.W.S." (light, air, water, soil) of nature, which govern who and what lives in a place and how.**
Biotic	**Living things, including anything caused by and produced by a living thing.**
Organism	**Anything that is alive or was alive, including plants or animals.**
Producers	**Organisms that are able to make their own food from the energy of the sun.**
Consumers	**Organisms that cannot make their own food and must rely on other organisms as a food source. Humans, although they can make their own sandwiches, must use the products of other animals. Includes herbivores (plant eaters), omnivores (plant and meat eaters), and carnivores (meat eaters).**
Decomposers	**Organisms that break down dead decaying plant and animal material (detritus) and turn it into food for plants. These organisms include Mushrooms and Banana Slugs.**
Cultural	**Parts of an ecosystem that have been introduced or altered by humans. Examples would be a dam across a river, or a tree that had its bark stripped to make clothing.**
3 R's	**Reduce, Reuse, Recycle, in order of importance.**
Adaptations	**The change over time of the structure, function, behavior, or habitat of an organism, which allows for it to better survive in its environment.**
Biodiversity	**The variety of life on earth.**
Bog	**An area of soft, spongy, water-saturated ground. The ground is a build-up of sphagnum moss and is very acidic. It has no streams running in or out.**
Community	**All abiotic, biotic, and cultural elements of a place, and how they interact.**
Compass	**A tool that finds directions by a turning magnetic needle. The red end of the needle points north.**

Compost	**A mixture of decaying organic matter rich in nutrients, often used to fertilize gardens.**
Conifer	**A tree that grows its seeds in cones.**
Conservation	**To save and protect something, especially natural resources.**
Decomposition	**The process of breaking down organic matter into its basic elements including nutrients needed for plant growth.**
Deciduous	**Trees that lose their leaves in autumn, such as the Big Leaf Maple.**
Detritus	**Dead and decaying plant, animal, and organic material.**
Diurnal	**Active during the day.**
Ecology	**The study of the interconnecting relationship between all of the biotic and abiotic components of an ecosystem.**
Ecosystem	**A dynamic and interrelating complex of plant and animal communities and their associated non-living environment.**
Energy	**The capacity to perform work, or the potential for power and activity.**
Environment	**All of the surrounding conditions and influences that effect the development of a living thing.**
Estuary	**The place where freshwater meets the ocean (saltwater) resulting in a mixing of fresh and salt water.**
Evergreen	**Trees that keep their leaves (often needles) all year long.**
Field guide	**A book used to identify natural organisms in a specific field.**
Food Waste	**Food that has been touched or placed on an individual plate and not consumed.**

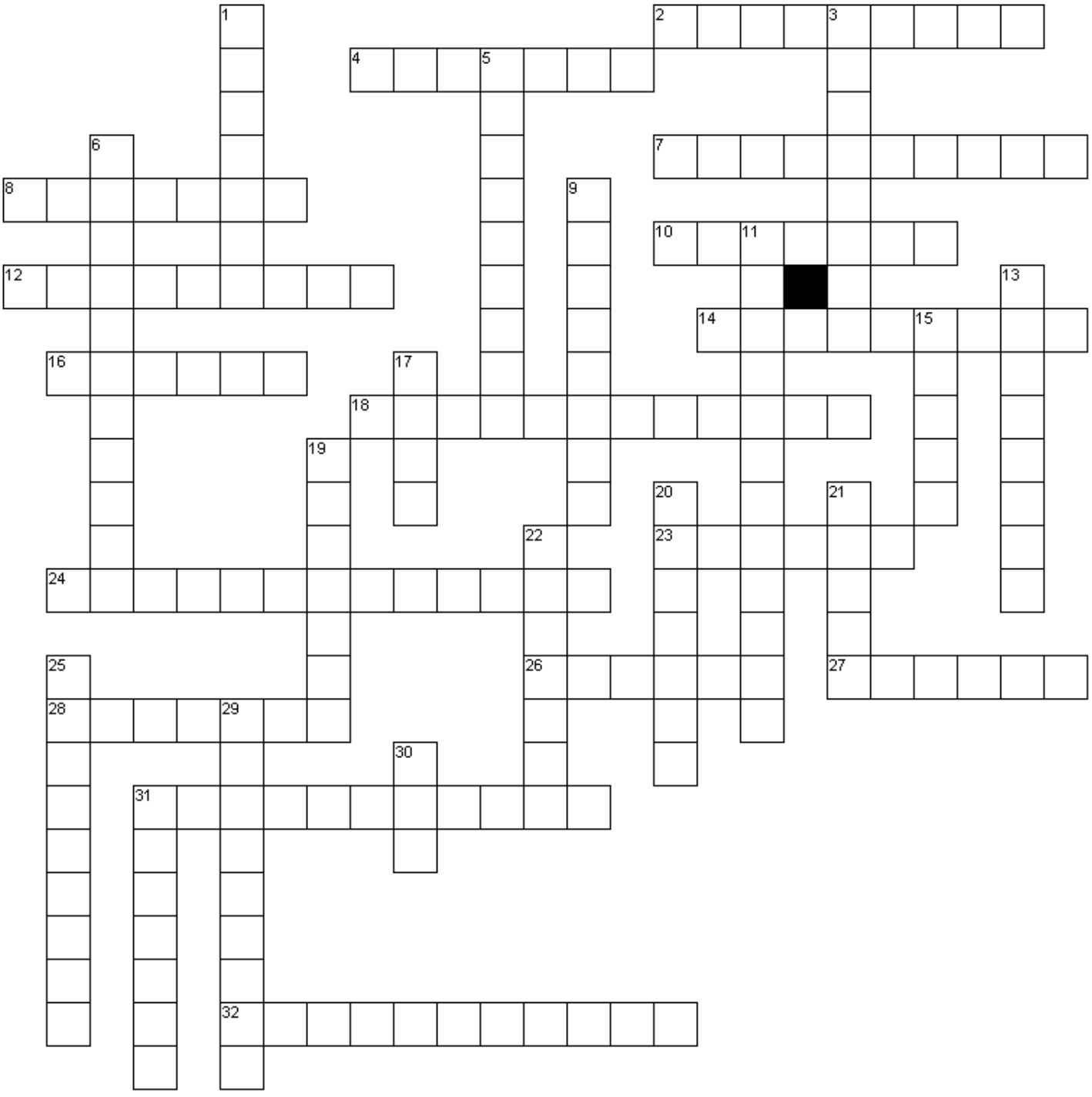
Food web	**Feeding relationship in communities that displays the flow of energy and materials from producers, consumers, decomposers, and scavengers.**
Free-Range	**Animals that are not caged, but rather free to move about and feed at will. This term is often used to describe livestock that has been raised without pens or cages.**
Habitat	**The location that an organism or community of organisms lives, their home, where they are able to find water, food, and shelter.**
Impact	**To have an effect on something.**
Invasive species	**Species that have been transported, accidentally or purposefully, from their natural setting and planted in a new environment.**
Invertebrates	**Having no backbone.**
Journal	**A personal record of experiences, observations, thoughts, and ideas kept in a diary or other written form.**
Lake	**A large body of standing water, deep enough so light cannot penetrate throughout its depth.**
Leftovers	**Food that has not been touched or placed on an individual plate and has remained in the serving platter.**
Macro invertebrates	**Invertebrate (no backbone) animals large enough to be observed without the aid of a microscope or other magnification.**
Mammals	**Warm-blooded vertebrates that nourish their young with milk and have skin often covered with hair.**
Map	**A drawing or some other kind of picture of a particular area; generally used to find your way around.**
Marsh	**Wetlands that are dominated by grasses and herbs.**

Native species	**A naturally occurring species.**
Naturalist	**Someone who studies nature.**
Nocturnal	**Active at night.**
Non-Compostable	**Food scraps that attract pests and give off a bad odor. These include cooked foods, meats, fish, and dairy products.**
Nutrients	**Substances taken in by plants and animals to help them grow. For animals, these are gotten through eating food.**
Observing	**Watching and taking note of the world around you.**
Organic food	**Food that is grown or reared without the use of synthetic chemicals or pesticides.**
Pollution	**Substances left in the environment that leave it less clean, or useful.**
Pond	**A body of standing water, smaller than a lake, in which light can penetrate through to the bottom. This allows plant life to grow throughout.**
Predator	**An organism that hunts and kills its food.**
Prey	**An animal targeted by a predator for food. An animal vulnerable to attack by a predator.**
River	**A large body of water moving under gravity's influence through clearly defined natural channels. Larger than a stream.**
Scavenger	**An organism that eats the abandoned food of other organisms, and rarely kills its own.**
Stream	**Any body of running water moving under gravity's influence through clearly defined natural channels to progressively lower levels.**

Sustainable	**Able to be maintained or sustained at a certain rate or level. Meeting the needs of the present without harming the ability of future generations to meet their own needs.**
Waste	**Unwanted and discarded material, not always useless.**
Water quality	**The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.**
Watershed	**All the land area that drains into a particular body of water.**
Wetlands	**A habitat that often has soil saturated by water or has shallow standing water for part of the growing season.**

Created by Joseph Petrick, Spring 2004

IslandWood Vocabulary Crossword



Crossword Clues

Across

2. Trees that lose their leaves in autumn, such as the Big Leaf Maple.
4. A mixture of decaying organic matter rich in nutrients, often used to fertilize gardens.
7. Someone who studies nature.
8. A personal record of experiences, observations, thoughts, and ideas kept in a diary or other written form.
10. The location that an organism or community of organisms lives, their home, where they are able to find water, food, and shelter.
12. All the land area that drains into a particular body of water.
14. Organisms that cannot make their own food and must rely on other organisms as a food source.
16. Living things, including anything caused by and produced by a living thing.
18. To save and protect something, especially natural resources.
23. Any body of running water moving under gravity's influence through clearly defined natural channels to progressively lower levels.
24. The process of breaking down organic matter into its basic elements including nutrients needed for plant growth.
26. To have an effect on something.
27. The capacity to perform work, or the potential for power and activity.
28. Food that is grown or reared without the use of synthetic chemicals or pesticides.
31. Organisms that break down dead decaying plant and animal material (detritus) and turn it into food for plants. These organisms include Mushrooms and Banana Slugs.
32. The change over time of the structure, function, behavior, or habitat of an organism, which allows for it to better survive in its environment.

Down

1. Warm-blooded vertebrates that nourish their young with milk and have skin often covered with hair.
3. Dead and decaying plant, animal, and organic material.
5. Organisms that are able to make their own food from the energy of the sun.
6. Able to be maintained or sustained at a certain rate or level. Meeting the needs of the present without harming the ability of future generations to meet their own needs.
9. Parts of an ecosystem that have been introduced or altered by humans. Examples would be a dam across a river, or a tree that had its bark stripped to make clothing.
11. The variety of life on earth.
13. Anything that is alive or was alive, including plants or animals.
15. Wetlands that are dominated by grasses and herbs.
17. A body of standing water, smaller than a lake, in which light can penetrate through to the bottom. This allows plant life to grow throughout.
19. The non-living parts of an ecosystem. You can remember by thinking about the "L.A.W.S." (light, air, water, soil) of nature, which govern who and what lives in a place and how.
20. The place where freshwater meets the ocean (saltwater) resulting in a mixing of fresh and salt water.
21. Unwanted and discarded material, not always useless.
22. A tree that grows its seeds in cones.
25. All abiotic, biotic, and cultural elements of a place, and how they interact.
29. Active at night.

30. An area of soft, spongy, water-saturated ground. The ground is a build-up of sphagnum moss and is very acidic. It has no streams running in or out.
31. Active during the day.

Created by Joseph Petrick, Spring 2004

IslandWood Word Search

Hidden Message

Use the first eleven unused letters from the top of the word search and the following clue to decode the hidden message:
HINT: *Highlighting the words in the word search makes it easier to find the unused letters at the end.*

CLUE: With only one muscular foot, these decomposers move slowly. Despite their slow movements they can travel over a razor blade or sharp edge of glass without cutting themselves.

_ _ _ _ _ _ _ _ _ _ _

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

ABIOTIC
ADAPTATIONS
BIODIVERSITY
BIOTIC
BOG
COMMUNITY
COMPASS
COMPOST
CONIFER
CONSERVATION
CONSUMERS
CULTURAL
DECIDUOUS
DECOMPOSERS
DECOMPOSITION
DETRITUS
DIURNAL
ECOLOGY
ECOSYSTEM
ENVIRONMENT
ESTUARY
EVERGREEN
FREE-RANGE
HABITAT
IMPACT
INVASIVE
INVERTEBRATES
LAKE
LEFTOVERS
MACRO
MAP
NATURALIST
NOCTURNAL
NON-COMPOSTABLE
NUTRIENTS
OBSERVING
ORGANIC
ORGANISM
POLLUTION
POND
PREDATOR
PRODUCERS
RIVER
SCAVENGER
STREAM
SUSTAINABLE
WATERSHED
WEB
WETLANDS

IslandWood Word Search Solution

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

(Over,Down,Direction)
ABIOTIC(9,20,E)
ADAPTATIONS(14,13,W)
BIODIVERSITY(17,7,S)
BIOTIC(17,6,N)
BOG(3,18,W)
COMMUNITY(10,14,W)
COMPASS(20,1,S)
COMPOST(13,5,S)
CONIFER(20,14,S)
CONSERVATION(16,12,W)
CONSUMERS(14,10,NW)
CULTURAL(6,11,NE)
DECIDUOUS(1,17,E)
DECOMPOSERS(15,11,N)
DECOMPOSITION(13,13,NW)
DETRITUS(10,15,E)
DIURNAL(16,17,W)
ECOLOGY(1,20,E)
ECOSYSTEM(18,12,S)
ENVIRONMENT(2,1,E)
ESTUARY(1,8,NE)
EVERGREEN(14,9,N)
FREE-RANGE(1,3,SE)
HABITAT(2,6,SE)
IMPACT(7,12,NE)
INVASIVE(17,19,W)
INVERTEBRATES(16,18,W)
LAKE(2,13,N)
LEFTOVERS(9,2,SW)
MACRO(2,8,SE)
MAP(18,20,W)
NATURALIST(3,1,SE)
NOCTURNAL(20,16,N)
NON-COMPOSTABLE(14,1,SW)
NUTRIENTS(16,16,W)
OBSERVING(18,9,N)
ORGANIC(16,14,W)
ORGANISM(4,9,NE)
POLLUTION(19,1,S)
POND(13,8,SW)
PREDATOR(1,19,E)
PRODUCERS(16,1,S)
RIVER(2,5,NE)
SCAVENGER(9,15,W)
STREAM(8,2,SE)
SUSTAINABLE(19,20,N)
WATERSHED(1,5,S)
WEB(1,16,SE)
WETLANDS(1,16,E)

Hidden Message
Banana Slugs

Content 5
Exploring the School's Community

Lesson Overview:

- **Purpose:**
  - To give students an idea of what can be found in their school's community
  - To begin to have students compare IslandWood's community to their own community
  - To develop observation skills
- **Objectives:**

  2.1.3 The students will explore the abiotic, biotic, and cultural aspects of their school's community and will be able to compare them to IslandWood's community

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **Student Outcomes:**
  - Completion of *Exploring the School's Community Worksheet*
  - Completion of journaling activities

1. Exploring the School's Community

Teacher Information:

- **Objectives:**

  2.1.3 The students will explore the abiotic, biotic, and cultural aspects of their school's community and will be able to compare them to IslandWood's community

  5.1 The students will use journaling to reflect throughout the planning, implementing, and evaluating of the *Make A Difference Project*

  5.2 The students will participate in group reflection throughout the planning, implementing, and evaluating of the *Make A Difference Project*
- **EALR:** ARTS 3.1; COMMUNICATION 1
- **Duration:** 60 minutes
- **Venue:** Explore a section of the school grounds or have the students choose different parts of the community as a homework assignment (make sure the students explore with an adult)
- **Materials:**
  - A copy of *Exploring the School's Community Worksheet (p. 34)* for each student
  - pen/pencil
  - Clipboard for each student
- **Safety:**
  - Adult volunteers can be used as extra eyes and ears
  - Students should be able to hear and see an adult at all times
  - Remind students of respect and safety expectations
  - Clearly mark the perimeter of a specific area that the students will explore
  - Check for safety concerns
  - Have a signal to get everyone's attention (banana slug, whistle, etc.)

- Give each student an *Exploring the School's Community Worksheet* and a clipboard
- Tell each student where they will be exploring
  - Make sure each student knows the boundaries they must stay within
  - Make sure each student knows the signal to get their attention
- Allow the students thirty minutes to explore the school's community using the worksheet

- Once the students have completed their exploration have them complete the part of the worksheet that asked them to imagine what IslandWood will be like
- Have the students share their descriptions and pictures in small groups
- Have the students put the *Exploring the School's Community Worksheet* in their IslandWood Journal
- **Reflection Questions & Projects:**
    - What parts of the school's community do you think will be different than IslandWood's community? Why?
    - What parts of the school's community do you think will be similar to IslandWood's community? Why?

Created by Joseph Petrick, Spring 2004

Name:
School:

Date:

Exploring The School's Community Worksheet

	Describe or draw what it is like in your community	Describe or draw what you think it will be like at IslandWood
Light		
Air		
Soil		
Plants		
Pollution		
Things made by humans		
You		