

*A Different
Perspective*

esthetics, and the senses

BAT AND MOTH TAG

Focus To show the adaptations of the bat that aid it in catching food.

Group Size Entire class

Time Required 10-15 minutes

Materials Blindfolds (*1, or enough for entire class*)

Physical Setting Small clearing or opening along the trail

- Process**
1. One child is chosen to be the Bat and is blindfolded. The rest of the children are Moths and slowly walk around within the designated boundary.
 2. To represent the echolocation used by bats to catch their prey, the child that is the Bat will periodically say "BAT". Every time the Bat says this all the moths will reply by saying "MOTH", representing the sound waves that will bounce off of the moths and return to the bat. The Bat tries to tag/eat as many moths as possible.

Variations:

- both moths and bat are blindfolded
- more than one bat

EACH ONE TEACH ONE

- Focus** To allow students to learn about the forest by teaching others.
- Group Size** Entire class
- Time Required** 45 minutes (*each station should last less than 2 minutes*)
- Materials** Taxonomy key
- Physical Setting** Trails at Cispus
- Process**
1. Gather the students into a semicircle. Then, select 1 or 2 students (depending on group size) and begin walking down the trail.
 2. When arriving at any interesting object (you may wish to "preview" the trail), stop the student(s) and teach them something about it. A suggestion for a station is the ancient Douglas Fir tree on the Braille Trail. You might say to the student: *"This is an ancient Douglas Fir. You can tell that it is a Douglas Fir by its rough bark and by the cones lying beneath the canopy. It was a seedling at the time Christopher Columbus discovered America, and has survived two fires. One of the likely reasons it has survived the fires is because of its extremely thick bark."* The student(s) would gather this information, perhaps giving a trial run. It is important to remember to keep the information short and understandable.
 3. Once the student(s) understand the station, other students pass by singly or in pairs. These students learn about the station and then continue down the trail to meet the instructor and learn about their station.
 4. The next group goes through and is taught about the first and second stations, then moves on to become the third station. This process repeats until all the students have stations.
 5. When the last student(s) have a station, the first station students will go to the second station to be taught, continuing until all students have been through every station.

Station suggestions:

- vegetation layers of the forest
- mushrooms
- millipede
- animal sign (spoor, owl pellet, hoof/paw print, tree markings)
- forest flowers
- banana slug
- bird call

Each One Teach One was introduced to the author by Wendy Scherrer of North Cascades Institute.

INTO THE NIGHT FOREST

- Focus** To rediscover and use all of our sensory abilities through guided inquiry and field study.
- Group Size** 15 students
- Time Required** 1.5 hours
- Materials** One flashlight
Appropriate clothing
Darkness
Handout: *Into the Night Forest questions*
- Physical Setting** Braille Trail and part of Covell Creek trail
- Process**
1. When it's dark, walk your students to where the Covell Creek trail and the Braille Trail end. Tell them you will take them into the forest where you hope they will rediscover and use all of their senses in a new way. Reassure them that they will be walking on a well established path that is extra wide, and that you know the path well. Tell them that they must stay together while they absorb their surroundings.
 2. Before beginning ask: *"What precautions should be taken if you are going to walk in the forest at night?"* After several answers, again remind them of the safety of the adventure on which you are about to embark. Then ask: *"What are our senses?"* After the senses are identified, proceed at a leisurely pace up the wide path to Covell Creek. Remember to stop periodically. You may want to use the single flashlight once in a while.
 3. You will lead the group. Place another adult/high school counselor at the end. Because this is a new experience for most of the students, be patient, and remind them to pay attention to the sounds and smells of the forest at night.
 4. When you reach the creek, stop and calmly get everyone's attention. This is when they should begin to notice that there is more light near the creek. Ask them: *"Why is there more light in this part of the forest?"* After several responses, which should reflect changes in vegetation as related to soil changes and water availability, tell them: *"Now it's time to get re-acquainted with our senses. Pick up a handful of soil. Feel its texture by*

rubbing it slowly between your fingers and thumb. Bring your soil sample near your nose and slowly inhale its scent. Try to replace the soil in the same spot that you found it. Now, moisten your hands and rub them together. Carefully make your way to the nearest tree and feel its bark. What does its smell like? With your hands still damp, reach down and pick up a small rock. Are the edges sharp...smooth...rough? Feel the rock's texture. Carefully replace the rock in its original spot. Now we must be completely quiet and listen for the sound of this part of the forest (it will probably take some time to get them quiet). Quiet now (softly) "shhhhhh"...(wait at least a couple of minutes). What were some of the sounds you heard?

5. After several responses, begin turning them around to head back down the trail and return at a leisurely pace. Stop occasionally to again listen to the sounds of the forest. The sounds may be different than before.

6. At the end of the Covell Creek trail, take the trail that branches off to your left. This is the end of the Braille Trail, a special trail for the visually impaired. At night, we too are visually impaired. This gives us the opportunity to rediscover and use our other senses.

7. The next part of this activity can be done in a variety of ways. Place an adult at the end of the Braille Trail. Tell the group:
"I am going to place you by yourself several feet off of the path. Stand or sit, but you need to remain in the same spot. Become acquainted with your surroundings. Smell the air, the soil, the leaves, feel the plants and ground around you, and listen to the sounds of the forest in your special spot. MAKE NO SOUND YOURSELVES, PLEASE! Remain quiet. I will return to you in about 10 minutes."

Intentionally split up friends so they won't be inclined to visit. Intersperse adults and high school counselors at various intervals. Place students about 50-60 feet apart and show them where to sit with your flashlight. If a student is scared, place them near an adult or counselor. Place another adult at the end of the group. Then, circle around by going out onto the service road for the rental trailers and re-enter the Braille Trail where you began. Use your flashlight to assist everyone back to the path. Retrace your route, emphasizing quietness by being quiet and whispering yourself. Use the rope guide to follow the rest of the trail without the flashlight.

8. Upon returning to the center have the students complete the following worksheet.

Walk Into The Night Forest questions

WHAT precautions should be taken before taking a night hike?

LIST each of your senses. **NAME** at least one thing you discovered using each sense.
Example: **SIGHT**--tops of trees etched into the sky.

WHEN you entered the forest what senses could you rely on? **WHAT** senses became impaired?

WRITE a few sentences about your thoughts while alone in the forest.

HOW would a daytime visit be different?

HOW would this night-time visit be different in another season?

OWL GAMES

Focus	To show the sensory adaptations of the owl that aid it in finding food.
Group Size	8-12 students
Time Required	10-20 minutes
Materials	1 blindfold
Physical Setting	Any small clearing or opening along the trail, avoid roots and stumps
Process	<p>Activity 1:</p> <ol style="list-style-type: none">1. One child is selected to be the owl. He or she is blindfolded and placed in the middle of the clearing. The rest of the children (adults can play too!) make a circle around the owl.2. One at a time, the people in the circle make random noises that an owl's prey would make (squeaking, chirping, rustling leaves, etc.). The owl then tries to point out who is making the noise. Rotate children so that everyone has a chance to be the owl. <p>Activity 2:</p> <ol style="list-style-type: none">1. The group joins hands and forms a circle. One child is chosen to be the owl and is blindfolded, and another child is chosen to be the mouse. Both children then go to the center of the circle.2. The owl will try to tag the mouse by listening to the sounds it makes while moving within the circle. During this time the circle remains silent and provides a boundary for the game. The mouse may try different techniques to keep from being caught, such as walking softly and crouching down. Rotate so that everyone gets a chance to be the owl or mouse at least once.

SENSORY BEAST

Focus	To give the students an understanding of the sensory requirements of living in the natural environment.
Group Size	Entire class
Time Required	15-30 minutes
Materials	No extra materials required
Physical Setting	Warm-up rounds can be played in the open, but the game is designed for play on the trail

Process **INTRODUCTION:**

Begin with a brief discussion of sensory concepts.

1. Different animals rely more heavily upon different senses.
2. Humans are sensory generalists with our flat faces, flat ears, and mediocre sense of touch.
3. Animals are shaped so that their dominant sense is usually obvious:
 - Dog's snouts stick out for smelling and grabbing with their teeth.
 - Bat's ears and faces are shaped to catch and send echolocation signals.
 - Bugs' antennae and feelers protrude from their bodies to sense the area around them.
 - Cats' whiskers are like antennae for moving at night and in tight spaces.
4. Discuss some animals in the environment of the activity: deer, elk, chipmunk, squirrel, beaver, woodpecker, owl, etc.

HOW TO PLAY:

1. Work in teams of four. Two members will possess one sense, and the remaining two will have another sense (ex: two ears and two hands).
2. The team decides what form to arrange themselves in to make one creature. They move in this form through the game area.
3. Have them work together for 30 seconds to 1 minute to get accustomed to the form.
4. Have them switch roles and form to adapt to the environment.

OPTIONS:

1. Play a round with the creature inside of a circle of students, chasing a student who is their "prey".
2. Play at night or day. Each provides a good set of possible sensory experiences. Night is best for sight, sound, smell and touch. Day playing should eliminate sight as an option.

TOUCHY-FEELY

Focus	To allow students to utilize and focus on their sense of touch, and relate what they discover to the river and forest environments.		
Group Size	Entire class		
Time Required	1 hour		
Materials	<table><tr><td><u>River ecosystem:</u> Aquatic plant River rock Sand and/or silt Driftwood</td><td><u>Forest ecosystem:</u> Fern frond Upland rock Soil and/or humus Rotting wood Conifer branch w/needles</td></tr></table> <p>8-12 wooden example boxes with hinged lids and shrouded hand holes (<i>students should be able to feel objects without being able to see them</i>)</p>	<u>River ecosystem:</u> Aquatic plant River rock Sand and/or silt Driftwood	<u>Forest ecosystem:</u> Fern frond Upland rock Soil and/or humus Rotting wood Conifer branch w/needles
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Physical Setting	Standard classroom or clearing		
Process	<ol style="list-style-type: none">1. Students are introduced to the importance of tactile learning and the fact that we, as humans, often overlook this sense, thereby losing the incredible experience of how things in the environment around us feel.2. Each box will contain a different single object from one of the two environments. The students will be aware that two environments are represented, though not their specific names or types. Students will line up and get a chance to feel the object inside each box. They should record their observations on a sheet of paper (<i>Discovery Journal</i>)--including the texture, temperature, hardness, softness, etc. of each object. Also they will make guesses about the object's identity, where it might be found in the local environment, and how it might relate to the other objects.3. After everyone has passed through and finished recording, open the boxes and lay out the contents for everyone to see. Ask the students to help arrange them into two groups, according to the environment they belong to. <p>Discussion: After the objects are laid out, discuss the recorded observations--ultimately linking the objects together according to their environment and encouraging the use of touch to gain information about one's surroundings.</p>		