

These journaling activities were created/adapted by Stacey Leah Scarce, to present to teachers at the Louisiana Environmental Education Symposium. Some were adapted from Kate Hofmann's thesis, "Nature Journaling: A Creative Path to Environmental Literacy," which Stacey acquired at a NAAEE conference. Unfortunately, Kate's guide is not in print today.

NATURE JOURNALING

A Nature Journal is a place to record observations, questions, ideas, thoughts and feelings of the natural world, a way to understand connections between plants and animals. It is also a place to record relationships between plants and animals and once a new understanding of nature has been gained, it becomes easier to recognize and comprehend your place within the inner workings of nature.

While this time outdoors may be structured or a class lesson, some of the benefits that can come from journaling are relaxation, empathy, knowledge of plants and animals, creativity, critical thinking, keen senses, sharpened observation skills, appreciation of ecology, enjoyment, and more.

When taking a group out to journal give clear directions before going outside making sure they understand that this is not outdoor playtime. Agree on a signal to begin the activity and to end the activity. Set boundaries in schoolyard, as well as expectations and consequences. Remember to stress respect for all living things including other people, plants, and animals.

Create an atmosphere of non-judgmental sharing of opinions and emotions. Establish how students are to use their journals, not as a diary but, instead, as a way to consider the world around us and our place in it.

Wildlife Code of Ethics:

1. Observe wildlife from a safe distance by using binoculars, spotting scopes and viewing blinds.
2. Move slowly and quietly to not scare them away so everyone can see.
3. Do not make sudden movements such as pointing with arm extended, this often times scares wildlife into hiding.
4. Avoid nests and dens.
5. Put the safety and health of wildlife first by resisting the impulse to feed them.
6. Reserve feeding of wildlife to backyard birds.
7. Only photograph from a safe distance.

8. Never chase, herd, flush or make deliberate noise that stress wildlife.
9. Leave plants, trees, decomposing logs, and other natural features as we found them.
10. Tread lightly, stay on trails and designated pathways.
11. Help others to become responsible wildlife watchers.

Nature Bingo

Preparation

Make several copies of a journaling bingo card but move each activity in a different square so that no two bingo cards are alike.

Cut up one bingo card separating activities.

Example bingo card:

Draw & Compare Two Leaves	Find & list evidence that mammals are present	Draw a damaged tree & explain your theory of the cause	How many different shades of green or brown do you see, describe them	Observe, time & list an insect's activities for 3 minutes
Sit in one place, watch for birds until you can list or describe six or more kinds	Find and draw three patterns from nature	Write about something manmade that does not belong in this habitat	Find a plant that you like & list the reasons why	Draw in your journal using natural materials
Draw a map of an ants nest & trails leading to it	Write a "What am I?" description of a plant or animal	Write a poem where each line starts with a letter in the name of a plant or animal (ex. Raccoon)	Describe all the ways that you know the wind is present	Close your eyes, listen for 1 minute, list how many sounds you hear and try to identify them
Find & draw a leaf with 5 or 7 parts (leaflets of 3 - let it be)	Find an animal that you like & list the reasons why	Describe where you are as if describing it to someone who has never seen it	Describe an unusual or surprising natural thing that you see, hear, or smell	Describe an object using qualitative information (using adjectives)
Make a drawing without looking	Watch an animal for 5 minutes &	Find a pattern in nature that	Write about something that	Describe something that is

at the page	list its activities	represents the first letter of your name and draw it	you discovered that you never knew before	invisible
-------------	---------------------	--	---	-----------

Procedure

1. Give each student a bingo card. Give them an allotted amount of time to work on the bingo card.
2. Have them write, draw or photograph each activity on the card that they want to do in a line across, down or diagonal, keeping in mind that the more squares they do, the better chance they have to win at bingo.
3. When the time is over, have all students gather around as instructor puts her individual bingo activity cards into a box to shuffle. Pull one card out at a time. Students will mark off each activity the instructor calls out until someone has won the bingo game.
4. A discussion of how each bingo activity was satisfied would be a good way to show the diversity of ideas among students.

Texture, Shape and Color Treasure Walk

Preparation

Pick texture, shapes and colors, from the list provided, for your students to identify outdoors.

Procedure

1. Have students write, draw or photograph textures, shapes or colors that are representative of the following list. You can use one topic or all three.
 - a. Texture: hard, cold, hot, smooth, rough, bumpy, slick, scratchy, silky, soft, prickly, coarse, scaly, grainy, slimy, sticky, velvety, spongy, greasy, hairy, fluffy, dry, wet, bouncy.
 - b. Shape: star, triangle, square, rectangle, circle, crescent, oval, sphere, cube, cylinder, cone, pyramid.

- c. Color: red, orange, yellow, green, blue, purple, black, brown, gray and white.
2. Upon completion of activity, ask students to share their findings (interpretation of adjectives). Can students come up with other adjective to describe objects that were found?

Discovery through Observation

Preparation

Have students select a spot outdoors that they can sit in quietly, away from other students.

Procedure

1. Students should sit in their selected spot with their journals and write everything they see, hear, smell, and feel.
 - a. Set a timer or use a watch and let the students write for 5-10 minutes.
2. When the time is up, gather everyone together and have some students share their observations and discuss them.
3. Send the students back to their selected spot and have them write everything they see, hear, smell and feel again.
 - a. Set the timer for 10-20 minutes.
4. When the time is up, gather everyone together and have some student share their observations.
5. Discuss how their observations have changed between their first and second writings.
 - a. Teacher and students should be able to notice more detail about objects, emotions about nature, ownership and empathy for things in the environment in the second writing, whereas, the first writing was just a list of things present in their area.

Phenology Calendar

Preparation

Designate an observation window or area of the school yard near the classroom. Set up a rain gauge, bird feeder, squirrel feeder, thermometer, wind vane etc.

Procedure

1. Make a chart that students can record data on daily from the observation window/ area.
2. Record the bird species seen, the temperature, if it is sunny, cloudy or rainy, the kinds of clouds in the sky, how much rain fell, wind speed etc.
3. Do the observations and the recording at the same time each day.
4. At the end of each month, compile the data collected into a monthly phenology calendar that will show the students the weather conditions and the wildlife present for each day.
5. This will provide the class with information they can reference about seasonal weather patterns, bird migration, and more.

Field Guides

Preparation

Find areas around the school yard that students can identify plants or animals using field guides. Mark the areas if needed.

Things students could identify: trees, ants, wild flowers, vines, seed pods, honey bees, roly polys, hummingbirds visiting a feeder, squirrels, animal tracks, lizards, turtles, mushrooms, spiders, dragonflies.

Make sure there are field guides available that could be used for each of the items you chose for the students to identify.

Procedure

1. Assign each student or a group of 2-3 students to each station with the necessary field guides.
2. Have the students draw and describe their organism in their journals.
3. Have the students use the provided field guides to identify, to the best of their knowledge, what species they have.
4. Have the students write what is happening around and with their organism.
 - a. What are the ants doing? Are they going somewhere?

- b. Are there things living in the tree or visiting the tree for some reason?
- c. Are the leaves of the flowers torn or chewed? By whom?

Seasonal Changes

Preparation

Make a list of questions for the students to answer in their journals while out in the schoolyard.

- Questions could include:

How many different colors can you count and describe?

How many shades of green can you count and describe?

How many shades of brown can you count and describe?

What do you hear?

Can you identify these sounds? Buzzing, calls, leaves rustling?

Which sounds are human made and which ones are nature made?

Describe the weather.

Describe all the ways that you know wind is present.

Describe what the clouds look like.

How far can you see through the trees?

How much of the sky can you see through the trees?

What do you see on the forest floor?

Describe some tree trunks.

Are there leaves on all trees?

What are the shapes of the leaves you see and describe where you see them?

Are there berries in trees? On vines? On shrubs? On forest floor? Describe.

Are there flowers in trees? On vines? On shrubs? On forest floor? Describe.

Are there squirrel drays? Where?

Are there bird nests? Where?

How many bird calls do you hear?

Can you identify any of the calls?

Describe what you smell.

Do you see movement on the forest floor? What is it?

Do you see movement on dead trees? What is it?

Do you see movement in the sky? What is it?

Do you see foot prints in the mud?

What sort of animal signs do you see?

Procedure

1. Choose an area outdoors that the students can return to monthly/seasonally. Each student could have their own special spot away from others that they can remember and return to.
2. Give each student a list of questions and have them journal about them. Remind the students to be as descriptive as possible. They can use drawings as well if that helps them describe what is going on around them.
3. Return to the same spot each month or each season and have the student answer the same questions in their journals again.
4. Discuss the differences between answers for each month or season and predict what may be different the next time this activity is done.

Place Descriptions

Preparation

Read through the following passages with the class, select another from a favorite author or write your own passage about a meaningful experience.

“The dark, long, black wings glide past you without a whisper of knowledge that it was there. Sitting in wait atop a tree; for the prey that scurries along pathways through dead grass. You may never know it is there or know the fate of those for which it lies in wait. It is majestic, fearsome and grand beyond any reason. To see the eyes of such a creature, those large, brown-yellow eyes is to realize that there is wisdom of which we cannot comprehend. “

“The cicadas are whining high, low, high, low. The Rio Grande Chirping Frogs are competing with Cardinal chirps. The wind is slight, the softness brushes upon your skin. Crickets and other such insects not making themselves known until now. The crisp baby blue clouds are muted by the soft pinks, oranges, and purples until the dark edges of night appear, then the dark edges take over all colors until that is all that is there. “

“I thank the clouds for a reprieve and the strength to stay out in the open of the levee for a longer period of time. This enabled me to take in the splashing of all size of fish rocketing out of the water in that linear fashion until gravity brought them back down with a big splash, like a belly flop. They seem to eject themselves out of water, oftentimes, in groups of three. As the fish are sailing through the air the sun continues its course towards the horizon. It’s gets a little too hot so I retire under the canopy of trees and vines of the forest.”

Procedure

1. Have the student close their eyes while you read the passages to them so that they can imagine the place and the experience.
2. After reading, take the class outside and have each student find a spot to sit. Have the students think about a meaningful experience they have had at school, at home, in nature etc.
3. Ask the students to write a paragraph about their experience. They should include as many details and descriptions as possible. Prompt the students with questions if necessary.
 - a. What was the weather like? What did you see, hear, smell and feel around you?
4. When everyone has finished writing, have them read their paragraph to a partner or to the class. The audience can give their impressions at the end.
 - a. What images did they see? Where was it?
 - b. What kind of things made their descriptions most effective?

Which Rock?

Preparation

Collect enough rocks for each student to have one. Rocks from a gravel road or driveway will work. Number the rocks with a marker and place each one in a separate paper bag.

Procedure

1. Have students sit in a circle outside in the school yard and pass out the bags with a rock in them. Make note of which student gets which number rock for later.
2. Without looking into the bag, students should feel the rock and draw what they imagine it to look like. Have them notice the shape, size, bumpiness, smoothness, and unique features of the rock without using their eyes.
3. In addition to drawing the rock in the bag, students should describe in detail using adjectives about the size, shape, texture and uniqueness of the rock.
4. When everyone has finished, take the rocks out of the bags spread them out in the center of the circle. Using their drawings, students should try and find which rock they think was theirs. The rock they choose can be pulled toward them but left in the center in case anyone else chooses the same rock. Students can write down the number on the rock that they believe to be theirs.
5. The teacher can then tell everyone which number rock was theirs to see if the students and their chosen rocks match.

A Different Perspective

Preparation

Take the students outdoors to find a quiet spot to sit alone and write.

Procedure

1. Have the students each choose a natural object that they will write about. Explain to them that they will be writing from the perspective of that object. They will be that object for this activity.

- a. They can choose any living or non-living thing in nature. A river, decomposing log, blade of grass, bumble bee, soil, tree, flower, swamp, forest, mountain, snow, rain, bird, snake, raccoon.....
2. Tell the students to write as if they were the object they chose. They should include what they see, hear, smell; what they pass by or go through; how they feel, what their job is in nature, what happens to them, etc.
3. In addition, they should include their interactions with humans and wildlife.
 - a. What do humans do to them or with them? Do humans try and harm them or do humans enjoy them?
 - b. What does wildlife use them for? Is there other wildlife that may prey upon them or be eaten by them?
4. Have the students draw a picture of the author of their writing (the river, tree, bug, etc that they chose to use).
5. When everyone is finished have students share and discuss their writing with the class.

Symbolic Words

Preparation

Print out some of the following quotes, written by naturalist writers. One quote per page.

"Conservation is sometimes perceived as stopping everything cold, as holding whooping cranes in higher esteem than people. It is up to science to spread the understanding that the choice is not between wild places or people. Rather, it is between a rich or an impoverished existence for Man." ~ Thomas E. Lovejoy, World Wildlife Fund

"So long as the fur of the beaver was extensively employed as a material for fine hats, it bore a very high price, and the chase of this quadruped was so keen that naturalists feared its speedy consideration. When a Parisian manufacturer invented the silk hat, which soon came into almost universal use, the demand for beavers' fur fell off, and this animal—whose habits, as we have seen, are an important agency in the formation of bogs and other modifications of forest nature—immediately began to increase, reappeared in haunts which we had long abandoned, and can no longer be regarded as rare enough to be in immediate danger of extirpation. Thus the convenience or the caprice of Parisian fashion has unconsciously exercised an influence

which may sensibly affect the physical geography of a distant continent." ~ George Perkins Marsh, *Man and Nature*, (1864), 84.

"So-called extraordinary events always split into two extremes naturalists who have not witnessed them: those who believe blindly and those who do not believe at all. The latter have always in mind the story of the golden goose; if the facts lie slightly beyond the limits of their knowledge, they relegate them immediately to fables. The former have a secret taste for marvels because they seem to expand Nature; they use their imagination with pleasure to find explanations. To remain doubtful is given to naturalists who keep a middle path between the two extremes. They calmly examine facts; they refer to logic for help; they discuss probabilities; they do not scoff at anything, not even errors, because they serve at least the history of the human mind; finally, they report rather than judge; they rarely decide unless they have good evidence." ~ Marc-Auguste Pictet. Quoted in Albert V. Carozzi, *Histoire des sciences de la terre entre 1790 et 1815 vue à travers les documents inédits de la Société de Physique et d'Histoire Naturelle de Genève*, trans. Albert V. and Marguerite Carozzi. (1990), 175.

"To stand at the edge of the sea, to sense the ebb and flow of the tides, to feel the breath of a mist moving over a great salt marsh, to watch the flight of shore birds that have swept up and down the surf lives of the continents for untold thousands of year, to see the running of the old eels and the young shad to the sea, is to have knowledge of things that are as nearly eternal as any earthly life can be." ~ Rachel Carson

"In an age when man has forgotten his origins and is blind even to his most essential needs for survival, water along with other resources has become the victim of his indifference." ~ Rachel Carson

"These sprays, dusts, and aerosols are now applied almost universally to farms, gardens, forests, and homes-nonselctive chemicals that have the power to kill every insect, the "good" and the "bad," to still the song of birds and the leaping of fish in the streams, to coat the leaves with a deadly film, and to linger on in soil-all this though the intended target may be only a few weeds or insects. Can anyone believe it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? They should not be called "insecticides," but "biocides." ~ Rachel Carson

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is something infinitely healing in the repeated refrains of nature -- the assurance that dawn comes after night, and spring after winter." ~ Rachel Carson

"The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction." ~ Rachel Carson

“But man is a part of nature, and his war against nature is inevitably a war against himself.” ~ Rachel Carson

“It is a wholesome and necessary thing for us to turn again to the earth and in the contemplation of her beauties to know the sense of wonder and humility.” ~ Rachel Carson, *The Sense of Wonder*

“The 'control of nature' is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man.” ~ Rachel Carson

“In nature nothing exists alone” ~ Rachel Carson, *Silent Spring*

Wednesday, April 17, 1805. “The whole face of the country was covered with herds of Buffalo, Elk, and Antelopes; deer are also abundant, but keep themselves more concealed in the woodland. They are so gentle that we pass near them while feeding, without appearing to excite any alarm among them; and when we attract their attention; they frequently approach us more nearly to discover what we are.” ~ The Journals of Lewis and Clark

"I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practice resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life, to live so sturdily and Spartan-like as to put to rout all that was not life, to cut a broad swath and shave close, to drive life into a corner, and reduce it to its lowest terms." ~ Henry David Thoreau, *Walden: Or, Life in the Woods*

"We need the tonic of wildness...At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and un-explorably, that land and sea be indefinitely wild, un-surveyed and unfathomed by us because unfathomable. We can never have enough of nature." ~ Henry David Thoreau, *Walden: Or, Life in the Woods*

“Though I do not believe that a plant will spring up where no seed has been, I have great faith in a seed. Convince me that you have a seed there, and I am prepared to expect wonders.” ~ Henry David Thoreau

“Amid a world of noisy, shallow actors it is noble to stand aside and say, 'I will simply be.'” ~ Henry David Thoreau

“Wonderful how completely everything in wild nature fits into us, as if truly part and parent of us. The sun shines not on us but in us. The rivers flow not past, but through us, thrilling, tingling, vibrating every fiber and cell of the substance of our bodies, making them glide and

sing. The trees wave and the flowers bloom in our bodies as well as our souls, and every bird song, wind song and tremendous storm song...is our song." ~ John Muir, *John of the Mountains*

"Our tools improve faster than we do. It is unlikely that economic motives alone will ever teach us to use our new tools gently. The only remedy is to extend our system of ethics from the man-man relation to the man-earth relation. We shall achieve conservation, when and only when, the destructive use of land becomes unethical-punishable by social ostracism. Any experience that stimulates this extension of ethics is culturally valuable. Any that has the opposite effect is culturally damaging." ~ Aldo Leopold, *Wildlife in American Culture*

"Man always kills the things he loves, and so we the pioneers have killed out wilderness. Some say we had to. Be that as it may, I am glad I shall never be young without wild country to be young in. Of what avail are forty freedoms without a blank spot on the map?" ~ Aldo Leopold, *A Sand County Almanac*

"We shall never achieve harmony with land, any more than we shall achieve justice or liberty for people. In these higher aspirations the important thing is not to achieve, but to strive. It is only in mechanical enterprises that we can expect that early or complete fruition of effort which we call 'success'. ~ Aldo Leopold, *Round River*

"Possibly, in our intuitive perceptions, which may be truer than our science and less impeded by words than our own philosophies, we realize the indivisibility of the earth-its soil, mountains, rivers, forests, climate, plants and animals, and respect it collectively not only as a useful servant, but as a living being." ~ Aldo Leopold, *Some Conceptual Fundamentals of Conservation in the Southwest*

"Many conservation treatments are obviously superficial. Flood-control dams have no relation to the cause of floods. Check dams and terraces do not touch the cause of erosion. Refuges and hatcheries, to maintain the supply of game and fish do not explain why the supply fails to maintain itself." ~ Aldo Leopold

"In general, the trend of the evidence indicates that in land, just as in the human body, the symptoms may lie in one organ and the cause in another. The practices we now call conservation are, to a large extent, local alleviations of biotic pain. They are necessary, but they must not be confused with cures. The art of land doctoring is being practiced with vigor, but the science of the land health is yet to be born." ~ Aldo Leopold, *A Sand County Almanac*

"There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace." ~ Aldo Leopold, *A Sand County Almanac*

“There is yet no ethic dealing with man’s relation to land and to the animals and plants which grow upon it. Land, like Odysseus’ slave girls, is still property. The land-relation is still strictly economic, entailing privileges but not obligations.” ~ Aldo Leopold, *A Sand County Almanac*

“There will always be pigeons in books and in museums, but these are effigies and images, dead to all hardships and to all delights. Book-pigeons cannot dive out of a cloud to make the deer run from cover, or clap their wings in thunderous applause of mast-laden woods. Book-pigeons cannot breakfast on new-mown wheat in Minnesota, and dine on blueberries in Canada. They know no urge of seasons; they feel no kiss of sun, no lash of wind and weather. They live forever by not living at all.” ~ Aldo Leopold, *A Sand County Almanac*

Aldo Leopold encouraged his readers to “Think like a mountain,” for “Only the mountain has lived long enough to listen objectively to the howl of a wolf.” He describes his remorse as he looked into the eyes of a dying wolf: “I was young then, and full of trigger itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters’ paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view.” ~ Aldo Leopold, *A Sand County Almanac*

“The problem, then, is how to bring about a striving for harmony with land among a people many of whom have forgotten there is such thing as land, among whom education and culture have become almost synonymous with landlessness. This is the problem with ‘conservation education’. ~ Aldo Leopold, *Round River*

“Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop away from you like the leaves of Autumn.” ~ John Muir

"When one tugs at a single thing in nature, he finds it attached to the rest of the world." ~ John Muir

"In every walk with Nature one receives far more than he seeks." ~ John Muir

“Thousands of tired, nerve-shaken, over-civilized people are beginning to find out going to the mountains is going home; that wilderness is a necessity...” ~ John Muir

“As long as I live, I'll hear waterfalls and birds and winds sing. I'll interpret the rocks; learn the language of flood, storm, and the avalanche. I'll acquaint myself with the glaciers and wild gardens, and get as near the heart of the world as I can".” ~ John Muir

“Most people are on the world, not in it-- having no conscious sympathy or relationship to anything about them-- undiffused separate, and rigidly alone like marbles of polished stone,

touching but separate. " ~ John Muir

"When we contemplate the whole globe as one great dewdrop, striped and dotted with continents and islands, flying through space with other stars all singing and shining together as one, the whole universe appears as an infinite storm of beauty." ~ John Muir

"You are capable of more than you know. Choose a goal that seems right for you and strive to be the best, however hard the path. Aim high. Behave honorably. Prepare to be alone at times, and to endure failure. Persist! The world needs all you can give." ~ E.O. Wilson

"Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction." ~ E.O. Wilson

"Humanity is part of nature, a species that evolved among other species. The more closely we identify ourselves with the rest of life, the more quickly we will be able to discover the sources of human sensibility and acquire the knowledge on which an enduring ethic, a sense of preferred direction, can be built." ~ E.O. Wilson

"Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values as yet un-captured by language." ~ Aldo Leopold, *A Sand County Almanac*

Procedure

1. Place one quote at each station outdoors or on desks in the classroom. If you choose to do this indoors, have the desks set up in a way that the students can easily move from desk to desk (circle form would work well).
2. Have the students do around to each station, silently, and read the quotes.
3. Once all have been read, have the students choose one of the quotes that mean something to them to write about. Students should stand or sit near their quote, but not pick it up and take it, so that others may use it also if they would like.
4. Allow the student some time to write their thoughts and feelings about their chosen quote.
5. Students can share their quote and their writing when everyone is finished.

Celebrations

Preparation

Think about some events or experiences you have had that have impacted your life. Beautiful, amazing things you have been a part of or have witnessed in the natural world. Write some of your own experiences to share with your students before having them do this activity.

Procedure

1. After reading some journal entries with the class and before leaving the classroom, tell the students that you would like them to think about the experiences they have had in nature so that they can write about at least one of them. It should be something extraordinary and amazing.
2. Take the students outdoors to find a quiet spot to sit and reflect. Let them write about the experiences they would like to celebrate. Have them think about something they have been through that no one else has been through in nature. They could draw something to go with their celebration.
3. Gather the group when all are finished and have a celebration-sharing.

Mystery Bags

Preparation

Put a different natural object into each of the paper bags, trying not to duplicate too many objects (if there are 20 students, in bags #1-5 put different objects, in bags #6-10, #11-15, and #16-20 put the same objects as in bags #1-5 to shorten the activity). Number each bag and set up at a station.

Procedure

1. Discuss our five senses, and the fact that as humans we tend to rely most on sight.
2. Ask students if sight is the only way we can find out what is inside of the “mystery bags” and discuss what other senses could be used.
3. Assign students to a station to then travel from station to station.
4. As they move from station to station, have them reach into each bag to feel the objects inside without looking at them. They can shake the bag or smell into the bag but cannot look.

5. Have them write down the station number and adjectives describing the object before writing what they think it is.
6. Once students have been to all bags, discuss adjectives that students used for each object and what they thought it was before revealing “mystery object.” Discuss the amount of information they gathered without using sight.

Alternatives and Extensions

- Students could draw the objects based on how they feel.

Sound Map

Preparation

Find an outdoor location with a variety of interesting sounds and an area large enough for students to spread out.

Procedure

1. Point out a landmark that all students will be able to see. Once students have found a place away from others, they will draw an arrow on the upper right hand corner of their paper. The arrow indicates where the landmark is, so the arrow on their paper should always be pointed in the direction of the landmark while making the map.
2. Have students make a mark in the middle of the page, this represents where they are. Students will make other interpretive marks in relation to the mark that represents where they are on the page.
 - a. Each interpretive mark will represent something that is heard, such as a leaf falling, car horn, wind rustling leaves, bird singing, squirrel chattering, lawn mower, frog croaking, insects buzzing, etc.
 - b. Marks could include a spiral, circle, square, cross, x, check mark, star, wavy line, dot, heart, triangle, lightning bolt, smiley face, musical notes, or even letters.
 - c. It may be a good idea for students to make a legend of their interpretive marks.
3. Show students how to make “deer ears” by cupping their hands behind their ears to magnify the sounds.
4. After 5 to 10 minutes of listening and mapping, call the group back together to share what they heard.
 - a. How many kinds of sounds did they hear? Did they hear different sounds depending on where they were? What sounds did they especially like, or not like? Did any sounds surprise them or make them curious?

- b. Ask them to consider how the sounds they heard compare to what they might hear in other locations – a busy street corner, a forest, a lakeshore, a swamp.

Alternatives and Extensions

- Do this activity again and compare sounds in a different location, or at a different time of day or time of year.

Sensory Awareness

Preparation

Find areas in schoolyard where there is a variety of sensory stimuli.

Procedure

1. Discuss our five senses and brainstorm a list of words to go along with each sense.
2. Have students sit or wander in a small area and record all that they see, hear, smell, touch using adjectives to describe these senses for several minutes. Students should remain silent during this exercise.
3. Have students write a paragraph or poem using their descriptive words.

Alternatives and Extensions

- Have students close their eyes for several minutes of the exercise to enhance senses other than sight. Ring a bell or whistle to let them know when to open/close their eyes.
- Guide students on a silent hike, stopping often for them to record in their journals.

Partner Drawing

Preparation

Gather an assortment of natural objects – pinecones, leaves, acorns, seed pods, flowers, bark, seashells, feathers, etc. and put in bags.

Procedure

1. Hold up an object to have students describe without naming it. Imagine someone is listening who cannot see the object, and model the kinds of details to mention: size,

shape, number of different parts and how they relate to each other, whether the shape reminds them of anything.

2. Have students pair up and sit back to back. Instruct each pair to choose an Artist and a Describer. Give each Describer a paper bag with a natural object in it. Describer can either look at object or keep it in the bag without looking at it while describing it.
3. Describers explain the objects appearance in as much detail as possible without naming the object or giving clues to what the object is. The Artist draw exactly what they are told, asking questions if they would like.
4. When a pair finishes, they switch roles with new objects.
5. Compare drawings to objects. How well did they match? Which words or phrases were helpful and not helpful for the Artist. Was it easier to be the Describer or the Artist? Can you look at the object and drawing and find new ways of describing it that would have helped the Artist? Discuss the importance of being very clear and descriptive to help others understand you.

What am I?

Preparation

Gather binoculars, magnifying lenses and a variety of field guides.

Procedure

1. Have students wander around outdoors with the purpose of questioning the natural world and how it works.
2. Students write, "I wonder" in their journals then write several questions they have about things in the natural world as well as musings.
3. Have students select one of their questions which they can find an answer to. They can use reference materials, their own observations or both.
4. With their new found information they will then write "What am I" statements
 - a. I have four legs
 - b. I am arboreal

- c. like my relatives-I live part of my life in water
- d. I live in forests
- e. I sing from March through August when the temperature is between 68 and 89 degrees
- f. What am I? *Hyla chrysocelis* – Cope's gray treefrog.

Alternatives and Extensions

- Write a poem, starting and ending with, "I wonder."

Natural Alphabets

Preparation

Find a location with vegetation, set boundaries to let students wander around.

Procedure

1. Explain that there are patterns and designs everywhere in nature; leafminer trails on leaves, vines and branches, tree bark, clouds, and mud cracks to shadows.
2. Have students search for the letters in their first names (or just the first letter of their names) within these patterns and designs in nature but not real letters written on something.
3. Create a space on their journals to draw all of the parts of nature that represent the letter. This could be squares or triangles or rectangles mapped out on their page.
4. Afterward, what were their favorite discoveries during this process? Were they surprised at how many letters they found once they started?

Alternatives and Extensions

- Students could use digital cameras to capture the letters in their name.
- Create a finished piece of art from their sketches or journal cover.

Close-up drawing

Preparation

Cut a piece of paper in half then cut out a 4" circle in the middle of the paper.

Provide a hand lens for each student.

Procedure

1. Students will place circle against a tree trunk, against or over a small flower, over grass or any other area so that they can draw up close.
2. Use hand lens to get more detail into drawing.
3. List any questions that might come up about the object within the drawing circle.
4. Discuss with students the kinds of details they noticed about their objects as they drew. What did they discover by looking closer? What did they see that made them curious? Ask them to share some of their questions, and discoveries.
5. If students would like to share drawing, ask classmates if they can guess what the drawing is part of.

Alternatives and Extensions

- Start this activity by showing close-up photographs of various objects and having students guess their identities.
- Draw entire object that close-up drawing is part of. Display close-up drawings with entire drawings and have students match them.

Nature Poetry

Preparation

Prepare several sheets of paper with some of the following statements on them.

Place statement papers near outdoor objects that students are going to write about.

1a. I am...

1b.

2a. I wish...

2b.

3a. I have...

3b.

4a. I will...

4b.

5a. I was...

5b.

6a. I can...

6b.

7a. I feel...

7b.

8a. I come from...

8b.

9a. I see...

9b.

10a. I hear...

10b.

11a. I want...

11b.

12a. I need...

12b.

13a. I like...

13b.

14a. I will be...

14b.

15a. I give...

15b.

Procedure

1. Place students in groups of 2 or 3.
2. Instruct students to write two-line stanzas at each station, each group will start with the first stanza and as they move to each station they will write on the next stanza until they have stopped at all stations.
3. Assign each group to a station and have them move in a predetermined direction.
4. Share poetry with students.

Alternatives and Extensions

- Assign a page of poetry, from a station, to each group to have them revise the poetry to make it more cohesive.
- Share the finished product with the class.