

101 Nature Activities from Sanborn Western Camps

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This is my Classroom
I have trees for walls
I have the sky for a roof
I have the ground for a floor
The wind is like an air conditioner
The sun is like a heater
The rock that I am sitting on is like a desk.
6th grade student

Sensory Awareness Activities

- 1. Magic Eye:** This activity stresses the full use of the sense of sight. Subtle patterns, textures, forms and colors pop into clear focus through the Magic Eye. A Magic Eye can be a piece of cardboard with a hole in the middle, a knothole in a piece of wood, or even a circle made with your thumb and index finger. The Magic Eye can be held at varying distances from your eye to focus on different things. Start by holding it next to your eye and looking through the hole at any object you choose. Slowly stretch your arm out toward this object, always looking through the Magic Eye. When your arm is at full length, look carefully at what you have framed. If it is close enough walk up and examine it closely. Choose another object for scrutiny through the Magic Eye.
- 2. Deer Stalking:** Two players are blindfolded and designated as the deer and the stalker. The other players form a circle around these two. Within the confines of this circle, the stalker tries to tag the deer by listening to footsteps, breathing and other deer noises, while the deer tries to keep away the stalker. The outside circle must be absolutely quiet, for any noise will be distracting to the participants. If the stalker does not catch the deer within a certain time limit, the deer wins the round and two new participants are chosen.
- 3. Do You See:** This exercise is valuable in helping us to become aware of the common habit of looking without seeing. Casually ask group members to look in one direction for 60 seconds. Then have them close their eyes and ask them questions about the area they just viewed. Are there clouds in the sky? Did they notice any animal signs? How many colors did they see? What was the largest thing they saw? What was the smallest? Participants may then open their eyes and take another look at the area. What do they see this time that they didn't see the first time?
- 4. Flubber:** This is a good quick activity to lead into other sensory awareness activities. In a bowl mix 2 16 oz boxes of cornstarch and about 2 cups of water, then add 1 $\frac{3}{8}$ cup more water. Mix by hand to ensure an even consistency. Do not push through the mixture as if mixing batter, but rather keep "lifting" from the bottom of the bowl to the top until an even consistency is reached. Flubber should flow when you tip the bowl, but feel like a solid when you hit it or rub your finger across the surface. If it is too thick to flow just add water and if slightly soupy little more cornstarch. Have people blindfolded and using their sense of feel, check out the flubber-is it liquid or a solid, or both-How can you make it become a solid or liquid. Punch the flubber in the bowl hard and quick, gently and slow. When does it seem to be a liquid, a solid? After you have taken off the blindfolds, play some more using your other sense, see if you can make other discoveries. Often this is best done outside.

5. **Asteroid Belt:** In this space age scenario, a space ship tries to maneuver its way safely through a crowded field of asteroids. One blindfolded player represents the space ship. Remaining players become asteroids and take up random positions in an area approximately 30 feet long and 10 feet wide. The space ship then tries to move through the full length of the asteroid belt without bumping into any of them. Fortunately, the space ship is equipped with radar so that the nearest asteroid to her must emit a “Beep Beep” sound in warning. If the space ship successfully completes the trip, another player is selected to pilot the craft and the game continues. If the ship crashes into an asteroid, the destroying asteroid becomes the new pilot and returns to the starting point to begin a new game.
6. **Blindfold Partners:** In addition to accenting other senses by removing the sense of sight, this game helps to create feelings of trust and responsibility for one’s partner. Each player is also placed in the unique position of being a guide for a blindfolded partner which heightens sensitivity and awareness for the natural surroundings. The group is divided into pairs, and one member of each partnership is blindfolded. The other partner helps the “blind” person walk around, giving him things to touch, smell and taste. The guide needs to be especially aware of the safety of his “blind” partner, and to do everything she can to help him sense the environment fully. After about five minutes, the partners can change roles.
7. **Cookie, Cookie:** In this blindfolded partner exercise, the guide may not say anything except “cookie.” Using inflection only, he must express safety concerns, and help his partner to appreciate the environment.
8. **Meet a Tree:** Lead a small group of blindfolded campers on a short walk, allowing them to concentrate on our less used senses by taking away our most used sense-sight. Lead the campers through a variety of sensory experiences-sunlight, shade, open area, trees, grassy, rocky --always going slowly and building their confidence in you as their leader. Now, leave each blindfolded camper at a different tree. Tell them to learn as much as possible about the tree by feeling, smelling, listening, and even tasting. Take each camper away from the tree, remove the blindfold and ask each one to find his/her tree. *Did they find it?*
9. **100 Inch Hike:** You will need a piece of string 100 inches long for each participant. Shrinking our field of perception often adds to our awareness. By closely examining a very small area, one can discover wonders which might otherwise be overlooked. In the 100 Inch Hike, everyone is given a piece of string 100 inches long. Each participant places it on the ground and explores carefully the area along the string. Things to look for include signs of animals, birds, or insects; distinctive characteristics of any plant along the trail; textures of soil or sand; different colors, etc. Participants may wish to record their findings and share them with other members of the group.
10. **Smell Hike:** Take a hike focusing your sense of smell on the nature around you. What does the bark of a tree smell like (a ponderosa pine is said to smell like vanilla or butterscotch.), what does sage smell like, what do the flowers and grasses smell like? Why do different things have different smells? Are they trying to attract insects?
11. **Team Sense:** Four people act together as a team, and each member has only one sense; the first person can smell, the second can taste, the third can hear, the fourth can feel; all are blindfolded. The leader gives the team an object from nature, which each player experiences and then describes to the rest of the team from her/his sensory perspective. The point of the game is to put all the team’s information together in order to identify the object. This can be a game for one team or a race between 2 or more teams.

12. **Sense of Touch Bag of Rocks:** Have everyone find or choose a rock from a pile. Get to know your rock. How does it feel? How many sides does it have? What color is it? Does it have any marks on it? Is it heavy or light? Have everyone put their rock in a bag. Mix up all the rocks. Each person must then find their rock. How easy is it to find a particular rock? How is one rock different from another rock?
13. **Onion Hike:** You will need some onions. One group rubs onions on trees to indicate the trail for another group. The second group follows the trail by sniffing around!
14. **Camera:** Players divide into pairs; within each pair, one partner will first be the photographer while the other is the "camera." The photographer's job is to find a beautiful or interesting view and to point the "camera" toward this view. Like all cameras, the shutter (or eyes) of the "camera" are closed until the photographer snaps the picture. Once the photographer has the "camera" pointed at the "picture", she opens the shutter by squeezing his elbow, pressing on top of his head. Encourage the photographer to be creative and take pictures from different angles. After a number of pictures have been taken, the photographer and camera should exchange roles. Once both partners have been the camera, have them take a sheet of paper and colored pencils. They need to draw their favorite "photo" that they took. Do not allow them to go back and look, they must draw from memory. Once they have completed their drawing with as much detail as they can remember, have them go back and look at the actual picture.
15. **Nature Sounds:** The group is given five minutes to see who can make the longest list of things heard in the woods during that time. It may be a raindrop, crow, cow, rooster in distance, rustling leaves of oak or the swish of the pine, tapping of the woodpecker, or song of the brook.
16. **Trail Observations:** A good Scout can retrace a trail because he remembers certain objects along the trail. Walk for a certain distance over a trail and then ask ten questions, or each one may write ten questions and then exchange. Disagreements will follow and it will usually be necessary to go over the trail again.
17. **Tracking:** Nothing enlivens the senses like the anticipation of surprises, and tracking games provide this type of excitement. The most interesting tracking, is of course the following of animal trails. Unfortunately, this is not possible in all areas. However, tracking games played by two individuals or teams are practical in almost every situation. One popular tracking game involves two teams. The first team gets a ten or fifteen minute head start to lay their trail. They may set up prearranged indications of their path like rocks arranged in a definite pattern, or they may try to proceed as secretly as possible, leaving only inadvertent evidence of their passage. Some types of terrain are very good for this secretive movement. In other types of terrain, however, it is virtually impossible for the tracking team to follow unless markers have been laid. At the end of their trail the first team hides and awaits the approach of the tracking team. The tracking team follows as closely as possible the trail left by the first team, but also needs to be alert to the possibility of an ambush by the first team. Teams may reverse rules for a second go-around.
18. **Paint Chip Hike:** Give each child a paint chip sample from a hardware store. They can be all colors pinks, reds, greens, blues, they don't even have to seem like natural colors. As you are hiking have the kids try to match their color with natural things they see like a purple flower or neon yellow lichen.
19. **Camouflage Hide and Seek:** One of the most common adaptations in nature is camouflage-the ability of an animal to blend into its environment. This game helps to underscore its importance. It is best to play this game in a forest or area where there is an abundance of natural cover. Begin by selecting one person to represent the predator. The predator is blindfolded and stands in the center of the play area.

Remaining players are prey, and when the signal is given they run to hide. They must be able to see the predator from their hiding spot. When all of the prey are hidden, the predator may remove her/his blindfold. She then scans the surrounding territory, naming or describing the location of anyone she can see. These prey are caught and come to the center.

20. **Kick the Can:** This classic camp game can also easily be used as a nature game to introduce camouflage and stalking techniques. Play the game in a grassy area surrounded with shrubs, rocks, and other places for hiding. The game begins with one person in the middle of the field whose job is to guard the can (ie an orange cone) from being kicked over by the other players. The rest of the campers distribute themselves into the area to hide while the guard counts to thirty with her eyes closed. After hiding, the campers try to kick the can without being seen by the guard. If the guard sees the person, they should call out, "1,2,3 I see so and so behind that rock." In that case the captured camper must go to a designated jail. The camper can be freed from jail if another player successfully kicks the cone. Let the game go for one or two jail breaks before replacing the guard with someone new.

After a few minutes when the predator can no longer see anyone, the game resumes. This time, prey who have escaped detection must change their hiding places and move closer to the predator. Again, the predator removes his/her blindfold and scans the area calling out the name or location of anyone they can see. If there are still several hidden prey, another round can be played. When only one prey remains, he is declared the winner and becomes the new predator for another game.

Activities that Build a Connection with the Natural World

21. **Silent Hike:** Explain to the campers that they are going to take a silent hike and that there will be cards placed along the trail every so often. You will want to make these cards up ahead of time. They might include things like: hug a tree, look up, how many shades of green do you see?, what would you do with a million dollars, can you feel the warmth of the sun, or anything that goes along with your goals for other activities throughout the day. The leader goes first and places the cards strategically along the way then the campers follow leaving about 30-45 seconds in between each person so that everyone can take their time.
22. **Special Spots:** When out on a hike look for an area where campers can spread out and find a Special Spot. Explain to them that they will be like a giant in their special spot, so they will need to inspect it closely to discover what is going on there. When they enter their special spot, they will be entering a little community that already existed before they arrived, so it is important not to do anything which would disturb or damage their spot. Look carefully at rocks and sticks. *What shapes are they? Where do you think they came from? What living things do you find? How do they depend on the non-living things in your spot? What sounds or smells do you experience?* Take time to just be to sit and look at the view.
23. **Past and Future:** This can be done anywhere outside. Ask the students to imagine what this place was like 100 years ago and discuss their thoughts. *What things can they see now that would not have been there 100 years ago? What things can they have seen 100 years ago that they can not see now? What things are the same?* Divide into smaller groups and ask each group to make a sketch of what they think this place might look like in 100 years.

24. **Sound Tapestry:** Have the group spread out. If possible, have half of the group in a meadow environment and the other half of the group in a forest environment. Have your campers sit and listen for birds, grasses, and other sounds in nature for 10 minutes, recording every detail they hear on a piece of paper with colored pencils. The act of drawing or sketching the sounds allows for them to sort out the complex sounds that are all tangled up together.
25. **Cloud Watching:** Don't forget about the simple pleasures that are so often overlooked today. This time spent laying in the grass staring up at the sky helps stimulate imagination and brain function and allows for the much needed time to just be. Racing clouds: Each person picks a cloud, and whoever's reaches a designated landmark in the distance is the winner.
26. **Nature/Environmental Poetry:** This can go in so many directions, but here is a way to get started. Find at least ten different colors and five different sounds in your immediate surroundings. Describe where you see the colors or hear the sounds in relation to yourself. The final poem can have any number of lines, as long as each line describes one color or sound and tells the location in relation to the writer (e.g. green and blue water stretches in front of me; a few white clouds up in the sky; chirping of a bird in a tree near me).
27. **Web of Life:** Have everyone stand in a circle with the leader standing in the center with a ball of yarn. Ask the campers to decide what animal, plant or other part of nature they would like to be. Give the end of the yarn to the first camper who shares what part of nature they are. Now, as other animals and plants are named, ask the campers if they can draw connections between them. Illustrate these connections by crossing the yarn from one camper to another. Many things will be connected many times-if one camper is the sun, for example, he/she will have to be connected to everything. Keep the discussion, and the web, going at a quick pace. Then ask if it really matters if we removed one item from the web. *For instance, is a boulder really that important?* Have the camper who is the boulder slightly tug the yarn on they are holding onto and then see how many others felt it. *Did an ant or other insect feel it?* As you are dismantling the yarn have a conversation about what conditions would cause different animals, plants, or other natural objects to disappear. (Hunting, development, pollution, etc.)
28. **Animal Classifications:** Cut out about forty pictures of different animals from magazines. How many ways can you group the animals? Try classifying the animals by color, how big they are, what they have covering their body (e.g. feathers, hair, scales), how they move, where they live, what they eat and which make good pets.
29. **Tree Talk:** The more we appreciate and understand something, the less likely we are to harm it. This is especially true in the natural world, and Tree Talk helps emphasize an attitude which can help us to make intelligent decisions in regard to our environment. The group encircles a tree and the leader says a few words about the tree then asks each participant to speak about the tree for 15 seconds. These comments can be descriptive or imaginative. One might consider the tree's height, age, coloring and special markings, leaf or needle structure, root systems, conformation of its branches, relationships with birds and animals, what it has "seen" during its lifetime, how it "feels" about losing its leaves, how it likes its location, how it gets along with its neighbors. What other living things are dependent on the tree? What is the tree dependent on? After each person has had an opportunity to speak and everyone feels they really "know" the tree, the group leader can ask the group if they would like to cut the tree down. Participants are often not willing to cut the tree down, and this can lead into a good discussion of appreciation of the natural world. This can also be done with any plant or animal as the central focus.

- 30. Balance of Nature:** This game demonstrates the concept that nature is said to be in a state of balance when the populations of animals and plants are in such proportions that everyone has food without damaging the well-being of another species. Divide the group evenly into three groups. These groups represent grass, mice, and bobcats and each group has a specific sign which distinguishes them from the others. In designating these groups, be sure to build up the reputations of the grass and the mice or everyone will want to be a bobcat. When the game begins, the bobcats try to catch the mice, the mice try to catch the grass, and the grass try to catch the bobcats. The reasoning is that when bobcats die, their bodies fertilize the soil and provide nourishment for the grass. If the chaser succeeds in tagging his victim, the victim then changes species and becomes whatever he was tagged by. It is wise to set boundaries. After a few minutes of play, call them all back and count how many of each species there are, then let the tagging start again. After a few minutes, call them back again and count off. Often, the dying species will have made a remarkable recovery. The students can see that population is important and establishes a balance. If there are only a few mice, there will be plenty of grass for them to eat, and their predators, the bobcats, will have a harder time finding them. Therefore, it is likely that the mice will make a comeback. This can be repeated as often as you like and different scenarios will play out. It can also bring about a great discussion if you introduce one hunter who can tag anyone in the game.
- 31. Food Chain Lap Sit:** Give each player a food chain card. Several chains may be created with the cards and number of people available. When all are ready, have each player find and join hands with the food chain member on whom he depends for survival. When all members of a food chain have gathered together, a circle is formed, and the group performs a lap sit (each person puts his hands on the hips of the person standing in front of him, and then everyone in the group lowers himself so that he sitting on the lap of the person behind him a self-supporting circle is created!) All members of a food chain are important. If your players don't believe this, have one person representing an animal in the middle of chain stand up!
- 32. Nature Charades:** What is it like to be a tree? How does a baby animal feel? Get an understanding of different parts of the environment by pretending that you are those parts. Natural objects: a plant or rock. Animal: squirrel, baby bird, raccoon. Present event: wind blowing through the trees, bird building a nest, global warming.
- 33. Read One Inch Tall by Shel Silverstein:** Have a conversation about perspective. How do different insects and animals see the world (an ant, a squirrel, a rabbit, a deer, a hawk).

Nature Hikes

- 34. Insect Zoo Hike:** Take along paper, pencil and a hard surface to sketch on. Observe the insects you see and sketch them. What are the purposes of their different body parts?
- 32. FBI Hike:** This fun activity can take place anywhere. The FBI (Forest Bureau of Investigation) can also become the CIA (City Investigation Agency). Campers are challenged to explore their environment to find evidence of criminal activity within the natural world. Examples might include trees which are littering by carelessly scattering needles or leaves, birds murdering insects or worms, or squirrels kidnapping the "children" (seeds) of trees. The possibilities are endless and can lead to discussions about food chains, interrelationships within the natural world and many other natural principles. Investigators can use digital cameras to document the crime scene and make notes about the evidence they find. At the end of the hike, the detectives make "Wanted" posters describing each criminal they uncovered.
- 35. Alphabet Hike:** Explain to campers that they are to find at least one item in nature for every letter of

the alphabet. It has to be the true name like cat not kitty. It is also good to say it has to be something they can actually see in the area. Once they have completed their walk and recorded their findings, ask them which letters they had the most problems with. Which could they find the most items in nature? How many things were they able to find that they did not realize were there? We find the kids looking between branches for nests, checking around tree stumps for insects, and under boulders. Find out who was surprised at what they found or where they found it.

- 36. Animal Count Hike:** Take a leisurely hike and count how many different wild animals you can spot. Can you find 10? 20?

Scavenger Hunts

37. Awareness Scavenger Hunt

This scavenger hunt will help to open the campers' senses and discover interrelationships in the natural world.

- Something humans can't live without
- Something red
- Evidence of an animal
- The youngest thing you can find
- The oldest thing you can find
- Something Amazing
- Two seeds
- Something with a smooth texture
- Something with a rough texture
- Something scary
- Something natural that has no purpose

38. Sound Scavenger Hunt

- a cricket chirping
- grasses moving
- an airplane
- a car
- a bird
- wind/breeze
- what does a tree sound like?
- A stick breaking
- A frog

39. Rock Scavenger Hunt:

- A metamorphic rock
- An Igneous rock
- A sedimentary rock
- A sharp rock
- A flat rock
- A bumpy rock
- A crumbly rock
- A rough rock
- A smooth rock

- A dull rock
- A rock with speckles
- A rock with stripes
- A multicolored rock
- A rock with only one color

40. Wonder of Nature Scavenger Hunt

- Count something so that you know more about it after you have counted it than you did before you counted it.
- Look for an object that has a geometric shape in its structure. Think about how that form is related to its function.
- Describe something of power in nature.
- Look for a natural object that has five parts
- Find an object that has at least 4 colors showing.
- Find a change that is predictable.
- Take a Familiar object from the unnatural environment. Find and demonstrate a new use for it in the natural environment.
- Find a sound that makes you feel; happy, angry, sad, afraid, tough

41. Time Scavenger Hunt

- Find something you think is the oldest living thing around you
- Find the youngest living thing around you
- Find something eroded by water
- Find something you think is 100 years old
- Find something you think is one million years old
- An example of an animal that lives in the area that has adapted to man
- Draw a sketch of what the area looked like before man
- Describe the most elementary form of life you can think of

42. Conservation Scavenger Hunt

- A bag of litter
- A sketch of a place where a dam has helped to stop erosion
- Something which causes erosion
- Something which prevents erosion
- Something Which could cause a forest fire
- An example of soil that does not hold water well
- An example of soil that does hold water well
- A song about conservation
- A sketch of what might happen to the land if all the trees are cut
- A piece of wood which has been infected by boring beetles
- An example of balance in nature
- A piece of grass from an area that has never been plowed
- Something which protects the soil

43. Woodsmen Scavenger Hunt

- A piece of bark from a Ponderosa Pine (or another tree)

- A sign of an animal which lives in a tree
- A sprig from a tree which is sharp to the touch
- An estimate of the height of the tallest tree in the area
- An animal or sign of an animal that helps decompose dead trees
- A piece of dead wood containing hardened resin
- A piece of wood that looks like an animal
- A sprig from a shade loving tree
- Make a legend about a tree stump (to be performed)
- The seed bearing part of a tree
- A sign of an animal that helps a tree

44. Nature Photography Scavenger Hunt

- Birds at a bird bath, birdfeeder, or bird house.
- Squirrels or other small animals
- Animal tracks (if you have time, you can also make a [plaster cast](#)).
- Sunset or sunrise.
- Waterfall, mountain, boulder, lake, beach, or swamp (with someone in the picture!)
- A rock that looks like a heart
- Unusual sights like a tree root curled around a rock.
- The discovery (plant, animal, landscape) that amazed you the most

45. Animal Signs Scavenger Hunt

- A set of tracks (What animal are they made them?)
- Scat (Did the animal eat plants or animals? Do you see seeds?)
- Chipmunk Feast (a pile of dismembered grass seed heads, open dandelion heads or remains of other plants)
- Squirrel Feast (a pile of pine cone scales on the ground)
- A Burrow
- Tree Scars (shrubs from which bark has been gnawed or stripped at the bottom often indicate the presence of gophers or rabbits. Deer and elk will eat the bark from aspen trees leaving them scarred. Many birds make different types of nest in trees and their trunks.
- An ant hill
- Boring beetle Paths (Twisting trails which look like ancient handwriting can be found on almost any piece of dead aspen. The paths are the result of Boring Beetles/Bark Beetles as they eat the wood of trees just beneath the bark.)

46. Insect Scavenger Hunt I:

- An ant
- A bee or wasp
- A fly
- A grasshopper
- A mosquito
- A stink bug
- A butterfly
- A june bug
- A butterfly
- A cricket

- A moth
- An insect without wings
- An insect with wings
- An insect with 3 colors
- An insect with 1 color
- An insect egg

47. Insect Scavenger Hunt II:

- An insect eating a plant
- An insect eating another insect
- An insect pollinating a flower
- An insect drinking nectar from a plant
- An insect colored to blend into its background
- An insect with 2 wings
- An insect with 4 wings
- An insect that lives in a “society”
- An example of a larval stage
- An example of the pupal stage

48. Plant Scavenger Hunt (Seed Dispersal):

- A seed which is specially adapted to blow in the wind
- A sketch of a plant which has lost its leaves to prevent water loss
- A leaf from a plant which has developed broad leaves to gather more sun
- A berry from a plant which has developed berries to entice animals to carry its seeds
- A leaf with serrated edges which prevents leaves from shading each other
- The height in inches of a tall plant which gathers sunlight by rising above surrounding plants
- A sketch or a written description of a plant which is adapted to wet conditions
- A “hitchhiker seed” which travels by sticking to animals and birds
- A winged seed from a tall plant
- A leaf from a plant which has a sweet smell to attract birds and insects

49. Night Sky Scavenger Hunt:

- The North Star
- A group of stars that looks like a dog
- Something that revolves around the Earth
- Something that revolves around the Sun
- Something man made in the night sky
- The Center of our galaxy
- A light in the sky that has traveled more than a year to reach the earth
- Two stars which are different colors
- Something which plays a role in the Earth’s water cycle
- A group of stars that looks like a car
- Something in the night sky which is at least 6 trillion miles away
- A body in the sky which reflects light
- A body in the sky which emits its own light
- Somewhere in the sky that is so hot you could not survive

- Somewhere in the sky that is so cold you could not survive

50. Nature Bingo: Draw a 5 x 5 grid of squares on a 8 ½ by 11 sheet of paper, use any of the above lists and write the name of one object in each square. Campers then “play” bingo while they are actively looking for the items on their bingo cards. Great for helping kids focus and really get into the scavenger hunt itself.

Night Time Nature Activities

- 51. Night Visions:** Have campers sit in a circle and cover one eye w/ one hand and keep it covered during the discussion of eye function (rods, cones, pupil dilation). Light a candle (don't light until everyone has their eye covered) in the center of the circle and have campers look at it for about 3 mins. using the uncovered eye. Blow the candle out and have students look around alternating opening and closing each eye. Campers will see and feel the difference between night and day vision simultaneously.
- 52. Colored Paper:** Pass out a different color square of paper to each camper. Ask them to look at it and guess what color they think it is . Have the students put the square in their pocket . When you return to the tent/cabin have them check and see if they were right.
- 53. Wintergreen Lifesavers:** Have your campers form a circle. Pass out the Lifesavers. Tell them that they are to chew with their mouth open. Count to 3 and have everyone chew at the same time, watching each other. They should see sparks caused by an ingredient in the Lifesaver. Ask them if they can explain what caused the sparks.
- 54. Moth-Bat-Game:** Have your campers form a circle. Explain echolocation. Have someone volunteer to be the bat. The bat is blindfolded and placed in the center of the circle. Have someone volunteer to be the moth. The bat says “bat” and the moth must answer immediately with “moth.” They move around the circle until the bat catches the moth. (You may wish to use a film canister filled with gravel as a bat communication device)
- 55. Disappearing Heads:** Have your campers stand in two rows facing each other about eight feet apart. Instruct them to stand completely still and stare at the face of the person across from them. (Their head should disappear.) Explain why their heads seem to disappear. Rods in the eyes see light and cones see color. When you stare straight ahead, you use the cones and ignore the rods. But at night, light is more important than color. In a sense, your eyes are turning off the light, making the object seem to disappear.
- 56. Deer Ears:** *Why do some animals have large ears? (to direct sound waves into the ear) Can you name some of the creatures with large ears? (deer, canines, some bats, cats, mice)* The larger the outer ear, the better an animal can hear. Have campers cup their ears and stand perfectly still, listening to the sounds around them. Let campers experiment with this for a short time and discuss.
- 57. Scent:** (Before your outing, place variously scented items in film containers.) Have campers form a circle. Explain that you will be passing around something to smell. Pass around one container at a time. When the container has gone all the way around the circle, let campers guess the scent they smelled.
- 58. Skits with Stars:** Divide everyone into groups of three or four people. Have each group read a constellation story to themselves. After reading the stories, each group should plan a skit and make

simple props that will help them act out their constellation. Once the real constellations can be seen in the night sky, have the groups act out their stories. End the evening by finding the constellations in the night sky using binoculars and telescopes.

59. **Moon Journal:** Check out the book Moon Journals by Joni Chancer and Gina Rester-Zodrow. This book will help you create a focused nature activity around the moon. Campers will combine art, writing, and their sense of wonder in creating a moon journal.
60. **Night Vision Test:** Place large white boards or poles in a relatively straight line, at 3 meter intervals. After being in a well-lit area for a while, stand in a designated spot outside, in the dark, and count the number of poles you can see. Repeat the test after being outside in the dark for half an hour. Can you see farther? Why?
61. **Cereal Box Planetariums:** Remove the waxed paper bags from several cereal boxes. Each box can be used to show one or two constellations. Punch holes through the side of a box in the right positions for a given constellation. Cut a round opening at one end of the box for a flashlight. Take the box into a dark area. Shining a flashlight into the box makes the holes glow brightly. Take cereal box planetariums along on a stargazing trip to help you find constellations in the sky.

Winter Fun

62. **Snowflake Capture:** You can make "snowflake impressions" by catching snowflakes on cold glass sprayed with cold hair spray, and then view the results under a magnifying glass.

63. **Winter Scavenger Hunt:**

- seven different colors
- something that is red
- something that is brown
- something that is very old
- a track? Who do you think made it
- a hole dug by an animal? Why do you think it dug the hole?
- a tunnel in the snow
- a snowflake
- an icicle
- brown leaves still hanging from a tree
- signs of insects (rolled leaves, galls, leaf mines)
- an [abandoned birds nest](#)
- a squirrels nest of leaves?
- a hole in a tree where an animal might shelter from bad weather?
- five different kinds of leaves? (Don't forget evergreens)
- three tree buds waiting for spring
- holes in tree Who made them woodpeckers, insects, someone else?

64. **Sugar Snow:** A tradition that dates back over 200 years this is a fun way to create a winter treat. For

detailed directions go to www.massmaple.org.

65. **Winter Nature Sketchbook/Journal:** Buy an inexpensive artist's sketch pad or book and begin a winter nature diary. Each time you take a walk, observe something up close in nature. Draw the item, then write down descriptive details and date the entry. Continue observations and entries throughout the year as seasons and locations change. This is especially fun if you visit the same area year after year- you can compare your observations over time.
66. **Icicle Hunt:** Take a hike to look for icicles. How many can you find? Where are they located? Look at them up close. Why are some longer than others?
67. **Winter Time Zoo:** Take a hike through the snow to look for tracks. Then have children make snow sculptures of the animals whose tracks they saw.
68. **Snow Tag:** Just like any tag game snow tag can have lots of variations.

Nature Crafts

69. **Plaster Casts of Tracks:** Find an animal track. Mix Plaster of Paris according to directions (so that it is about the consistency of pancake batter). Fill the track with plaster. Let dry for about 30 minutes or until the plaster is hard. Gently lift the cast out of the track. Gently wash or brush off to clean. How many toes does the track have? Can you see claws? How big is the track? Can you guess what made it? Can you tell what the animal was doing when it made the track?
70. **Rustic Stick Frames:** Gather about 20 sticks (1/4-1/2 inch thick). Strip leaves and break into 6-9 inch lengths. Arrange sticks to form a frame. When sticks are arranged how you would like tack them into place with a glue gun. Warp the 4 corners with twine/sinew. Cut and glue 6 inch piece of twine to back of frame for hanging.
71. **Sand Tracking:** Make puzzles on the beach, such as: someone has a piggy back ride, someone falls down and is helped up, someone crawls on hand and knees to view a bird, etc.
72. **Nature Charades:** What is it like to be a tree? How does a baby animal feel? Get an understanding of different parts of the environment by pretending that you are those parts. Natural objects: a plant or rock. Animal: squirrel, baby bird, raccoon. Present event: wind blowing through the trees, bird building a nest, global warming.
73. **Nature Sculptures:** Check out a book of Andy Goldsworthy's work such as [A Collaboration with Nature](#), [Time](#), or [Wood](#), or look up some of his photograph's online. He creates works in nature with things he finds and without using tools. Goldsworthy's work is truly amazing. Head outside and create your own sculptures. No live material should be damaged during the process. Take a picture of your sculpture.
74. **Nature Rubbings:** Walk around outdoors to collect various textured objects. These could include leaves, tree bark, rocks, shells, etc. To make a rubbing, place a piece of paper on top of the object. Rub the paper gently with crayons (you may want to use the side of the crayon) until texture appears. The

object and its texture will be "imprinted" on the paper. Experiment with overlapping rubbings over each other. This works very well with different shape leaves, rubbed in different colors overlapping each other. Have fun and be creative. Another option is to draw on the construction paper with markers. Draw outlines only. Fill in the spaces by rubbing over various items. Still another option is to make rubbings on paper. Cut out the rubbings and glue them onto another sheet of paper, making a collage.

75. **Nature Kaleidoscopes:** Cut two index cards lengthwise making 4 2"-4" pieces (you will only need three pieces to make your triangle). Glue the same size mirror type material to the three pieces of index cards, one side on each piece. Lay all three pieces with the shiny side down, close together so there is no space in between. Take three pieces of duct tape 6" long. With one piece of tape, tape two of the index cards pieces together, you should have one long strip. Now take all three pieces and bend them at the cuts to form a triangle with the shiny side in. Take the last piece of tape and tape the last untapped sides together. You should now have a completed triangle.

Take the contact paper and cut out two circles 4 ½ inches up to 5 inches in diameter. Also cut out one circle or diamond or whatever shape you would like that would be less than ½ inch on extra card stock. Take the small ½ inch piece and place it on the center of one sticky side of the contact paper. This ½ inch piece will be used to make the center stiff so that you can put the straight pin through to connect the spinning contact paper with all the flower petals or other pieces of nature on it to the triangle. Now you need to gather petals, leaves and grass. You can place them on the contact paper with the ½ inch piece in a design or no order at all. Make sure you aren't leaving much empty space. When the contact paper is all covered with your petals, place the other piece of contact paper on top of the petals, to make them enclosed. Don't just plop it down, start from one side and gently go across making sure there are no air pockets. The last step is to put the straight pin through the center of your ½ inch piece and connect it in on of the corners of the triangle. You can weave the pin in and out of the duct tape to connect it so it can spin freely.

Nature Conservation Activities

76. **Garbage-Free Lunch:** This activity might work well at a day camp, or could be modified to work in other situations. Have the kids count how many pieces of garbage they have in their lunch. Spend some time talking about how they can reduce that amount (e.g. reusable containers, ask mom and dad to purchase foods with less packaging). Now, plan to have a "garbage free lunch" and again count how many pieces of trash each child has. Explore other actions people take to minimize the production of waste.
77. **Un-Nature Walk/Hike:** Set up a "silent nature walk" in a wooded or natural area (can be a very small area). Using 10 man-made objects, hide them along the short trail. For example: put a candy bar wrapper slightly under a rock, put a pen in a tree, a banana peel under a bush...explain to students that they will be walking along the trail without talking and they are to look around remember anything they see that "does not belong." When you have all walked along the trail (without talking or pointing) sit in a circle and ask who saw things that didn't belong. See if anyone got all 10 objects. See if, among the group if all 10 object were spotted. You can re-walk the trail pointing out each object.
78. **Litter Over Time:** This is a good follow-up activity to the Un-Nature Hike. It will help demonstrate how important it is to throw your own trash away and to pick up what others leave by illustrating how long it takes for specific items to decompose (to break down organic matter from a complex to simple form, mainly through the action of fungi, bacteria or solar radiation). Have a list of objects or gather physical

objects. Ask the group to guess the time it takes each item to decompose. Here are some ideas and amounts of time: disposable diaper 10-20 years, orange or banana peel 3-5 weeks, cigarette butts 2-5 years, plastic six pack holder 450 years, piece of paper 2-4 weeks, plastic bag 10-20 years, Aluminum can 250-350 years, wool sock 2-4 years, Styrofoam never, glass never. Were their guesses way off? Have you seen this item outside, perhaps were people have littered? Many people think its ok to leave food items outside like apple-cores or fruit skins because they are "natural." Even food takes a long time to break down and is harmful to wildlife that might eat it.

79. **Compost Cards:** Create a set of compost cards. Each card to have an item that is compostable or not compostable. (they might include Banana skin, egg shells, tea bags, apple care, plastic bottle, glass jar, kitty litter, dog hair, plastic bag, coffee grounds, paper towel, cookies, diaper, plastic wrap, cardboard box, ashes) Then have the kids separate them into the appropriate piles. This activity can go along with litter over time and having a conversation about waste, recycling and composting.
80. **Read the Lorax by Dr. Seus:** Have a conversation about conservation
81. **Solar Oven:** Make a solar over to cook a hot dog or other food item, and have a conversation about alternative energy sources. Check out ehow.com and solarnow.org plus other websites for instructions on how to make a variety of kinds of solar ovens.
82. **Read the Giving Tree by Shel Silverstein**

Miscellaneous Activities:

83. **Paper Making:** What happens to used paper? Most paper is thrown away in landfills or is burned. If we recycle paper we save landfill space and use these valuable wood fibers again. Don't throw away that old newspaper, office paper or unwanted wrapping paper, turn it into a piece of art by making new paper with it. Making your own paper from old paper is similar to what happens in a paper recycling mill. At a mill, the pulp is put into a machine with a long moving screen. The water drips through the screen. Then the screen moves through part of the machine that presses and dries the pulp. Now you have paper. **You will need:** blender or egg beater, mixing bowl, flat dish or pan (9"x13" or a little larger than the screen), round jar or rolling pin, newsprint, scrap paper or wrapping paper, piece of non-rusting screen (about 12" x 8" or the size of paper you want to make), 4 pieces of cloth or felt to use as blotting paper (same size as screen), 10 pieces of newspaper for blotting, 2 cups of hot water, teaspoons of instant starch (optional). **What to do:** tear paper into very small bits. Add 2 cups of hot water to ½ cup of shredded paper. Beat the paper and water in the blender, or with the egg beater, to make pulp. Mix in the starch (optional). Completed pulp should be the consistency of split pea soup. Pour the pulp into the flat pan. Slide the screen into the bottom of the pan and move it around until it is evenly covered with pulp. Lift the screen out of the pan carefully. Hold it level and let it drain for a minute. Put the screen, pulp-side up, on a blotter that is placed on top of newspaper. Put another blotter over the pulp, and more newspaper over that. (www.dnr.state.wi.org)
84. **Flubber:** This is a good quick activity to lead into other sensory awareness activities. In a bowl mix 2 16 oz boxes of cornstarch and about 2 cups of water, then add 1&3/8 cup more water. Mix by hand to ensure an even consistency. Do not push through the mixture as if mixing batter, but rather keep "lifting" from the bottom of the bowl to the top until an even consistency is reached. Flubber should flow when you tip the bowl, but feel like a solid when you hit it or rub your finger across the surface. If it is too thick to flow just add water and if slightly soupy little more cornstarch. Have people blindfolded and

using their sense of feel, check out the flubber-is it liquid or a solid, or both-How can you make it become a solid or liquid. Punch the flubber in the bowl hard and quick, gently and slow. When does it seem to be a liquid, a solid? After you have taken off the blindfolds, play some more using your other sense, see if you can make other discoveries. Often this is best done outside.

85. Underwater Scope: Getting a little wet can help you discover a whole new underwater world. **What you need:** an old coffee can or other large can, plastic wrap, a sturdy rubber band, scissors, can opener. **What to do:** Using the can opener make sure both ends are opened. Using scissors, cut a circle of plastic wrap to fit over one end of the can, make sure you have at least two inches extra all the way around. Stretch the plastic wrap tight like a drum and secure it with the rubber band. It might help to tape the extra edges with duct tape or another strong tape. Take it along with you the next time you are headed to a pond, stream or lake. Stand still and quietly in a shallow area and you can watch the minnows and other water life swim by your feet. Place the plastic covered end of the scope in about an inch below the surface of the water and look down into the water, through the scope.

86. Pond Exploration: Bodies of water represent complete ecosystems-relatively independent areas where we can study the interrelationships of the animal and plant life, and see how various life forms have adapted to their environment. Using dip nets, white plastic containers, your underwater scope, and a resource book or cards describing pond life, make a study of the creatures of the pond. Each group should capture specimens, identify them and determine and record how they have adapted to their unique environment. The following list of adaptations may be reported: gills, hinged lower lip, piercing mouthparts, calcareous shell, breathing bubble, exoskeleton, hairy legs, sucking mouthparts, no head capsule, breathing tube, hairy feet, chewing mouth parts, oar like legs, jointed legs, camouflage, air breathing, long antennae. What to look for: algae, hydras, tubifex worms, leeches, freshwater snails, daphnia, copepods, scud/amphipods, backswimmer water bugs, water boatmen, water striders, water tigers.

87. Tree Story Book: **You'll Need: White paper, 9" x 12" colored construction paper, Stapler, Pencil or pen, Glue, Tree identification book, Crayons. **How to Make a Tree Story Book:** Step 1: Fold two sheets of white paper in half. Fold the construction paper in half and insert the white paper. Staple together along the spine. Step 2: Take a photo of the tree (or draw it) and glue the picture to the cover of the book. If you don't know the tree's name, look it up. Step 3: Hold the first page of the book against the tree's bark. Rub a crayon over the page to make a pattern. Step 4: Pick a leaf, flatten it, and glue it into your book. If your tree sheds flowers, pick and press one. **Step 5:** If your tree loses branches, find a small winter twig. Glue it on the third page. Then use pages four and five to describe what is living in the tree.**

88. Tree Poetree: To create "true poetree," your kids will write a poem in praise of their wooded friends. Trees have always been a favorite subject of poets. Here is part of a poem that Robert Frost wrote about birch trees:

When I see birches bend to left and right
Across the lines of straighter darker trees,
I like to think some boy's been swinging them.
But swinging doesn't bend them down to stay
As ice-storms do. Often you must have seen them
Loaded with ice a sunny winter morning
After a rain.... -- From "Birches"

Try writing your own poem about a tree. It could be a tree you planted, or a tree you like to swing in, or even a tree in your imagination. Your poem can rhyme, or not -- it's up to you! If you like, draw a picture

of the tree to go with your poem. Do you know your official state tree? Keep reading to learn.

- 89. Tree Tag:** This simple game allows the students to test their knowledge of tree species. To play, find an open meadow bordered by trees and have the trees be the boundaries of the game. Announce that if you touch certain species of trees (which you will announce) you will be “safe”, but only if you are touching the right tree, and that these “right” trees will change. The counselors will serve as judges. Now choose one person to be “it” and begin to play. Later in the day you may want to play again and expand the definition of safe trees to include information the students have learned on succession, tree diseases and tree inhabitants with only a safe tree, being one which is under attack by beetles or which will soon die for lack of sunlight.
- 90. The Stick Game:** While walking or hiking outside pick up a stick that resembles an object. You must use your stick as though it were that object. For example a stick may look like a big spoon so you would pretend like you are eating soup or it may look like a broom so you pretend to sweep the ground. Then use your stick to make an a shadow animal on the ground. You might put two sticks on your head like antlers and your shadow maybe come a deer. You can also have each camper try to find the tree that their stick came from.
- 91. Rose Petal Candy:** This is a great opportunity to learn about roses and rosehips as well as making a great treat. Use a cup or plastic bag to gather the rose petals. When you return from getting rose petals you will need to put sugar in shallow bowls or plates and put milk into another shallow bowl or plate. Dip each petal, both sides, into milk, then dip into sugar on both sides. Place each petal flat after you dip them on a piece of wax paper. Let dry or put into freezer to harden. This is a good activity to go along with and edible plant hike.
- 92. Naming Game:** Trappers and early explorers often conducted the earliest surveys of the West, and were responsible for naming and mapping many things. As you are walking along, observe geographic features, plants, insects, birds, trees, etc., as if you have never seen them before, Give them names based on physical characteristics, similarity to other plants which exist east of the Mississippi, the name of the discoverer, etc. Create an official Certificate of New Discovery for each discoverer.
- 93. Who What When Where Why Game:** Simply sit in an area and have the campers look around and ask questions. They may need guidance to keep the questions going in the right direction. Here are some sample questions....
- How many ways can you use a leaf (or a stick or a flower or a shell)?
 - What is a tree good for?
 - What if there were no trees?
 - What shapes do you see in the clouds?
 - Where do clouds come from?
 - Where do rainbows come from?
 - Where do bubbles go when they float up?
 - Where do birds go when it rains?
 - What would happen if it never rained?
 - How many different ways can you group your objects?
 - What can we do to help stop pollution in the environment?
- 94. Story Book Acting:** Have campers select a couple of their favorite storybooks and head into an aspen

grove. Read the book out loud and then using props from nature have the campers act out the story.

95. **Nature Bingo:** Next time you are out on a hike create some nature bingo cards to take along. Creating these can be part of the fun.
96. **Skunk & Spray:** Have group break into partners of two. Tell that one will be the "head" and the other will be the "spray". You can talk about adaptations. They have one rolled up sock or something soft (we used tied-together sweatshirts) and a blindfold per group. The "spray" player gets both blindfolded and the soft item which will represent his/her spray. The head can only do one thing -- talk. He/She can talk to the "spray" player. The goal of the game is spray the other teams. I always ask players to throw the socks underhand and fairly softly as they are blindfolded and could nail some other player in the head with their hands. Once the "spray" has thrown the first sock they are to retrieve it but only with the help of the "head" player who can only use words (not allowed to touch sock or "spray" player). My rule is that you can only use the sock that you threw (this stops groups from hoarding socks). You can change it by saying they can get any open socks but that they can only have one or two pairs at any one time (it's fun to watch two sprays trying to get the same sock). After a few minutes you can stop the game and do a short debrief about what it was like to be the different players. There's always good comments about how important DETAILED directions are much more helpful. Then you can change positions to give each partner a new perspective.
97. **Shadow Tag:** Set some boundaries and have everyone spread out. The object of the game is to step on someone else's shadow. This is great on cold days to get the kids moving and warmed up, or to start a conversation on the sun.
98. **Terrarium Making:** You will need: One 2-liter bottle of soda (with cap), Potting Soil, A handful of small stones or pebbles, A Marker, Scissors, Seeds, Seedlings (small plants) this is optional if you want to start right out with plants in your terrarium. Draw a line around the bottle about six inches up. I use a neat little trick to make a nice straight line. I rest the marker on the top of an upside down coffee cup then I rotate the 2 liter bottle. It makes a nice straight line. Cut the bottle along the line with a pair of scissors. You may need to start a small hole in the bottle before you can cut it with the scissors. Please ask a parent or adult to help you with this cutting of the bottle. Place a handful of stones in the bottom half of the bottle. About 1-2 inches deep should be good. Place your other materials in the bottle. The charcoal then the moss then the soil. If you are not using charcoal or moss then put just the soil in. fill it to about 1 inch from the top. Now Plant your seeds! You should plant 6 to 10 seeds and later as they grow you can pluck out some of the weaker ones and leave the 2 or 3 best ones. Don't forget to water your terrarium before placing the top on. The soil should be moist but not soaked. Now Place the top on. It is best if you squeeze the top onto the bottom so the top is on the outside. If you have trouble fitting the two pieces together you can cut a slit about halfway down the bottom half of the bottle. this will help it close up a bit and make it easier to fit the top over it. Congratulations your terrarium is completed. In a few days your seeds should germinate and in no time you will have a soda bottle terrarium. Taking Care of your terrarium: There are two important factors you have to consider when it comes to your terrarium: the amount of sunlight it gets and the amount of water that is inside. Once the plants have sprouted you should make sure it gets sunlight but do not leave it in direct sunlight for the entire day. It is a closed environment and it can get very hot inside. Water - Look carefully at the soil in the terrarium. It should look moist but not soaked or too dry. Beads of water should form on the top inside near edge and these will drip down the sides and continue to water the soil. If it appears to be too wet you can take the top off and leave it uncovered for a day or two.
99. **Back to Back:** Have the campers gather items found on the ground, such as rocks, sticks, or leaves.

Pair them up and have them stand back to back. Give one of them an item and have them describe it to their partner. The partner guesses what the item is.

100. Ant Dance: Ants and other social insects cannot talk to each other, so they communicate using physical motions. Niko Tinbergen, one of the founders of the study of animal behavior, discovered that bees "dance" to communicate the location and distance of food sources to other members of the colony. In this game, campers will learn to listen with their eyes and follow directions given without a mouth, but rather by the feet and hands. Introduce this game with a brief description of how social insects communicate with each other and then lead the campers in an introductory dance. Next, explain that you will make hand motions to describe the object that you want the campers to find, step in place a number of times to indicate distance, and then point towards the object. Any nearby object can do, such as rocks, a large branch, or a "lost" counselor. Start with simple ideas and gradually become more complex as the game goes on. For older campers, you can make the game more complex by actually using the bee form of communication. The bees appear to use figure-eights to indicate the direction of resources, with the first diagonal indicating direction and its length relative distance. Have one camper hide a flower and then return to the group and direct them to find it.

101. **Quartz Rush:** We use this activity as an introduction and role setting to our prospector discovery group. Divide the students into four mining companies, each led by a counselor. To help set the role, counselors may want to dress like prospectors, in overalls, plaid shirts, old hats, with dirt on their faces. Now read or describe the following news bulletin from a piece of old newspaper.

"NATIONWIDE QUARTZ RUSH IN PROGRESS!! Scientists working on alternative energy sources have discovered a new type of nuclear fuel which is safe, economical, inexpensive, and does not have dangerous by-products. Prospectors all over the country are searching for this precious mineral whose value has increase one hundred times overnight. (Now the leader can sneak a piece of pure quartz out of his pocket and show it to the prospectors group, taking care not to let any of the other groups see this valuable mineral. Explain that rich deposits of quartz are known to exist in the area. This is the break you've been waiting for-a chance to become prospectors and "strike it rich"! The leader can now take the mining companies to the first strike site. They may want to choose a name for their mining company along the way.

Upon arrival at the first prospecting site, give the students about 10 mins. to look for quartz. Have them take all quartz they find to the "Assay Office" where the value of their finds can be determined. At the assay office a teacher or staff member can play the role of the "Mad Assayer", who loves quartz and awards points on the quartz finds of each individual prospector. The prospectors, in turn, report their points to their mining company leaders and continue the search for quartz. The mad assayer can barter with the prospectors as well as help them recognize the constituent minerals of Pikes Peak granite (mica, quartz feldspar) After the Assay Office is closed, the mining companies can tally their points. After the assays are complete, gather the campers again and discuss their discoveries. (questions and topics of conversations: What is quartz? The difference between a rock and mineral, What makes a mineral valuable? Why is gold valuable? Silver? Uranium? Are there some minerals which have no use valuable for other reasons?)

