Nature-based Education: Activities & Resources

ACTIVITIES

What Am I? Game: Place animal picture cards on students' backs. They ask yes/no questions of each other to try to guess their animal. Can limit the number of questions (to four) so the students need to think about types of questions to ask that will be helpful for them to identify their animal.

Scavenger Hunts: Providing lists, pictures, etc for children to find in a natural area. Helps them focus and explore.

Nature Bingo: This is a variation on the scavenger hunt. Can be on any subject (such as spring, birds, etc). Place pictures on a bingo card. Find enough items to get Bingo.

Loose parts: Place stumps, logs, sticks, tree cookies and other natural materials in an outdoor play area for children to use in numerous ways. Loose parts encourage creative play and problem solving.

What's missing? Game: Children gather natural items as a group. They examine each one and then place a cloth over them all. They close their eyes, as one item is removed. Uncover the items, guess which one is missing. Can make it more challenging by taking two items away.

Look Closely Game: Everyone collects the same item (such as leaves, rocks, etc.). They examine the items and then go around the group to have each one verbalize a characteristic of the object with no repeats. Continue until no further characteristics are found.

Deer ears: Cup your hands and place them behind your ears to hear what is in front of you. Place them in front of your ears to hear what is behind you. Great tool for listening more closely.

Counting Sounds: Stand in a circle outside and put arms/fists out in front. Over a period of 30 seconds have everyone put a finger out when they hear a sound. Do this first with their eyes open, then with their eyes closed and determine which way they hear more sounds.

Frog chorus: Divide a large group of people into three groups: spring peepers (say quickly, in a high pitched voice, "tomato, tomrato, tomato…"); green frogs (say, in a medium tempo, and regular voice, "fried rice, fried rice, fried rice…"); bullfrogs (say slowly, in a deep voice, "mashed potatoes, mashed potatoes, mashed potatoes…"). Each group sings separately and together to make a frog chorus. Frogs don't actually say "ribbit". (from David Stokes)

Sound mapping: Have children find a spot to sit in a natural area. They place an x in the middle of a piece of paper to represent where they will sit. Every time they hear a sound, they make a mark on the paper to represent the sound. They locate the marks to correspond with the distance and direction of the sound. Marks can be symbols, like wavy lines for the wind or a musical note for a bird. Do this for 4 to 10 minutes depending on the age of the children. After time is up, have students share what they heard. Were they familiar or unfamiliar sounds? What sounds did they like the best? (from Joseph Cornell)

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Surprise sock: Put an oatmeal container in a tube sock. Place an item in the container and have children put their hands in to feel the object. Have them describe the characteristics of what they feel without giving away what it is. After everyone has had a chance to feel the object ask for guesses as to what the object is. Take out the object and pass it around.

Micro-hike: (hoola hoop) Place a hoola hoop on the ground and explore everything within the hoop using a hand lens. They can draw what they see or write about it in a journal, then share with their classmates.

Andy Goldsworthy-like art: On a dark colored felt square or paper, place rocks (and other nature items) for participants to make their own creations (like leaf man)

Nature journaling: Have children find a "sit spot" in a natural area and visit it throughout the seasons, drawing or writing about what is seen and heard (great place to do sound mapping). Some drawing ideas include contour drawing (choosing an object and drawing the contour while looking at the object without looking at the paper), gesture drawing (drawing something quickly that is moving and recording the movement or quickly drawing a stationary object allowing only 5-30 seconds while only looking at the object), and memory drawing (examining a natural object in detail and then hiding it while drawing it from memory including adding notes and comments). These are processes that will enhance one's nature journaling.

Folding poem: In small groups (3 or more people), create a poem that expresses an experience in the wilderness or seeing a special animal. The first person writes a line, the second person writes two lines. Fold the poem so the third person can only see the second line and then writes two lines. Fold the poem again so the first person can only see the last line and then writes the concluding line. Then read the poems. (from Joseph Cornell)

Perspective-taking: Students take the perspective of something in nature. They write or act about how they feel or what they want people to know. For example, younger children describe how an insect feels when it's noticed, observed, or captured by a person. Middle or high school students could describe the impact privileging western scientific naming conventions of species (in Latin and English) versus using names given by indigenous peoples.

Math in nature: Students can find, sort, or photograph objects found in nature to explore shapes, symmetry, and patterns. Sun-sensitive paper can be used to capture details. Fibonacci sequences (often called nature's numbering system) and the Golden Ratio can be explored, measured, counted, photographed, explained or debunked.

Inquiry-based learning: *Do all frogs say, "ribbit?" Why do apples turn brown? Is our local water clean?* Use students' own curiosity and questions as the basis for scientific inquiry.

BOOKS

Balanced and Barefoot (Angela Hanscom)

Coyote's Guide to Connecting with Nature (Jon Young, Ellen Haas, & Evan McGown)

How to Raise a Wild Child: The Art and Science of Falling in Love with Nature (Scott Sampson)

The Great Outdoors (Mary Rivkin)

Last Child in the Woods (Richard Louv)

Natural Playscapes (Rusty Keeler)

The Nature Principle: Reconnecting with Life in a Virtual Age (Richard Louv)

Sharing Nature with Children (Joseph Cornell)

Vitamin N: The Essential Guide to a Nature-Rich Life (Richard Louv)

Lens on Outdoor Learning (Banning & Sullivan)

Nature Preschools and Forest Kindergartens (David Sobel)

WEBSITES

Naturally Developing Young Brains cards (www.braininsightsonline.com)
NWF: Schoolyard Habitats (https://www.nwf.org/schoolyard/)
List: 50 things to do before you're 11 ¾ (https://www.nationaltrust.org.uk/50-things-to-do)
Natural Start Alliance (www.naturalstart.org)
Children and Nature Network (www.childrenandnature.org)
Teaching and Learning in Nature PDF (https://www.fws.gov/northeast/cpwn/pdf/educatornature.pdf)

VIDEOS/DVDs

PBS documentary: “Where Do the Children Play?”
DVD: “Wetlands and Wonder”
PBS documentary: “Mother Nature’s Child”
DVD: “School’s Out: Lessons from a Forest Kindergarten”

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