

## Suggested Activities for Use of Outdoor Classroom

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## Language Arts

- The outdoor classroom can be used as a motivational tool for reading. Have students bring towels to sit on and find a quiet place among the trees to read. This is an excellent location for SSR time!
- Do leaf rubbings and then write poetry or prose about them. The same can be done with bark rubbings.
- Pick an object in the outdoor classroom---the pond, a flower, a tree, a plant, a rock, an acorn, etc. Then make a list of adjectives describing the object. Expand this into a lesson on detailed writing.
- Have the children write riddles or paragraphs about something in the outdoor classroom and let others figure out what it is.
- Do research about a tree in the outdoor classroom. Have them draw the tree, write a report about it, do poetry about it, etc.
- When reading books with forest settings, go to the outdoor classroom to better understand the settings in the story.
- Letter writing: Write a letter to an animal telling them about a possible home in the outdoor classroom.
- Have students discuss what they see in small groups, and then compare it to other places they've seen or read about.

## Math Activities

### Number and Number Sense

- Study the tree markings and then have groups hunt for the same types of trees. Have them count how many of each type they can find.
- Count the number of trees in an area. Then write fractions of types of trees. Example: Out of the 10 trees in the corner,  $\frac{3}{5}$  of them are Oak trees. Write decimals as well.
- Write number stories and number sentences about things in the outdoor classroom.
- Make a list of objects in the outdoor classroom. Have the students take a count of the objects with tally marks and then write the numbers.

### Computation and Estimation

- Write number sentences and stories about the items in the outdoor classroom. Have students solve them. Have students write their own for partners to solve.
- Write fraction subtraction/addition sentences using concrete objects in the outdoor classroom.
- Estimate the number of leaves on a certain branch and then count them.

### Measurement

- Measure the circumference of trees.
- Measure distances between trees and other objects.
- Plant garden plots, measuring the correct distance between the planted seeds.
- Keep a record of a plant's growth.
- Keep track of the depth of a pond. Compare it after it has rained, or when it hasn't rained for some time.
- Weigh a variety of items from the outdoor classroom.
- Keep track of the air and/or pond temperature over a period of time.

### Geometry

- Look for shapes in nature. Draw and identify them.
- Look for lines and angles in nature. Draw and identify them.
- Look for symmetry in nature. Find leaves with symmetry. Do leaf rubbings of the symmetrical leaves you find.

## Probability and Statistics

- Collect data about tree varieties, plants, animal sightings, number of fish and plants in the pond, LITTER found, etc. Graph the data.
- Have different groups graph different data and then analyze it.
- Have students write probability statements about happenings in the outdoor classroom. These could be based on weather reports, for example.

## Patterns, Functions, and Algebra

- Search for patterns in nature. Have students replicate the patterns they find.
- Use leaf, bark or rock rubbings to create patterns of their own.
- Plant flowers or other plants in a preplanned pattern.
- Compare and classify leaves.

## Science

### **Force, Motion and Energy**

- Have the children sit quietly in the outdoor classroom, looking for motion. Have them list the things they saw moving and describe the motion (vibration, circular, back/forth, straight).

### **Matter**

- Have students choose an object in the outdoor classroom and describe its physical properties. Describe textures, positions, shapes, colors, relative size and weight, etc.
- Have them sketch objects, label the properties and then write descriptive paragraphs or poetry about them.
- Have the students go on a scavenger hunt for solids, liquids and gases.
- Assign each child a specific property and have them find as many objects in the outdoor classroom as they can with that particular property.
- Make observations about the pond over a period of time. Have students conclude what is happening to the water level by using the terms melting, freezing, evaporation, condensation and evaporation.
- Go out early in the morning to see examples of condensation in nature.

## **Life Processes**

- Have students sketch a plant and label its parts, depending on their level. This can be as simplistic as the flower, stem, leaves, and roots, or as complex as including the stamen, pistil, sepal, embryo, spore, and seed.
- Use the actual plants in the outdoor classroom to describe the process of photosynthesis.
- Go to the outdoor classroom at different times of the year to show dormancy.
- Look for examples of animals and plants having physical and behavioral adaptations.
- Have the students observe the pond's tadpoles as they go through their life cycle changes. Do the same with plants growing in the garden.
- Have students write anecdotes about what would happen to various living things in the outdoor classroom in the case of drought or flood.
- Discuss the needs of living things and how these needs are met for the living things in the outdoor classroom
- Make lists of living and non-living things in the outdoor classroom.
- Compare and classify the living and non living things in the outdoor classroom.

## **Living Systems**

- Find examples of living things and classify them as producer, consumer, and decomposer.
- Identify, draw and label food chains in the outdoor classroom.
- Describe the communities, various populations, and niches in the outdoor classroom. Have students work in groups to identify and research one of these.
- Have students identify the positive and negative effects of humans on the outdoor classroom. (Example: positive: habitat created with brush pile and pond; negative: people traffic through area, esp. during sports season, litter)
- Have students predict how the outdoor classroom may change over time.

## **Interrelationships in Earth/Space Systems**

- Keep track of the weather over a period of time. Use thermometers, rain gauges and wind vanes to help the students collect data.
- Keep track of the types of clouds seen over a period of time. Have your class sign up to be cloud watchers for NASA.
- Use a soil auger to allow the students to see the different components and layers of soil.
- Use the compost bin to compost your cafeteria waste. Have the students keep track of the decomposition of a variety of items.
- Experiment with shadows at different times of the day. Measure their shadows at different times of the day and have them make predictions about the time.

## **Earth Patterns, Cycles, and Change**

- Have students identify life cycles of plants and animals in the outdoor classroom.
- Over a period of time, use the pond to describe the water cycle.
- Find examples of erosion in the outdoor classroom. Have students identify ways to stop erosion. Set up experiments to check their hypotheses.

## **Resources**

- Identify natural resources in the outdoor classroom.
- Discuss the schoolyard as a watershed. Discuss the effects of what we do in the schoolyard on the water systems.
- Have students find examples of interdependency in the outdoor classroom.
- Have students brainstorm and research for what the various plants and trees can be used.

## SOCIAL STUDIES/HISTORY

### **History**

- Research and plant period gardens.
- Discuss which American Indians would have lived in the Outdoor Classroom's type of habitat. Have them build models of longhouses from sticks/leaves they collect.
- Make a human sundial. Have students draw the results.

### **Geography**

- Have students make a map of the outdoor classroom. Include measurements and a legend, a compass rose, and a title.
- Have students write directions using north, south, east and west through the outdoor classroom. Have them measure the distances.