

Ideas for Hogback Tree Unit

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Activities to enhance observation:

Tree Products “Memory” Game –

Collect a number of tree artifacts such as leaves from different trees, cones, nuts and seeds, pieces of bark (for more detailed observation, use just leaves, or just seeds, etc.). Place all artifacts together in a basket or dish that has some sort of cover (a cloth or paper). Explain to students that they are going to have 30 seconds to look at the artifacts, and to try to memorize everything that is in the basket. After showing them the basket for 30 seconds, cover it up. Students will have a couple of minutes to write down and/or draw what they saw in the basket. They should be encouraged to use vocabulary terms that help to accurately describe the artifacts in the basket. (Vocabulary terms would have to be discussed prior to this activity). After they have written/drawn for a couple of minutes, go around the class to see if they can describe what is in the basket.

Tree Products “Market Share” –

Students are put into groups of three or four. Each group is given a collection of random tree products (all leaves, all pieces of bark, all seeds, all twigs, etc.). Groups will spend a couple of minutes sorting their items. For example, they might place all leaves that have multiple points together, or all bark that is smooth together. Groups will then have the chance to trade with each other, in order to make their collection completely uniform. Some groups might trade rounded leaves for pointed, or spikey nuts for all acorns. Each group will be responsible for deciding what the unifying criteria for their collection will be.

Come together as a class to share the collections. Talk about classification, and see if student classifications are similar to those in field guides, taxonomies, etc. Potentially a good way to start identifying their trees.

Descriptive Words Poetry –

(A little different than scientific observation, but get students thinking about describing all of the details of their tree)

Pick five (?) different trees out on the playground that students will collectively write poems about. Place two envelopes near each of the trees. One envelope will contain small blank pieces of paper, the other envelope will be empty. Students will visit each tree, writing a descriptive word or

short phrase about each tree on one of the small pieces of paper. Examples of words could be “gnarled brown bark,” “smooth and shiny,” “sharp horns like a bull,” etc. They will put their words into the empty envelope. Students will then work in groups to create a poem out of the descriptive words. They can arrange and rearrange the pieces of paper in order to “write” their poem. Come together as a class to share.

Shapes of Trees

Investigations of their trees:

Looking at Leaves –

How many different kinds of leaves can students find underneath their tree? What is the most common leaf present? Make visual estimations, and then count in a small measured area. Using that number, can they figure out how many leaves will likely be found underneath the entire tree? (Good measuring math activity).

Looking for animals –

Looking in the leaf litter under a tree, what kinds of critters are present. Can students find an animal that hops, wriggles, doesn't move at all? Record findings, and make drawings in field journal.

Look for damage on trees –

Look for leaves with holes in them. Are all the holes the same? Collect a sample of leaves with different damage on them. Make hypothesis about what caused the damage. (Perhaps a good jumping off point for some research). If leaves are out of reach, look for damage on the bark of the tree. This might be more difficult to collect, but would be possible to draw...

Collect seeds –

What do the seeds of different trees look like? Acorns are easy, but what do maple seeds, birch seeds, cherry seeds look like? Can we collect and perhaps even plant some of the seeds (grow in the grow lab)?

Look at WHERE trees grow –

Create some surveys to find out where different trees grow. What is the most common tree on the Marlboro playground? Do some trees like to be at the edge of the field, do others like to be near water?

Measure their tree, estimate/figure out the age –

Have children estimate how old their tree is. Teach them how to take DBH (diameter at breast height) measurements. For every 12” DBH, the tree is roughly 50 years old (roughly). Estimate the height of their tree. Use triangulation to figure out the actual height of their tree. (This might be easier to do with trees at Marlboro School based on the need to be able to see the entire tree from base to tip).