The Forest Grows

Investigative Question- How can we describe how the trees in the Community Forest are growing? What will the trees look like when they are mature?

Objectives
Knowledge- Students learn tree characteristics using bark and buds.
Skills- Students use guides and measuring tools to identify and measure tree seedlings to maturity.
Value- Tree seedlings help regrow/rebuild a forest.

VA Standards of Learning addressed: Science 3.1, 3.8, 3.10, 4.1, 4.5, 5.1. Math 3.17, 3.9. English 3.4 b & f, 3.6 e & f, 3.7b

Materials
- Virginia Department of Forestry Common Native Trees of Virginia books
- Rulers
- Flexible tailor’s tapes
- Hand lenses
- Data sheet

Procedure

1. Setup- Should out a schoolyard or a forest area for young native trees and flag or mark for this investigation.
2. Engage- Ask students to observe characteristics of the trees. How do we identify trees? (shapes of leaves, bark, flowers, etc.)
   a. What are some of the characteristics you can observe?
   b. Split students into groups of 2-3, giving each group a tree guide book and a data sheet, clipboard and pencil.
3. Explore- Instruct each group to identify the tree using the Tree ID guide. (Note: for different levels or readers, you can give the groups a tree name which they can look up using the index.)
   a. Then use the guide book to find and record on the data sheet the height of the small seedling.
   b. Then read to find the mature size height range, record this on data sheet.
   c. Next, ask what animals depend on the tree? Under ‘Values and Uses’, scan to find any organisms that use the tree (key words to look for are Wildlife, Birds, Squirrels, Raccoons, mammals, turkey, deer, dens, roosts).
4. Tree Gallery Walk- After student groups have completed the data sheets, each group will share information about their tree. Be sure to ask what organisms depend on this tree.
5. Draw a food web on the large white board as each group discusses the trees and the creatures that use the trees.
6. To conclude, ask students to make observations about the food web they created and explain interdependence.
What is the difference between the height of my tree now and its mature size?

Subtract
What is the height of mature tree? ________
- ________
What is the height of your sapling? ________

= ________

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<th>Height of sapling/seedling</th>
<th>Height of “Mature Size” Tree</th>
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Who uses the tree? Scan “Values and Uses” for organisms

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Who uses the tree? Scan “Values and Uses” for organisms