

TREE FACTORY

SUGGESTIONS AND VARIATIONS (PLT ACTIVITY 63, PAGE 269)

INSTRUCTIONS

Activity based on 30 individuals, adjust as needed:

1. Ask students what people need to survive. Then Identify parts of the body that help provide those basic needs. Take students to an area with a lot of space to build a tree using their bodies. Have 30 cards ready with these items written on them, pass out randomly:

Heartwood (1)

Xylem (3)

Lateral roots (3)

Cambium (5)

Phloem (6)

Bark (8)

Leaves (4)

2. Explain that trees are like people in many ways (Heart=heartwood, xylem, cambium, phloem=veins, taproot=feet, lateral roots=toes, bark=skin and leaves=hands)

3. Ask students what makes up the center of the tree and gives it strength? (Heartwood, Have the student with the "Heartwood" card stand in the center and chant, "I support, I support."

*What tree part transports water to the tree? (Xylem. Have the students with the "Xylem" cards stand around the "Heartwood" and join hands, chant "gurgle, slurp. Gurgle, slurp"

*Where the water in the xylem comes from? (Taproot, Have them stand

*Where the water in the xylem travels to? (Leaves.

CONNECTIONS

Make connections to nature based on student actions:

- **Ask students if they left out any parts of the tree, what do these parts do?** Certain species [willow or cedar] require more water than other species.
- **What is the final layer of a tree? The bark.** Invasive species such as Autumn Olive can out-compete native species.
- **What Happens when the tree gets old?** Use this question to connect to shade or sun loving species. (Shade loving: Sugar maple, Sun loving: Paper Birch)

VARIATIONS

Use these activity variations to explore other scenarios with trees:

- Use less blue chips to simulate a drought

QUESTIONS TO ASK

1. What happens when the tree experiences bad weather? (Have the students sway and shake in their positions like a thunderstorm has hit.

2. What happens when the tree gets old? (It falls over! Have the students carefully fall over into a pile on the ground to simulate the falling tree.

3.

ALL ABOUT THE EASTERN WHITE PINE

Scientific Name: Pinus strobus

EWP is
Michigan's
state tree

EWP wood is
used for crates,
boxes, boats
and lumber

Optimum
planting for EWP
is 3 feet apart

EWP is
Michigan's 7th
favorite
Christmas Tree

When planting EWP
always remember to
look up for
obstructions. EWP
matures between 80
100 feet tall.

The tallest EWP in
Michigan stands
180 ft tall and is
located in
Marquette, MI

EWP is a
species of
least
concern

EWP has clusters
of 5 needles.
Remember:
W*H*I*T*E