Every Tree for Itself

Try this active simulation to give children an understanding of the conditions trees need to live and grow. This activity will also help teach that trees must often compete for their needs.

Challenge students to think about the things they need to live and grow. Then ask about the things trees need to survive. What are a tree’s needs and how do they get them? What happens to trees when these needs are not met? Explain how trees use leaves to capture sunlight and roots to access water and nutrients.

Did you know that for many species, a tree’s height is roughly equal to the diameter of its root spread? This concept is illustrated in the diagrams below.

Explain to children that this information can be used to determine the root spread of a tree their size... or the size of their own root spread if they were a tree! Ask:

- How tall are you?
- What is the diameter of your root spread? (the same as their height!)
- How can we make a circle large enough to show the size of your root spread? (help them do so, using string or sidewalk chalk)

Have children stand in the middle of their root spread circle and pretend they are a tree. Remind children that trees are rooted to the ground and cannot move or talk in order to get what they need. Ask children to demonstrate how a tree might act if sunlight only reached one side. What might a tree look like if it is hungry, thirsty, or cold? What might happen if a tree’s root spread overlapped with those of other trees? How do trees compete for survival?

Make Learning Fun!
Encourage your child’s school to incorporate learning outdoors.
For more activity ideas and materials:
- Attend a PLT workshop, www.plt.org/state-network/
- Visit shop.plt.org