Activity Description

Not all trees are the same. In fact, there are more than 60,000 different species of trees in the world! All trees fall into two categories—angiosperms and gymnosperms. You can distinguish between the two based on their leaves and how they pollinate: angiosperms tend to have flat leaves and rely on pollinators to carry their seeds (which are enclosed in flowers or fruits), while gymnosperms tend to have needle-like leaves and have non-enclosed seeds (typically housed in cones). North Carolina is home to many different species of trees, and we’re going to observe the ones we can find in nature around our house!

Procedure

1. Head outside to do some tree investigating! Use some of your smaller sheets of paper to make some bark rubbings:
2. Take a single sheet of paper and hold it up against the tree. Using an unwrapped crayon (on its side), rub over the sheet to create a rubbing of the bark!
3. On the opposite side of the paper, write down some observations you make about the tree. What does its bark look like? What does it feel like? How tall is it compared to the other trees? Does it have any leaves? Any flowers? If it has leaves, what do they look like? What color are they?

Materials

- Multiple sheets of printer paper cut in half
- Crayons with wrappers peeled off
- Pencil

Preparation and Safety

Keep your eyes peeled for poison ivy and poison oak! Please stay alert and avoid any plants or areas that may have them!
Procedure (continued)

4. Find different leaves on the ground and make rubbings of those using the same method used for bark rubbings.

5. On the backs of those papers, write your observations about the leaf. Do you think you know which tree that leaf came from? Put the leaf rubbing together with the bark rubbing of the tree you think that leaf belongs to!

Extensions or Adaptations

• For investigators on a higher level, try to have them identify the type of tree they are observing. Is it an angiosperm (does it flower?) or a gymnosperm (does it only have leaves and cones?)? Investigate some different leaves. Just by looking at these leaves, can you determine if it belongs to an angiosperm or gymnosperm?

• Can you identify the tree species? Check out: projects.ncsu.edu/cals/plantbiology/ncsc/tnc/identify.htm to help you identify the tree species.