

DISCOVER YOUR FOREST

BUILD A BARK QUILT

GOAL: Learn about the function of bark and discover its unique and varied textures through the creation of a colourful bark rubbing quilt.

BACKGROUND:

Using leaves to identify a tree is a time-tested skill, but did you know a tree's bark can also be used as an identification tool? Unlike leaves, fruits and flowers, bark remains on trees throughout the year, making it useful in tree identification. Bark is also a living shield against the elements, with a species-specific pattern of cracks and crevasses developing over years of growth.

The most important role of bark is to protect a tree from injury and disease. This is achieved through a number of adaptations, such as prickly thorns to keep mammals away, bad tasting chemicals to deter insects, or an unusually dense layer of bark to protect the tree from forest fires. While the external surface of bark is often hard and can be almost woody itself, it protects two soft inner layers. The inner bark, also known as phloem, carries the sugars created by leaves to the tree's branches, trunk, and roots, providing food for the tree. Next to the phloem is the cambium, which is the growth layer of a tree that is responsible for the outward growth (also known as secondary growth) of tree trunks. The cambium creates a new ring of woody tissue each year that is visible in cross-sections and tree cookies. Both the phloem and cambium are essential to the health and well-being of a tree and are protected by the living shield that bark provides.

As a tree matures, its bark will change and develop a unique texture as it cracks or stretches to accommodate annual outward growth. As a result, a younger tree's bark will generally have less texture when compared to a mature tree of the same species, and very old tree bark will have a different texture than mature bark due to age and weathering.



Please remember that trees need bark to protect themselves from the outside world. Never peel or remove bark from a living tree, as it can cause harm and stress to it. If enough bark is removed, the tree may even die.

*Young Black Cherry (*Prunus serotina*) bark (left) compared to mature Black Cherry bark (right). When identifying the mature tree, it is easy to spot the 'burnt cornflakes' of the bark; a reference to its dark colour and raised, flaky texture.*

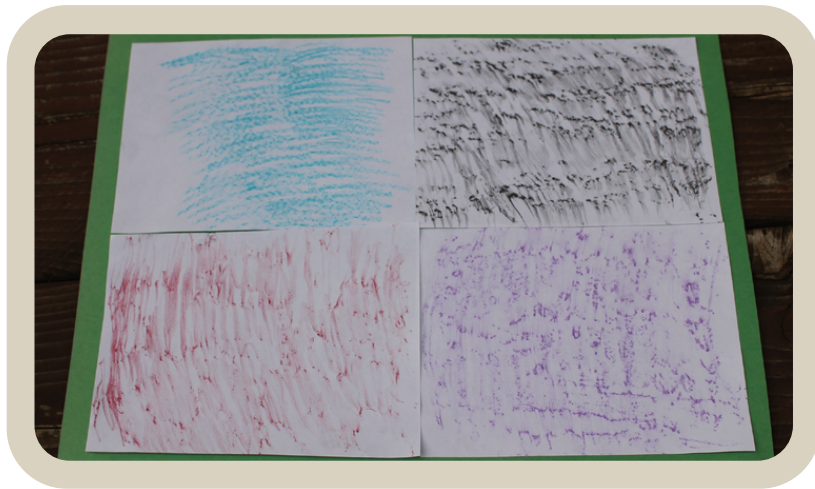
MATERIALS:

- White printer paper
- Wax crayons, multiple dark colours
- Tape or glue
- Construction paper (optional)



ACTIVITY:

1. With paper and crayons in hand head out to a nearby York Region Forest.
2. Select a tree you can reach without leaving the trail. Place a piece of paper on the bark and gently rub the crayon back and forth. Repeat with different trees and crayons until you have collected at least 4 rubbings.
3. Tape the rubbings together to form a paper quilt, use construction paper to form border.
4. Share an image of your bark quilt rubbing with us online using the hashtag #yrforest.



EXTENSION:

Using Tree Bee (www.treebee.ca), try to identify the tree species included in your bark quilt. How many species were you able to identify?

Share your complete bark rubbing quilt with a friend or family member and challenge them to find the trees included in your quilt. Were they successful?