



**Title:** Make Bark and Leaf Rubbings

**Grade:** K-2

**Subjects:** Science, Language Arts

**Time:** 50 mins

**Objectives:** Students will be able to..

- Understand that plants have features (bark and leaves) to help them live in different environments
- Use conventions of print in writing to write about leave and bark rubbings.
- Uses complete sentences in written compositions to write about leave and bark rubbings.

**Standards:**

- **Benchmark #1:** Use conventions of print in writing (e.g., forms letters in print, uses upper- and lowercase letters of the alphabet, spaces words and sentences, writes from left-to-right and top-to-bottom, includes margins).

**Science Standard 5:** Understand the structure and function of cells and organisms.

- **Benchmark #2:** Know that plants and animals have features that help them live in different environments.

**Materials:**

- Bark
- Leaves
- Crayons
- Pencils
- Forms for leave and bark rubbing books

**Overview:**

Trees are important organisms in our environment. Many species of insects and animals live in, on, or near trees and rely on trees to survive. The main parts of a tree are the roots, the trunk, the branches and twigs, the leaves and the bark.

Trees are woody plants with trunks that are usually covered in bark. The bark protects the trees from external threats such as insects and mammals. Bark gives trees structural support and helps nutrients travel from the leaves to the roots. Bark of various species of trees has different characteristics. Tree bark is used for paper and herbal medicines.

Leaves are the food factories of trees. Chlorophyll is a chemical that gives leaves their green color and lets the plant manufacture sugars. Leaves have a waxy, waterproof, protective coating. Leaves have tiny openings or pores called stomata that allow carbon dioxide to enter the leaf to make food for the tree.

**Kid's Speak:**

All trees have bark and leaves that are important for them to survive. Various species of trees have leaves and bark with different characteristics. Bark protects and holds up trees and helps them transport nutrients. Leaves make and store food for trees.

**Eco-Fact:**

Trees are the longest living organisms on Earth.

**Procedures:**

**Before Making the Bark and Leaf Rubbings:**

- Discuss the function and importance of the bark and leaves of trees.



- Have students share their observations about different trees, bark, and leaves they have seen in their life.
- Tell students how to peel the paper from their crayons. The crayons they use will need to be peeled in order to make bark and leaf rubbings.

#### **Instructions on How to Make Bark Rubbings:**

- Peel the paper from a large crayon.
- Press a sheet of thin paper up against the bark of a tree.
- Gently rub the side of the crayon on the paper until the pattern of the bark shows.

#### **Instructions on How to Make Leaf Rubbings:**

- Collect interesting leaves. Lay them flat on a hard, smooth surface.
- Cover the leaves with paper and rub the side of the crayon on the paper. Students will notice one side of the leaf is smoother than the other.

#### **After Making the Bark and Leaf Rubbings:**

Use the included worksheets or make your own scrapbook

- Bark: Glue your rubbings in a scrapbook to make a Bark Book. Have students record observations about their bark as captions in their Bark Book. Compare rubbings from different trees. Which bark patterns make the nicest rubbings? Can you tell which rubbing came from which kind of tree?
- Leaves: Glue your rubbings in a scrapbook to make a Leaf Book. Have students write a short description of each leaf they found, including what the leaf looks like, what type of tree it may be from, and how it compares to other leaves they found.

#### **Adaptations:**

- Students can use a tree identification guide to identify the type of tree the leaves from their leaf rubbings came from. Students can use a free tree identification guide at <http://www.arborday.org/trees/whattree/whattree.cfm?itemid=e6a>
- Students can try the lesson every months to observe changes in the leaves during different seasons. Students can keep a journal to monitor the changes.

#### **Extensions:**

- Students can take a field trip to a forest or national park to see different types of trees.
- Students can check out other lessons about trees on the National Green Week daily lesson section for Grade 1 on this GEF website.