

Can you draw a hidden leaf?

Ages 4–7 with a grown-up · 10–15 minutes · Look for a pattern

<https://kiddos.ai/explorations/learning-with-gina-and-ollie/can-you-draw-a-hidden-leaf>

Wonder together

A leaf in hiding. Gina covers the leaf with paper. What will a crayon reveal?

Materials

A safe flexible fallen leaf, thin plain paper and a large non-toxic age-appropriate crayon.

Adult setup – read before trying

An adult chooses a clean leaf with raised veins, avoiding unknown, irritating, thorny or decaying plants, and removes the crayon wrapper. Work on a protected smooth hard surface. Keep leaves/crayon out of mouths; wash hands afterward.

Try together

1. An adult selects a safe flexible fallen leaf and prepares an unwrapped crayon.
2. Put the leaf bumpy-side up on a smooth hard surface. Cover with thin plain paper and hold still.
3. Rub with the crayon's long side. Lift the paper and match the outline and lines to the leaf.

Keep the comparison clear

Keep fixed: Leaf and paper stay still over the same hard surface.

What changes: Crayon wax collects as you rub across the covered leaf.

Look for: Match the rubbing's outline and branching lines with the original leaf.

Explain with care

Raised veins make higher areas under the paper where more crayon marks collect.

The leaf's green pigment does not pass through the paper. A rubbing may miss tiny veins; it is not a plant-identification or tasting guide.

Talk about it

A leaf in hiding. Gina covers the leaf with paper. What will a crayon reveal?

Answer cue: Welcome a guess before reading the result. No correct prediction is required.

Which lines in your rubbing match the leaf?

Answer cue: Look for the outer shape, central vein and branching veins.

Where did the color on the paper come from?

Answer cue: From the crayon wax, not from the leaf's green pigment.

A parent move: Ask the child to find one matching feature before naming veins.

Start simply: One person holds the paper while the other rubs with the crayon's long side.

Explore further: Make two rubbings and match them to two safe leaves using shapes and lines.

Return to it: Look at a different safe leaf and predict which raised lines would show.

In the classroom

Flexible 20-minute small-group session; pause or shorten as needed.

3 min · Wonder

Read pages 1–2. Invite a prediction with words, pointing or a sketch; keep the result hidden.

4 min · Notice the story

Read pages 3–5. Which lines in your rubbing match the leaf? Separate the observation from the explanation.

9 min · Try together

Use the materials and adult setup on this guide, then follow the activity steps in this guide. Match the rubbing's outline and branching lines with the original leaf.

4 min · Make meaning

Where did the color on the paper come from? Invite a drawing, a description or an adult-written note. Ask the child to find one matching feature before naming veins.

Understanding check

Where did the color on the paper come from?

Answer guidance: From the crayon wax, not from the leaf's green pigment.

Participation choices: One person holds the paper while the other rubs with the crayon's long side. Accept pointing, words, a drawing or adult-directed action. Use the story alone if the activity is unsuitable.

Words to explore

veins — The branching lines in a leaf; some feel raised.

rubbing — A picture made by rubbing a crayon over paper laid on a textured surface.

Full adult notes and honest limits

An adult selects a clean, safe, flexible fallen leaf with easy-to-feel raised veins, avoiding unknown, irritating, thorny or decaying plants. No picking living plants is needed. Use thin plain paper and a large, age-appropriate non-toxic crayon with its wrapper removed by the adult. Work on a smooth hard surface, protecting it as needed. Let the child feel the leaf gently and make a guess first. Put the bumpy vein side upward, cover the leaf completely with paper, and hold both still. Use the long side of the crayon, not its point, to rub lightly back and forth over the covered leaf. One person can hold while the other rubs. Continue across the whole leaf area, then lift the paper and compare outline and vein branches. Darker wax gathers over raised areas; the leaf's green pigment does not pass through the sheet. Rubbings may be faint or patchy: try thinner paper, a darker crayon, a flexible leaf with more pronounced veins, or steadier holding. Do not promise a perfect copy of every tiny vein. For a second challenge, make rubbings of two safe leaves and ask your child to match each print to its leaf using shape and lines. A child can choose the crayon, feel the ridges, predict, point or direct an adult without needing a particular grip. Keep leaves and crayons out of mouths and wash hands after handling leaves. Teachers can offer leaf/rubbing pairs for a small-group matching task and ask children what evidence helped them choose. The illustrated leaf is a generic broad leaf, not a species-identification guide. The related story explores plant growth; its nibbling scene is not permission to taste collected plants. This is editorially reviewed, not a performed family trial or proof of measured learning.

Related reading

How Does It Grow? explores plants. Its story does not authorize tasting a collected leaf.

Scientific sources

huntington-leaf-etching — <https://www.huntington.org/digital-classroom-resources/activity-leaf-etching>

nebraska-extension-leaf-rubbing — <https://lancaster.unl.edu/leaf-rubbing/>

science-buddies-leaf-rubbing-physics —

https://www.sciencebuddies.org/science-fair-projects/project-ideas/Phys_p126/physics/clean-room-leaf-rubbing

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App Store: <https://apps.apple.com/app/id6720721998>

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