

Window Greenhouse

How do plants grow? In this experiment, you will create a mini greenhouse to learn how plants depend on sunlight and water.

Ages: 5 - 11

30 minutes

Adult Supervision

Place seeds in a re-closable plastic bag with a wet paper towel and put the bag by a sunny window. Record your observations daily to see how long it takes for the seeds to sprout and grow leaves. What do you observe? Use the observation printable below to record your observations.

MATERIALS

- A small handful of seeds (12 to 15) or a handful of beans (2 to 3)
- Small bowl
- Water
- Scissors
- Paper towel
- Construction paper
- Tape
- Re-closable plastic bag
- Observation journal printable

STEP-BY-STEP TUTORIAL

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Step 1
Gather your materials.



Window Greenhouse



Knowledge
Through
Entertainment

- 2) **Step 2**
Cover the seeds with water.
Soak them overnight.
(Soaking the seeds will help them
sprout faster.)



- 3) **Step 3**
Fold the paper towel in half and
cut it so that it fits in the re-clos-
able plastic bag.



- 4) **Step 4**
Dampen the towel. Gently wring
it out so that it's still damp but
not dripping.



- 5) **Step 5**
Place the damp towel inside the
bag.



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Step 6

Place a few seeds on the paper towel inside the bag, an inch or two from the bottom.



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Step 7

Lay the bag on a sheet of paper and sketch a house shape around it. Cut out the house shape, then cut out a window for the bag to peek through. Make sure the window is large enough to see all your seeds, with room to grow! If you want, draw on the greenhouse with markers or decorate it with paper cut-outs.



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Step 8

Tape the bag and frame it to a window, with the seeds facing inside so that you can see them sprout. Keep track of how your seeds grow with our Observation Journal Printable! If you like, create more greenhouses and let them grow under different conditions or locations to observe what happens. Print additional journal pages to track their progress.



LEARN MORE

When the seeds have sun and water, they sprout. But do they need both sun and water? Make multiple window greenhouses and test it out! What happens if you place the seeds in a dark room with water? Or in a sunny spot without water? Or even in a dark place with no water? What do you see?

This activity encourages resource-conscious behavior and fosters an understanding of the natural cycles in plant growth. By repurposing a Ziploc bag or other re-closable plastic bag and using simple materials like paper towels, this project highlights the importance of reusing everyday items instead of discarding them, a key aspect of the circular economy, which focuses on minimizing waste and extending the life of products.

Additionally, students learn about the role of plants in sustainability, as they are essential in absorbing carbon dioxide and producing oxygen, helping mitigate climate change. The hands-on nature of the activity can inspire discussions on how small-scale, sustainable practices – such as growing plants at home – can contribute to larger environmental goals like reducing reliance on industrial farming and promoting biodiversity. By observing how plants grow using minimal resources, students develop an understanding of the need to conserve water, energy, and materials, which aligns with the principles of a circular, resource-efficient economy.

SOURCE

<https://www.kiwico.com/diy/nature-adventure/plants-rocks/window-greenhouse>

KiwiCo was founded to nurture children's creativity and problem-solving skills through hands-on projects, making it easier for parents to provide enriching activities. The company simplifies the process of building, exploring, and creating together by designing fun and educational experiences that foster creative confidence. With a growing team of designers, experts, and kid testers, KiwiCo aims to equip children with the skills they need to face future challenges. Founder and CEO Sandra, an engineer and mother of three, created KiwiCo to inspire curiosity and exploration in families.