EI-5101
Grades K+
Ages 5+

Sprout & Grow Window™

Teacher's Guide

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Your opinion counts. Visit us online at **www.educationalinsights.com** to review this product.

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⚠ WARNING:
CHOKING HAZARD — Small parts.
Not for children under three (3) years.

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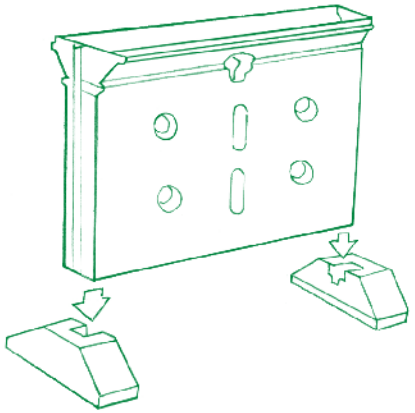
Do not let chiildren eat seeds or soil. Both are a choking hazard.

Let's Get Growing!

Assembling Your Sprout & Grow™ Window

Hold the growing chamber so that the open end is on top. Fit the bottom corners into the two plastic stands. The unit should fit securely.



Preparing Your Seeds

Give your seeds a head start on growth with this pre-planting technique. You will need paper towels, a plastic cup or jar, water, and some seeds. Here's how:

1. Fold a paper towel into a strip. Make the strip as wide as the cup is tall.
2. Wet the strip and place it around the inside of the cup.
3. Fill the cup with several crushed, wet paper towels.
4. Put three to four pea or bean seeds between the cup and the paper towel strip.
5. Check the cup each day. Keep the paper towels damp. After a few days, the moisture will loosen the **seed coats** (coverings), and some seeds will begin to **germinate** (sprout).
6. Plant your seeds following the instructions on the next page.

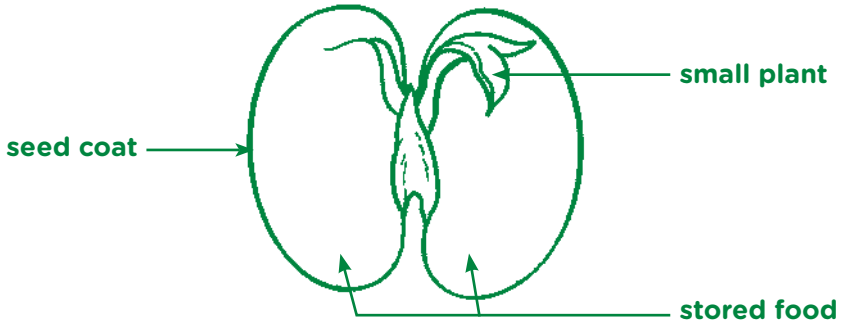
Seed Story

Seeds come in many different shapes, sizes, and colors. Each plant makes its own kind of seed. A seed has a cover around it. The cover is called a seed coat. It keeps the seed from drying out. Inside each seed is a small plant. The plant has a tiny root, stem, and leaf. There is also stored food in the seed.

Let's Look Inside a Seed

Soak one of each of your seeds for at least 24 hours in a damp paper towel. This will loosen the seed coat. Gently rub the seed between your fingers to remove the seed coat. Carefully split the seed open (a straight pin or toothpick will help) and look at it. Can you find the tiny new plant and stored food?

Diagram of a Seed:



Did You Know?

- The sunflower seeds you eat are the same ones that can sprout into a sunflower.
- We eat lots of seeds and roots. A peanut is a seed, and a carrot is the root of the carrot plant.
- The biggest seed is a coconut.
- Plants don't always grow from seeds. They can also grow from stems and leaves.
- Both peas and beans are good sources of protein.

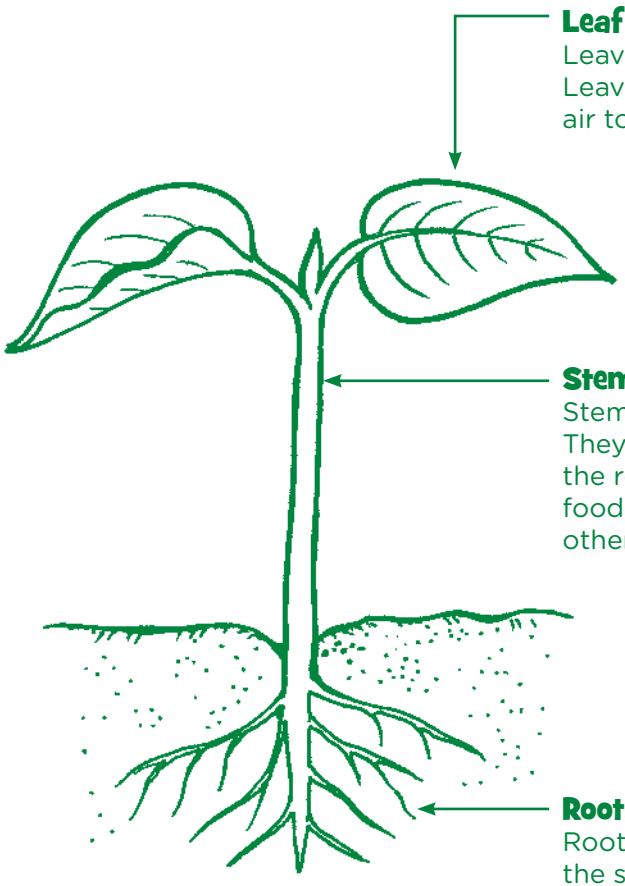
Being a Botanist

Botanists are scientists who study plants. Try these fun activitiest o learn more about your plants so that you can become a junior botanist.

Plant Parts Picture

Look at the picture. Most plants have three main parts – roots, stems, and leaves. Each part has a special job. On a separate sheet of paper draw a picture of one of your plants. Label its parts.

Diagram of a Plant:



Leaf
Leaves make a plant's food. Leaves use light, water, and air to make food.

Stem
Stems hold up the plant. They also carry water from the roots to the leaves and food from the leaves to other parts of the plant.

Roots
Roots hold the plant in the soil. They also soak up water and other minerals from the soil.

Planting Your Seeds

Here's how to plant your Sprout & Grow™ Window garden.

1. Cover a table with newspaper for easy clean-up.
2. Place 40 WonderSoil™ mini wafers in a large bowl. (Store the remaining wafers for use in a future project.) Pour one cup of water evenly over the wafers. Wait a few moments for the wafers to expand. Stir the expanded soil.
3. Carefully pour the soil mixture into the growing chamber. Spread the soil evenly so that it is level. Pat it down gently.
4. With the eraser end of a pencil, make three or four holes into the top of the soil. Space the holes evenly apart.
5. Place a seed in each hole. Cover the seeds with soil and pat down again.
6. Place your Sprout & Grow™ Window near indoor light or in a sunny area.

Caring for Your Plants

Plants need soil, light, and water to live and grow. Keep the soil in your garden moist—not muddy—or the seeds will rot. Be sure your garden gets enough light. Your plants will do best in a warm, well-lighted place. Using a straw or a coffee stirrer, burrow deep holes around the seeds. Doing this will send both air and water more evenly to the roots.

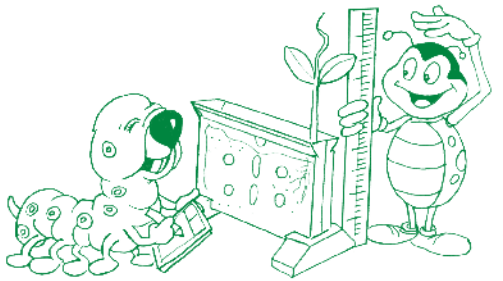
As your plants continue to grow, the stems will need some support. Taping craft sticks together (coffee stirrers and BBQ skewers are other options) can make a great trellis for your Sprout & Grow™ Window.

Cleaning Your Sprout & Grow™ Window

When you're ready for a new planting project, you will need to clean your Sprout & Grow™ Window. Do this in a utility sink or outdoors. Take off the plastic bases and tilt the chamber. Run water very gently into the chamber to loosen the soil.

How Does Your Garden Grow?

Plant some seeds. Then use this chart to track the progress of their growth. Starting on Day 1, cross out each day on the number line. On Day 5, measure and write down the height of your plants. Record the number of leaves. After filling in your chart, draw a picture of your plants. Repeat for days 8, 11, 15, 20, and 28.



BEAN CHART

DAYS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

DAY 5

HEIGHT	LEAVES

DAY 8

HEIGHT	LEAVES

DAY 11

HEIGHT	LEAVES

DAY 15

HEIGHT	LEAVES

DAY 20

HEIGHT	LEAVES

DAY 28

HEIGHT	LEAVES

PEA CHART

DAYS: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

DAY 5

HEIGHT	LEAVES

DAY 8

HEIGHT	LEAVES

DAY 11

HEIGHT	LEAVES

DAY 15

HEIGHT	LEAVES

DAY 20

HEIGHT	LEAVES

DAY 28

HEIGHT	LEAVES

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