



Miniature Garden

Children will learn about seed and plant growth by creating a miniature garden.

LEARNING GOALS

- Learn that plants need water and sunlight to grow
- Observe and keep track of plant growth in a journal

ITEMS NEEDED

- One planter per child – options could include a 6-celled seedling starter tray, a plant growing tray, or a 6-celled paper egg carton
- Soil
- Spoons
- Water
- 3 to 6 different types of vegetable, herb or flower seeds (see chart below for examples)
- Laminated plant identifier garden sticks
- One Nature Cat journal per child + pencils for writing in the journal
- Optional: Small rocks to add to the bottom of the planters to help with drainage



GET READY

Know in advance what kind of seeds you will plant with your group. You can use the plants on the “Suggested Plants” chart on page 3, or try other plants that you know grow well indoors or outdoors in your region. Before your group gets together, print and cut out the plant identifier sticks. Then laminate or use clear contact paper on the sticks to protect them from water. Be sure to make enough so that each child can have a stick for each type of seed he or she plants.

With your group, view the three video clips from Episode 107: **Where Have All the Butterflies Gone?!** available at pbskids.org/learn. In these clips, Nature Cat and his friends are creating a butterfly garden. After watching the videos, talk about different types of gardens. Have the children seen a vegetable garden, a flower garden, an herb garden, or a butterfly garden? Then tell the children what type of garden they will be planting today.



TALLY HO! LET'S HAVE FUN!

1. Tell children that they are going to create their own garden. Have children brainstorm what they might need for a garden (soil, seeds) and what the seeds will need to grow into a plant (water, sunlight).
2. Give each child one tray or a 6 celled planter and some soil. Children can use a spoon to fill the tray or each cell about 2/3 full of soil.
3. Let each child pick one or more types of seeds to plant. Ask children to observe their seeds. Are they small or large? Are they round or oval? What color are they?
4. Give each child the Nature Cat plant identifiers that match the seeds he or she selected. Have each child put the sticks along the edge where the seeds will be planted.
5. Instruct children to use one finger to press a dimple into the middle of the soil – either one dimple in each cell or several dimples in a line on a tray. Then have each child place his or her selected seeds into the dimple. Cover up the dimple with more soil.
6. Add water to each cell or along the tray until the soil is moist. If using a container with drain holes or paper egg cartons, be sure to protect your work surface with a plastic tray or by placing a paper towel under the planter to absorb any extra water.
7. The miniature garden is now ready for children to take home. Remind the children to place the planter in a place where it will get sun and remember to water it.
8. Give one Nature Cat journal to each child. Be sure to help each child fill in page 2 of the journal so that he or she knows how often to water the plant. Children can use the journal to document the growth of their plant(s) over time.

ONWARD AND YONWARD FOR MORE FUN!

- If the children planted vegetables or herbs in their gardens, have some of each of the vegetables or herbs available to taste so that the children will know what to expect when their plant is fully grown. Be aware of any food allergies.
- If the children planted flowers in their gardens, have some flower petals available for children to touch and smell. Then use wax paper or clear contact paper to create pressed flower placemats.





Suggested Plants

Listed in this chart are suggested plants that are hardy and sprout fairly quickly. Children can write this information on page 2 of the Nature Cat Plant Journal.

LARGE PLANTS THAT CAN BE TRANSPLANTED OUTSIDE AFTER SPROUTING	HOW MUCH WATER AND SUNLIGHT?
Vegetable: Radish	<ul style="list-style-type: none"> Place outside or in a window sill with full sunlight. Water enough to keep the soil evenly moist, not too wet or too dry. Radish seeds sprout in about 4 – 10 days.
Herb: Chives	<ul style="list-style-type: none"> Place in a window sill with full sunlight. Water enough to keep the soil evenly moist, not too wet or too dry. Chive seeds sprout in about 10 days.
Flower: Sunflower	<ul style="list-style-type: none"> Place outside or in a window sill with full sunlight. Water every 1 to 2 days and keep the soil moist. Sunflower seeds sprout in about 7 – 10 days.
PLANTS THAT CAN STAY IN A WINDOW SILL WITH LIMITED SUNLIGHT	HOW MUCH WATER AND SUNLIGHT?
Vegetable: Cucumber <small>(There are both indoor/potted varieties and outdoor/larger varieties of cucumber seeds. Check your package of seeds to make sure you are selecting the type of seed that is right for you.)</small>	<ul style="list-style-type: none"> Place outside or in a window sill (depending on variety) with full sunlight. Water whenever the top of the soil gets dry. Cucumber seeds sprout in about 7 – 10 days (longer in cooler weather).
Herb: Mint or Lemon Balm	<ul style="list-style-type: none"> Place in a window sill with indirect or low to medium sunlight. Water whenever the top of the soil gets dry. When planting, do NOT cover with soil. The seeds need light to germinate. Mint seeds sprout in about 10 – 15 days.
Herb: Basil	<ul style="list-style-type: none"> Place in a window sill with 6 to 8 hours of sunlight per day. Water only when the soil gets dry. Basil seeds sprout in about a week.
Flower: Forget Me Not <small>(Some varieties of Forget Me Not seeds are bur or stickseeds.)</small>	<ul style="list-style-type: none"> Place in a window sill with filtered sunlight. Water every 1 to 2 days and keep the soil moist. Forget Me Not seeds sprout in about 3 – 5 days when kept at a temperature of about 70 degrees.





Plant Identifier Sticks



 M I N T			 L E M O N B A L M		
 R A D I S H			 S U N F L O W E R		

Print, cut out, laminate and distribute the following plant identifier sticks to your group of children as needed for the seeds they are planting.

You can use a permanent marker to write other plant names on the blank plant identifier sticks.