



# NatureFest 2021

## "Just for Kids" Activities

**Charles County Master Gardeners**

UNIVERSITY OF  
MARYLAND  
EXTENSION

MASTER  
GARDENER 



GROW IT • EAT IT

A MASTER GARDENER PROGRAM

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### ***"Just for Kids" activities:***

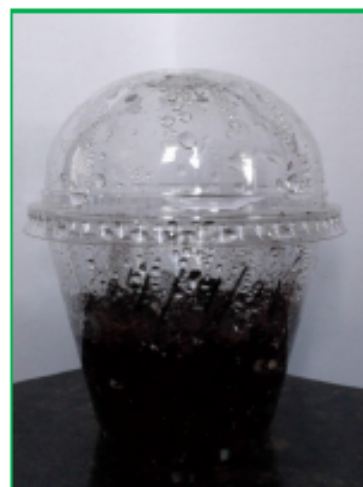
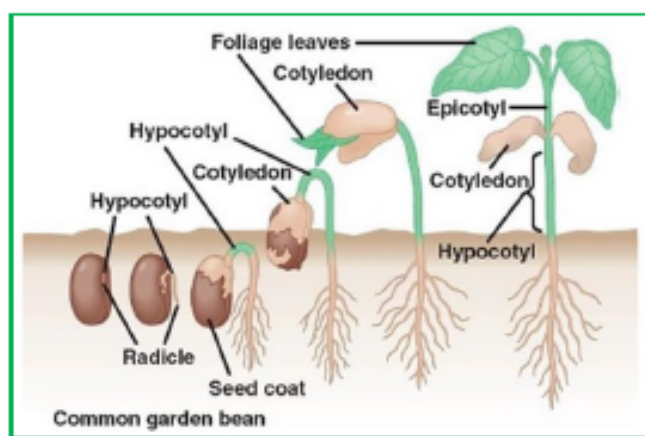
1. Planting a Bean in a Cup
2. How to Make Seed Balls!
3. How to Make Seed Balls from this Kit!
4. Let's Learn the Parts of a Plant!
5. Self-Watering Planter Kit Instructions
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7. How to Make a Caterpillar!
8. Life Cycle of a Butterfly Craft

# *Planting a Bean in a Cup*



- ⇒ Label cup with the date
- ⇒ Put the four provided bean seeds around the inside wall of the prefilled cup
- ⇒ Press lightly into soil and cover
- ⇒ Water until moist
- ⇒ Cover the bean cup with the lid
- ⇒ Place the cup on a plate in a warm, sunny location where you can watch seeds germinate and grow. Keep covered by lid until beans sprout.
- ⇒ Check to make sure the soil is moist every day and water as needed
- ⇒ Write the bean's progress on the 'Data Table for Bean Sprout Growth'

Once the beans have grown their first set of leaves, you can transplant them into a larger pot or into the ground. The beans will grow two feet tall. In about two months they will flower and make more beans!



See our other work sheets for more information:

"It Starts With a Seed—Learning to Grow A Plant from Seed Outdoors!"

"It Starts With a Seed - Learning to Grow A Plant from Seed Indoors!"

"How to Transplant Seedlings"

# *Planting a Bean in a Cup*



***Data Table: Bean Sprout Growth***

Days since planting	Height (inches)	Notes: What's special about the plant today?



# How to Make Seed Balls!



## What is a Seed Ball?



A seed ball is a marble or dime sized ball made of clay, soil and seeds which can be used in your garden or in a container on a balcony to grow flowers.

The clay protects the seed from the heat of the sun, heavy rains, animals, and the shape of the ball actually gives enough shade to conserve moisture.

At some point, the seeds begin to germinate and the ball breaks apart.

## Recipe:

- ♦ 1 to 2 parts potting soil - use more with finer soil, less with coarse soil (for example, 1 part = 1/4 cup - it depends on how many seed balls you would like to make)
- ♦ 1 parts clay powder (from your local art or home improvement store)
- ♦ 1 part water (add slowly, checking for consistency of mix - it should be moist, not wet)
- ♦ 1 part different seeds of your choice
- ♦ Tub to mix ingredients
- ♦ Cardboard box to dry and store seed balls

## Directions:

- ♦ Mix the soil and clay and slowly add water. There should be no lumps. Slowly add more water until the mixture is the consistency of cookie dough.
- ♦ Add seeds. Keep kneading the dough until the seeds are well mixed in. Add more water if necessary.
- ♦ Take small bits of the clay mixture and roll into marble or dime sized ball. The balls should hold together easily. If they're crumbly, add more water.

## Sowing:

Plant immediately or dry and save to plant later. When planting, you can "bomb" them on surface of the soil or make a small hole and lightly sprinkle with soil. To germinate, keep moist. To save for planting next season, place on a plate in a warm, dry area. Once completely dry, store in a cardboard box in a dry place away from high temperatures.



## *How to Make Seed Balls from this Kit!*

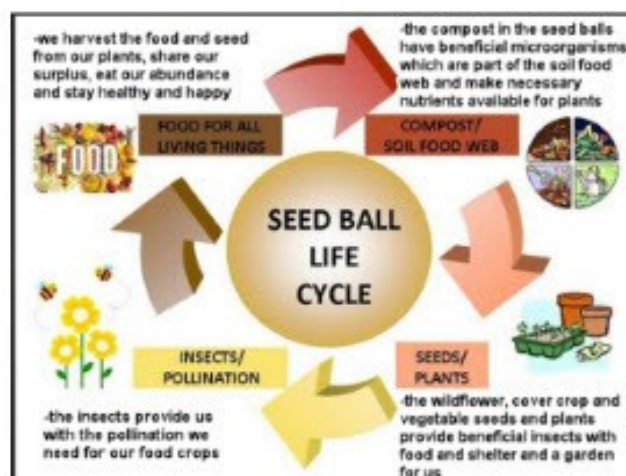


### ***Instructions:***

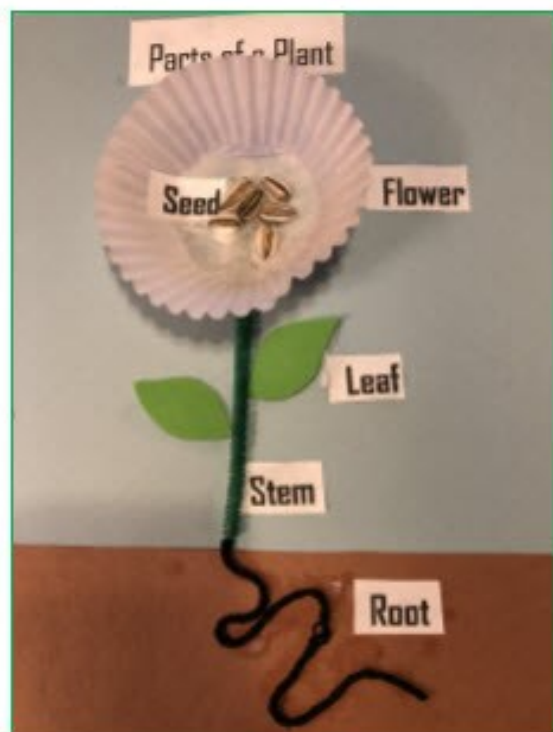
Included in this kit is a plastic bag with a mixture of fine potting soil, dry clay powder and seeds. Included seeds are a mix of Baby's Breath, Blue Flax, Lupine, Calendula, Siberian Wallflower, Yarrow, Sweet alyssum, English Daisy, Shasta Daisy, Coreopsis, Dianthus, Coneflower, and California Poppy. Out of this mixture, you can either make one marble sized or several smaller dime sized balls by rolling them in your hands. Slowly add 2 to 3 tablespoons of water to the mix. Knead bag. There should be no lumps and the finished product should be the consistency of cookie dough. The balls should hold together easily. If they're crumbly, add more water.

### ***Sowing:***

Plant immediately or dry and save to plant later. When planting, you can "bomb" them on surface of soil or make a small hole and lightly sprinkle with soil. To germinate, keep moist. To save for planting next season, place on a plate in a warm, dry area. Once completely dry, store in a cardboard box in a dry place away from high temperatures.



# *Let's Learn the Parts of a Plant!*



**Ages:** Kindergarten and up

## **Materials Needed:**

- ⇒ Blue and brown construction paper (1 each) (for ground and air)
- ⇒ Brown yarn or thick string (for roots)
- ⇒ Green pipe cleaner (stem)
- ⇒ Solid colored cupcake liner (flower petal)
- ⇒ Green felt or craft foam (leaves)
- ⇒ Large seeds, such as sunflower seeds
- ⇒ Parts of a plant labels and title
- ⇒ Glue (**not included in kit**)

## **Instructions:**

- ⇒ Glue the piece of brown construction paper to the bottom of the blue paper. If using white craft glue, make sure the layer of glue is very thin. A glue stick is best for attaching the flat parts of the craft.
- ⇒ Glue the title (Parts of a Plant) to the very top of the blue construction paper.
- ⇒ Attach (glue) the green pipe cleaner to create the stem of the flower.
- ⇒ Attach the flat part of the cupcake liner to the top of the green pipe cleaner to create the flower.
- ⇒ Glue leaves to the stem.
- ⇒ Glue the brown yarn onto the end of the green pipe cleaner and continue to glue the brown yarn onto the brown 'soil' in a root-like pattern.
- ⇒ Add the seeds to the middle of the flower. In nature, seeds are produced by the flower after the petals fall off.
- ⇒ Paste labels to the correct parts of the plant (root, stem, leaf, flower, and seed.)

**Congratulations! You have created a great 3-D diagram of a plant!!**



# Self-Watering Planter Kit Instructions

This planter is a great project that helps our environment by recycling plastic bottles and is a great way to keep your plants watered.

## In your kit, you will find:

- ⇒ Plastic water bottle with labels removed and already cut for this project
- ⇒ Yarn
- ⇒ Plastic bottle cap with a hole punched in it
- ⇒ Soil and Plants/seeds



## Instructions:



Thread your yarn through the hole in the bottle cap. If this is hard, you can use a large needle to pull the yarn through the hole.

Make a knot on the inside of the cap, as shown in the picture. The yarn will suck up water from the bottom of the planter. Attach the bottle cap to the top half of the bottle.

When you get home: Fill the bottom of the planter with water and then place the top part upside down into it. Add some potting soil and seeds to the upside-down section.

Now, watch your seeds grow!!





# *How to Make a Self-Watering Planter*

**Starting out you will need some basic materials:**

- ⇒ Plastic water bottles (either your own or some you found on your recent clean-up!)
- ⇒ Scissors
- ⇒ Acrylic paint (optional)
- ⇒ Paintbrush (optional)
- ⇒ Yarn
- ⇒ Hammer/ Nail or a Drill (for punching a hole through the bottle cap)
- ⇒ Soil and plants/ seeds
- ⇒ Water
- ⇒ Needle
- ⇒ Painter's tape (optional)



**Note: In Step 1 and 3, you will need an adult to help you.**



**Step 1** Remove labels from the bottle and wash/ dry. Then, using your scissors, carefully cut your bottle about 5" up from the base. In your kit, this is already done.



**Step 2 (Optional)** If you want to decorate your planter, wrap a piece of painter's tape around the top part of the bottle and paint it. Let the paint dry.



**Step 3** Using either a hammer/nail or a drill, carefully punch a hole through the center of the bottle cap. (in your kits, this is done for you.) This is a key component of the watering system.

## How to Make a Self-Watering Planter



**Step 4** Cut a piece of yarn (or some other type of thick absorbent cord) about 10 inches long and thread it through the drilled hole in the cap. If this is difficult, you can use a needle to pull the yarn through the cap. Make a knot on the inside to keep it in place (as shown).

The yarn will be used to suck water up from the water reservoir in the bottom of the planter.

**Step 5** Attach the cap to the top half of the bottle.



**Step 6** Fill the bottom of the planter with water, and then place the top part upside down into it. Now, add some potting mix and seeds (or cuttings) to the upside-down section.

Enjoy!

# *How to Make a Caterpillar!*



## **Materials:**

- 3 pipe cleaners
- 1 number 2 pencil
- Elmer's glue
- Bug eyes

## **Directions:**

- Take two pipe cleaners and twist them together at one end. Tuck in sharp edges.
- Twirl the two pipe cleaners over a pencil in a spiral motion. Try to keep the two colors from crossing over one another.
- Once finished twirling over the pencil, slide together tightly, then slide the caterpillar off the pencil.
- Next, cut a pipe cleaner about 2 inches in length. Twist over the edge of the caterpillar to make antennae.
- Next glue on the eye balls. Let it sit for awhile to dry.



## *Life Cycle of a Butterfly Craft*



### Materials needed:

- ⇒ Paper plate or paper
- ⇒ Markers
- ⇒ Rice or lentils (eggs), Rotini (caterpillars), Shells (chrysalis), Farfalle (butterflies)
- ⇒ Paint
- ⇒ Glue
- ⇒ Optional: twigs and leaves, or construction paper

To prepare this project, you can make a background in several different ways. You can either collect twigs and leaves, or you can cut out twigs and leaves out of construction paper. Another option is to simply draw or paint twigs and leaves.

For younger children - you may want to ask your parents to prepare most of this part, or help you where to glue paper leaves.



You can use long sheets of paper, or a paper plate or a large cutout circle (with lines dividing it into four sections), to diagram the life cycle.



Next, paint your pasta. You can decide on the colors that you want to use. The photos try to mimic the true colors in the life cycle of a monarch butterfly, but you can do them however you like. You can also do some research about what different butterflies look like in different stages of their life cycles and make the stages into accurate representations. Alternately, you could do the life cycle of a moth, substituting "cocoons" in the place of the "chrysalis" stage.

Note – Do not use an excessive amount of paint, as the pasta will become soggy and take much longer to dry.

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## *Life Cycle of a Butterfly Craft*



Once the pasta is dry, you can attach your pasta to the corresponding stage of the life cycle.



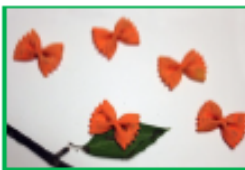
Lentils are the eggs on the leaves.



Light green Rotini pasta are the caterpillars.



Green pasta shells became the chrysalis hanging from the tree branches.



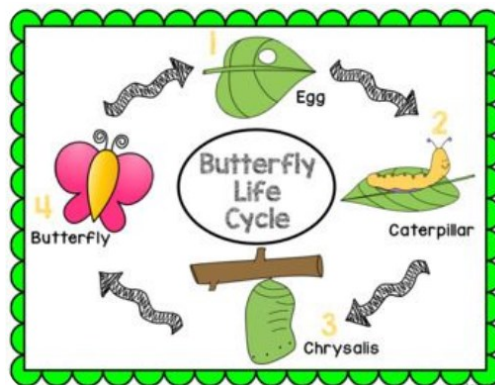
Lastly, the Farfalle pasta become the butterflies. You can draw antenna on them if you like.



Finally, you can write in each stage of the life cycle to complete the project.

Have fun and be creative! This is a good craft for both enjoying doing some artwork but also learning about metamorphosis.

<https://anationofmoms.com/2013/08/butterfly-life-cycle-craft.html>



## ***Additional nature activities:***

Pinecone Bird Feeders

<https://www.happinessishomemade.net/pinecone-birdfeeders/>

Native Bee Hotel

<https://youtu.be/m0re9o1ZqX8>

Eggheads with Cress Hair

<https://nurturestore.co.uk/eggheads-with-cress-hair>

Nature Mandalas

<https://www.orientacionandujar.es/mandalas-naturales-coleccion-de-fotografias-2/>

Chlorophyll Paintings

<https://aroundthekampfire.com/2019/02/chlorophyll-paintings-plant-science-leaf-rubbing-art-activities.html>

Helicopter Dragonflies

<https://www.pinterest.com/pin/522699100509562990/>

Leaf Animals

<https://www.firefliesandmudpies.com/creating-nature-art-with-kids/>

Hedgehog Leaf Collage

<https://www.craftymorning.com/make-hedgehog-craft-using-leaves/>

Cubism Leaves

<http://colormemichelle.blogspot.com/2013/02/2nd-grade-cubist-autumn-leaves.html>

Mother's Day Heart Seed Collage

<http://naturecraftsforkids.com/mothers-day-craft-seed-mosaic-heart/>

Vermicomposting/Worm Farming

<https://www.youtube.com/watch?v=UaSoMOVyCao>



## ***Additional activity websites:***

[Plants and Animals - Learn about Native Plants and Pollinators](#)

[Celebrating Wildflowers](#)

[Wildflower Coloring Pages](#)

[Wildflower Kids Activities](#)

[Butterfly Garden and Habitat Program](#) - Learn how to start a butterfly garden, select plants that invite adult butterflies to your garden to feed.

[Good Bugs and Bad Bugs Student Booklet](#)

[U.S. Department of Agriculture Kids Activities](#) - You can play a role in protecting our nation's crops, forests, parks and trees from hungry pests! Enjoy these games and activities as you learn more about invasive species, and ways you can help stop their spread.

[U.S. Department of Agriculture Kids Activity Book](#) - What does the word "agriculture mean to you? Activities to teach kids about farming, livestock, and how farmers provide food for the world.

# The enclosed information was provided courtesy of the Charles County Master Gardeners

April 2021



<https://www.facebook.com/charlescountymastergardeners>



[extension.umd.edu/locations/charles-county/  
master-gardener/resources](https://extension.umd.edu/locations/charles-county/master-gardener/resources)

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