

Did you know you can wear a greenhouse as jewelry? In this fun and educational activity, you can make your very own living necklace to wear and grow on your body! Living Necklaces are fun for adults as well as children. Everyone in your household can make one, and you can have a friendly competition to see whose grows the fastest! Throughout the week, your necklaces will begin to change- You will see your seed start to split, roots start to grow, leaves start to sprout, and you may even get stems poking holes in the plastic and growing up and out of the necklace itself!



When we think about the word "seed," we think of tiny, round specks we find in the center of flowers, or in pods hanging from trees. But seeds come in all shapes and sizes- And beans and popcorn are seeds too! They are also super easy to germinate. Chances are you've got some dried beans or popcorn kernels hanging around home right now. All you need to begin is a few of these beans or popcorn kernels, some string, a cotton ball, and a small plastic Ziploc bag! If you happen to have small plastic jewelry bags available like the one shown below, these are ideal, however if you don't, a plastic sandwich or snack bag work just fine.

Spring is a perfect time to talk to children about the power of seeds- Before you create your Living Necklaces, go for a walk outside and have children look around at all the things they see growing- From the mighty trees to the little weeds poking up through cracks in the sidewalk. Everything they see- all the trees near and far, every flower or grassy lawn -it all started from a seed! This is a powerful concept to take in. It's also a wonderful opportunity to work on social-emotional learning with your children- Seeds show us that no matter how small or seemingly insignificant something may appear, everything in the world has a valuable function. And in the case of seeds, an extremely important function! Challenge children on your walk to identify the different types of seeds they see. From dandelions growing on sidewalk grass to an orange hanging from a tree, seed are all around us working their magic. After your walk, head home to begin creating your Living Necklaces!

## **MATERIALS**

Dried Beans or Popcorn Kernels
Cotton Balls
Small Plastic Bags
Water
String



## **STEPS**

STEP 1: Choose 2-3 dried beans (or popcorn kernels). I like to always include a red or kidney bean, since they grow well, but any beans will do. Choose a variety to see which grows best!

STEP 2: Take one cotton ball and gently wet both sides of it. Do not fully saturate the cotton ball- Just make sure it's sufficiently damp on each side.

STEP 3: Place your seeds on top of the cotton ball.

**STEP 4:** Slip the cotton ball and seeds inside of your plastic bag, then zip the bag closed. **STEP 5:** Poke a small hole through the top of the plastic bag.

**STEP 6:** Lace your string through the hole in the plastic bag, forming a necklace, and tie it around your neck. Tip: Be sure it's long enough that children can easily slip it on and off their heads; Make sure it can lie against their chests.

### **HOW IT WORKS**

In order to germinate, seeds need 3 basic things- Moisture, oxygen, and heat (or the right temperature for that particular seed). Seed Necklaces germinate because the cotton ball provides the seed moisture, the air around you provides it oxygen, and the heat from your body provides the perfect temperature, turning that little plastic bag into a greenhouse for your seed! By simply wearing your necklace, your body is helping that little seed that has been dormant on your kitchen shelf to do something incredible. Over the course of the week, you will begin to see changes- The seeds will start taking in water and get bigger until their coats split apart so that air can then get to the seed. The oxygen in the air will help the baby plant burn the food packed inside the seed. Burning the food produces energy, and the baby plant uses that energy to grow. Each seed will grow differently, and each person's body will create different rates of growth! Roots, stems, and even tiny leaves will begin to grow, and if you're lucky, even push out through the plastic!

#### **SUPPLEMENTAL ACTIVITIES**

- Create nature journals to track and document the changes you observe each day your seed grows.
- Have each member of your household use different beans, and document which seem to grow the most.
- Analyze what seems to accelerate or slow down growth- Wear your necklace to be one night and record it's changes in the morning, but don't wear it to be the next night and analyze the difference in growth rates.
- Hold a friendly household competition to see whose Living Necklace grows the fastest!
   Make educated guesses as to why the winner's seeds grew so well.
  - Draw your seeds' changes in your nature journal each day.
- When your seed has sprouted leaves, transport it to a soil pot! To do this, remove the
  entire cotton ball from the bag and bury it with the seed attached. Continue journaling
  your observations as your seed grows inside the pot. It might even grow new beans!

#### LIVING NECKLACES SUPPORT NGSS!

By doing this activity, children will have the opportunity to:

Plan and carry out investigations; Analyze and interpret data; and Obtain, evaluate, and communicate information. They will also explore: Patterns; Cause and effect; Systems and system models; Energy and matter; Structure and function; and Stability and change. The entire activity investigates Life Science, Earth and Space Science, and Physical Science!

More Information:

Seed Facts: https://kids.kiddle.co/Seed
Germination Facts: https://www.coolkidfacts.com/germination-for-kids/
Living Necklace Tutorial Video: https://www.youtube.com/watch?v=zYG6yqBEixM

# LET'S STAY CONNECTED!

We'd love to see photos of your family doing
At-Home Nature Adventures!

Post your photos and videos on Instagram and Facebook
using our hashtags

#LAArboretumKids and #LAArboretumAtHome

#LAArboretumKids and #LAArboretumAtHome
for a chance to be featured on our social media pages.
Don't use social media? Just email us your footage at
brooke.applegate@arboretum.org.

