# **Science at Home**



Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can do these fun science activities using commonly found items. You can also visit us at the Museum's **Science at Home** page for additional resources.

## **Making an Eco-friendly Compostable Seedling Planter**



#### **Materials Needed:**

1 cup of all-purpose flour
2 cups of water
Teaspoon of salt
Whisk
Microwave and microwave-safe bowl
Paper strips
Yogurt cup (or recycled plastic planter,
recycled, any size)
Plastic cling wrap
Microwave-safe plate
Adult supervision or assistance

#### **Instructions:**



Step 1: Whisk one cup of flour and two cups of water in a microwaveable bowl. Whisk one teaspoon of salt into the mixture to prevent it from molding. You can save any left-over mixture in the fridge for up to a week or you can freeze it for future projects.



Step 2: Once you have a smooth mixture, place it in a microwave and heat for 30 seconds. Stir every 30 seconds and check its consistency. You don't want it to be too runny. (You might need an adult to assist you with this step.)



**Step 3:** Keep heating, stirring and checking the mixture until it looks like a creamy soup. It will get thicker as you let it cool down to room temperature.



Step 4: Line the yogurt cup with cling wrap. Soak the paper strips in the mixture and squeeze any excess mixture from the paper strips by letting them slide through your thumb and index finger. Layer the entire inside of the cup with soaked paper strips and add an additional layer at the bottom to make it structurally stronger.



Step 5: Place the cup on a plate and microwave it for about three minutes. Check every 30 seconds to see if the paper lining is dry. Once it's dry, let it cool down before you remove the paper planter from the yogurt cup by gently pulling at the cling wrap.



**Step 6:** Remove the cling wrap from your planter. It's now ready to be used as a compostable seedling planter. Fill it with soil and plant your seeds. Place the planter in a bigger pot once the seedlings are big enough. The paper planter will decompose and add nutrients to the soil.

#### What We've Learned

Instead of buying plastic seedling planters or trays, you can make compostable seedling planters with paper, flour, and water. Using a compostable seedling planter eliminates the delicate step of transplanting seedlings into a bigger pot and limits the damage to the delicate root system. Because the planter is already made of plant-based material, it will easily decompose and nutrients will be recycled back into the soil.

### **Everyday Connections**

Not all seedlings will germinate in the same time frame and under the same conditions. Try using a seed-starting mix of herbs that are easy to grow (basil, mint, bell pepper, etc.) and follow the instructions on the package to have a greater chance of success. Write the name of the plant and the date you have planted the seeds on a craft stick with permanent marker. This will help you learn the plant species name. You can also keep track of the growth of your seedlings by taking pictures every day and writing your observations in a special "seedling journal."

#### **Having Fun?**

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