# Plantable Paper Activity

| Name: IRRC | **Time Required:** Depending on age-
| | 15-30 minutes for poem
| | 20-45 for plantable paper activity
| Subject: Science, Language Arts | **Grade Level:** 3rd +

| Overview | Students will make plantable seed paper and write a short poem to go with it.
| | **Goal(s) & Objective(s)** Students will learn how to make plantable seed paper. They will keep a record of when it is planted and when the plants start to grow; focusing on what elements could have changed the growth rate.

| Materials | 1. Overhead copy of poem
| | 2. Plant seeds- (best if plant seeds can be scatter planted rather than spaced evenly in rows)
| | 3. 1 medium size planter with soil for class monitoring experiment
| | 4. *Room mother assistance would be encouraged for grades 3-6
| Original plantable paper supplies: | 1. Blender
| | 2. Cookie cutters
| | 3. Paper (construction or printing paper works best, newsprint has too much die)
| | 4. Water
| Simplified version: | 1. Newspaper
| | 2. Toothpicks
| | 3. Flour/water paste

| Teaching Activities: Instructional Approaches/Strategies | **Introduction:**
| | 1. Display on overhead & read the following poem:
| | 2. **Mary, Mary**, quite contrary,
| | How does your garden grow?
| | With **silver bells**, and **cockle shells**,
| | And **pretty maids** all in a row
| | 3. Have students write a similar poem, but replace the highlighted words with the flowers that they will be using- Since they will probably give this to their mother have them replace Mary with Mother, Grandma, Aunt,
etc. ex:

Mother, Mother quite contrary
How does your garden grow?
With wildflowers and cosmos,
And pretty marigolds all in a row.

**Procedures**

1. After students are finished with their poem, have them pick out and take to their desk a cookie cutter.
2. Depending on the age of students you can either make the paper paste during class or have it prepared before.

**Paper Paste Instructions:** (see attached pulp recipe, for more specific details)

I. **Mix it:** Tear up scrap paper and purée in a blender with water to make a thick, slushy pulp. 1 piece of paper makes enough for one thin cookie cutter. Colored paper is fun however, yellow does not make a pretty pulp - blues, pinks, reds are best.

II. **Mold it:** scoop pulp out, squeezing some of the water out. Press into cookie cutter pressing out more water.

III. **Seed it:** Add seeds to the pulp just before you mold it (Recommended for younger students: this anchors the seeds better) OR add seeds on top of the pulp after it has been placed in the mold. (Optional for older students: this will let you have artistic control over seed placement, but doesn’t anchor the seeds as well)

IV. **Dry it:** Press out excess liquid with a sponge, towel or newsprint and transfer the new, wet paper to a flat surface.

   You can leave the paper out to air-dry or place it between sheets of newspaper or felt to press it dry.

V. **Explain** to students that this is not littering, that the paper will dissolve away once it is planted. The soil, water, and bugs will decompose the paper and it will become part of the soil.

**Due to seeds getting wet with the paper paste- this will trigger germination so not all seeds will sprout. To counter this; use twice the amount of seeds as usual.**

**Simplified Version:**

Rip newspaper into strips
Create a flower and water paste
Dab flour paste on the seed with a toothpick. Spread seeds out along the Strip, gluing them down with the flour paste.
Optional:

1. Plant the classroom plantable paper in a planter.
2. Cover lightly with soil.

3. Have students record in a journal:
   - The day it was planted
   - How long the seed packet states germination takes
   - Their estimation of when the plant will begin to grow considering the different environment these seeds have compared to being outside- (i.e. planter, inside, sunlight amount, temperature) Have them write 6-10 sentences on the positive and negatives of an inside environment verses an outside and how they think it will affect the classroom plant.

4. Have them keep record of how much sun and water the planter receives, until their plant grows.

- This would be a great activity for Mothers Day or Easter.

Attachments:
Pulp Recipe
Planting Instructions

Pulp Recipe:

- 3 cups of ripped paper to 6 cups of water blend till pulp is smooth-
- Blend until paper looks like the same consistency as a smoothie. Add water as needed to create this smooth pulp. You will never have too much water because you wills squeeze most of the water out of the pulp right before molding it.
- This can be stored for a few days as long as there is enough water in a closed container, for the paper to not dry out.