



# Cornell University Cooperative Extension



gardening.cornell.edu

## Starting Plants from Seed

### Overview

- A terrific activity to do with children and youth!
- Tailored for audiences with special needs.
- Great for both new and experienced gardeners
- The perfect spring activity!

### Preparation

#### Seeds:

Involve youth in the process of deciding what to grow, by providing them with catalogs and asking them to pick two or three varieties of each plant you will grow. Purchase your seeds, or ask a seed company/ store to donate them.

#### Soil:

Seeds germinate best in a lightweight, fine-textured soil mix that has a high moisture holding capacity. For this particular activity, purchasing good soil will help to ensure the success of the project. Its best to get a commercial "seed-starter" mix – they have a high percentage of vermiculite and/or peat moss.

#### Containers:

You can use almost any type of container that is clean, has drainage holes, and is no more than two to three inches deep. Many gardeners have extra commercial flats or cell-packs to spare.

Before you get ready to plant, fill clean containers with soil/seed starter mix. Place on a tray of warm water until the soil at the surface is moist. Remove the container from the tray and allow it to drain for several minutes.

### Seed Needs

All seeds need a balance of moisture, warmth, light and nutrients! Annuals such as tomatoes are the easiest type to start from seed! Large seeded annuals, such as zinnia and marigold, germinate the most quickly!

### Materials

- Seeds, such as tomato, zinnia, marigold, cosmos, cucumber and cabbage
- Note: Start very large
- Trays that can hold water
- Soil and containers
- Light units

### Keeping costs down

- Some institutions will float a small loan for supplies.
- You can sell transplants to pay back the loan.
- This also is a great entrepreneurship activity for members of your group to learn communication, provide change, and so forth).

## Step by step

1. Pick a method of planting seed.
  - a. Poke holes with the eraser end of a pencil, drop in seeds to the appropriate depth (check the seed packet), then carefully fill over the hole with soil, and tamp gently with the end of the finger to firm soil.
  - b. Fold a file card in half, place several seeds in the crease of the file card, and push seeds off the card into the hole with a toothpick.
  - c. Shake them directly from the seed packet.
  - d. Mix tiny seeds with fine sand or used coffee grounds. The mixture can be put into an empty spice shaker container.
  - e. For limited vision, a magnifying glass can be used.
2. Regardless of your planting method, you should place two - three seeds per container, spacing them evenly, since some will likely fail to germinate.
3. After planting, mist lightly to settle the soil.

## Go one step further:

### Make home-made seed tape!

1. Cut strips of newspaper about 1 inch wide.
2. Mix a sticky past of flour and water; the consistency of thick gravy seems to work well.
3. Using a Q-tip or artist paint brush as an applicator, dab paste on the newspaper strip, spacing the dabs the right distance apart for the type of seed you're planting.
4. Make correctly spaced red marks on the newspaper ahead of time if participants need help deciding where to apply the glue.
5. Place a seed on each dab and set the strip aside to dry. Large or small seeds lend themselves to this method.
6. Plant the seed tapes (seed side up) and cover as you normally would. Keep them well-watered.

**Note:** Participants may enjoy the seed starting activity so much, that they may be eager to over-water! Overwatering causes damping off, a fungus which spreads quickly through seedlings, causing them to collapse and die. Avoid this by only watering when the soil begins to dry out at the surface. Watching closely for several days will let you know how often seedlings need a light watering.