



# Propagation 3 - Seeds

**Overview/Description:** Students will grow plants from seeds.

**Big Idea:** Living things make new living things - there are different ways that we can grow new plants.

**Guiding Question:** What do seeds need in order to grow into plants?

**Grade Level:** All

**Lesson Time:** 30 min

**Season:** Late Winter, Spring, Early Summer

**Type of Activity:** Science, General Garden Task

**Materials Needed:** Seeds, Soil, Planting Pots, Trays, Table, Scissors, Pencils, Old Window Blinds (for labels). Plants in the garden that have gone to seed (sunflower heads, broccoli pods, marigold, peas, beans, calendula flowers, etc). Watering Can or Spray bottle.

**Preparation:** Set up table. Have potting soil in large tubs or wheelbarrows near the table. Set out trowels, trays, planting pots, labels. For large groups provide multiple tubs of soil. Keep seeds contained until activity is ready to start.

## What to do:

- In the Opening Circle, ask: *Do trees and plants live forever? "No.."* So if all the plants and trees are dying, why aren't they all gone by now? "Cuz they grow new ones..." Yes, and this called *Propagation*. What are different ways plants propagate themselves?
- Ideally, have some examples of seeds growing in, or saved from, the garden. Kids can touch and explore these as you talk about different types of seeds, and the different way they are dispersed.
- Students **fill cell trays or 4" pots with potting soil**. Fill them to the top!
- **Plant seeds in cell trays**. Depth is key - "Plant seeds 2 or 3 times as deep as they are big". Tiny seeds will just go on top of the soil and get a sprinkle of soil to cover them. Kids REALLY want to make deep holes with their fingers, and REALLY bury those seeds deep - you will need to help them resist.
- Always **label!** We know it is broccoli, but what VARIETY of broccoli? Students can cut up old window blinds with scissors to make labels. Pencil won't fade like Sharpies do.
- **Water gently but deeply**. Soil needs a good soak the first time so it will absorb water forever after.
- **Keep seeds moist and warm** until they germinate. They don't need light until they sprout.
- After they sprout, **plants need light, moving air, warmth, and water**. Keep moist but not soggy. Water deeply, then let the soil almost dry out before watering again.
- See page 40 in the Seattle Tilth Maritime NW Garden Guide for information on how to **transplant seedlings into the garden**.
- Lots of things can be done with your new collection of potted plants: Send home with students, have a plant sale for a garden fundraiser, give to another school garden...
- NOTE - do not have kids right next to each other planting two varieties of tomatoes - they WILL get mixed up. If you are working with 5 different kinds of seeds, try to make sure they are all visually distinct, e.g. tomatoes, squash, carrots, beets, radish.

## Teaching Points:

- How do plants make more plants?
- Definition: Plant Propagation = the process of creating new plants. Germination = the process of a seedling/plant emerging from the seed.