

Act like A Seedling

Language Arts – Grades 1-3

Students act out the life of a seedling by each performing a different role important in a plant's development.

Materials:

- Be creative!

Instructions:

- 1. Assign each student a role to play in acting out the development of a seedling. Here are some examples, along with notes about the role. Roles could be added or removed depending on the number of students available.
 - 1 student acts as the **Provider** of the water and care to the seedling.
 - 1 student acts as the **Compost/Fertilizer**, which releases nutrients into the ground and feeds the seedling.
 - 1 student acts as the **Seed** that sprouts into a plant.
 - 1 student acts as the **Sun**. Could be too much, the right amount, or not enough.
 - 1 student acts as the **Water** (too much, just right, not enough).
 - 1 student acts as the **Bad Bug**, which eats the seedling. Could be not enough damage to be concerned, or bad enough to need a solution.
 - 1 student acts as the **Good Bug**, which could eat the Bad Bug, breakdown nutrients in soil and compost, and/or pollinate the seedling.

1 student acts as the **Bad Chemical** that comes along and kills the seedling or is needed to solve a very bad problem. Important to speak of all relationships here, noxious weeds sometimes need noxious solutions.

- 1 student acts as the Companion Plant like a hot pepper, garlic, or marigold that compliments seedling's development.
- 1 student acts as the Plant in Decomposition from the garden that feeds the compost that feeds the new seedling.
- 1 student acts as Bad Weather/Frost.



- 2. Have the Seed sit curled into a ball in the center of a circle made by the children who are playing different roles in the exercise. The seed has a very hard seed coat like sweet peas (i.e. trash can lid). It takes warming of the soil by the sun as well as rain and/or water to break down the hard seed coat. This can be demonstrated. The compost (full of nutrients) lays on the ground, breaking down to feed the seed; you can even have a worm that eats compost. This can be demonstrated by another student.
- 3. When the seedling sprouts it puts out its first feeder root called a foot. Still bent over, the seed strains to stand up to the sun with the seed coat on its head. The seed coat is usually holding the two cotyledons together overhead.
- 4. Once seedling sheds its seed coat it is standing with arms (cotyledons) open and reaching out to the sun. The rest of the group joins the seedling, water, and sun. The sun can shine from directions influencing the direction of the seed. This can be demonstrated by the sun moving around the plant, and the plant leaning toward the sun.
- 5. At this point, every scenario you can think of can be demonstrated, such as:
 - Pretend the plant is overwatered to show dampening off.
 - Pretend the plant is under-watered to show wilting.
 - Pretend the plant is eaten by a bad bug and a good bug comes along to eat the bad bug. A good bug example is a lady bug eating an aphid.
 - Pretend a person comes along with a chemical spray that accidently kills. Also, show a good use of spraying.
 - Pretend the plant produces food and everybody eats.
 - Pretend to compost, or decompose.
 - Eat, grow, composting relationships repeat over and over- life cycles!