

How to Sprout a Bean Plant – *Garden in a Bag*

Modified from http://www.mda.state.mn.us/en/sitecore/content/Global/MDADocs/kids/bookbundle/glove_garden.aspx

What happens to a seed when you plant it in the soil? When we plant seeds they first sprout or “germinate.” When planted in the soil, we’re unable to see the first sprout push out of the seed coat or see the root system. In this activity, you will be able to observe germination and the plant’s roots.

Things You'll Need

Clear zip lock sandwich bags (provided)
Dry beans (provided)
Paper towels
Permanent marker

Instructions

1. Distribute a zip lock bag to each child and write their name in the top corner with a permanent marker.
2. Dampen a paper towel per child and have them place the folded towel in the bag. Paper towels should be damp enough to provide moisture for the bean, but not dripping (which could cause mold).
3. Have children place a dry bean on top of the damp paper towel and seal the bag. There does not need to be any air in bag.
4. Tape each bag to a window or a wall which gets some sunlight. The seed mostly needs warmth at this stage, not light – so prioritize for warmth. A window helps for viewing the seed as it germinates.
5. The seeds should begin to germinate in 3-5 days. Moisten the paper towels if they are drying out.
6. Have children observe the growth of the sprouts. You can have older children (age 4 and older) record the growth on a piece of paper, to the best of their ability. For example, the first sketch should be on Day 1, showing the bean in the bag. The second sketch could be the first sprout, etc.
7. After 1 ½ to 2 weeks – either in a garden or indoors – transplant the sprouted seeds if soil is available. When the seeds are planted they will have their “seed leaves” and maybe even their “true leaves” (the second leaves after the “seed leaves”). These should be above the soil so the seed can continue to grow. Beans require a fair amount of warmth so may not grow well outside in the winter. However, in a sunny classroom spot with good soil and water, they may grow enough to give an idea of what they look like as a full grown plant.