

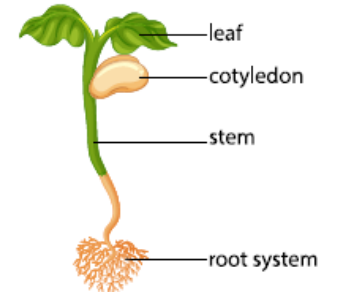
## TRY THIS @ HOME EXPERIMENT

### Bean in a Bag

#### How do I start?

1. Remove the contents of the kit, so you have an empty plastic bag.
2. Cut and fold a paper towel so that it will fit neatly into the bag.
3. Remove the paper towel and run it under the faucet. Wring out the water so that it is wet but not dripping wet.
4. Put the damp paper towel into the bag and smooth it out so that it is flat.
5. Place several beans into the bag on one side of the paper towel about 3 cm (1 inch) from the bottom of the bag.
6. Partially close the bag leaving a small opening so that air can enter the growing plant.
7. Find a window that gets good sunlight but isn't scorched by direct rays all day.
8. Tape the bag to the window with the beans facing indoors so you can watch them as they grow.

#### Anatomy of a Bean Seedling



**How does it work?** Dried beans are seeds that contain dormant (sleeping) baby plants. Plants need signals to make them germinate (“wake up” and emerge from the seed). Germination is the name for the processes that a plant goes through to sprout from the seed and form leaves. Some of the signals that plants need to germinate include sunlight, air, and water. Temperature can also play a role, so don't put your seed against a freezing cold window.

When a plant first sprouts, its nutrients come from the seed. The seed will shrink as it grows. Eventually, as a plant matures (gets older), it depends on roots and leaves to collect the nutrients, carbon dioxide (or air), and sunlight it needs. Once it reaches a specific size and has used up the seeds' nutrients, your window sprout will have to be transplanted into the soil to continue to grow.

#### Take it Further:

- Record your observations by drawing and measuring the beans each day.
- Try repeating the experiment but put one bag of beans in a window and another in a dark closet. What happens?
- Plant more than one type of bean or seed to compare how they grow.

Source: [www.scholastic.com/parents/kids-activities-and-printables.html](http://www.scholastic.com/parents/kids-activities-and-printables.html)

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### Teacher Instructions

- These “Try This @ Home” experiments are a wonderful way to have students continue their learning beyond the classroom. They are also an inexpensive giveaway for holidays, county fairs, farmers markets, class parties, or the class “prize” box.
- Materials and directions for each experiment are listed on the next pages.
- Each of these activities are very inexpensive with the cost ranging between \$0.25-\$1.50 per bag.
- While the materials are nontoxic, students should be told to perform their experiments at home with an adult (plus this is a great way to get parents involved with their children’s learning and perhaps learn something themselves!).

### Bean in a Bag

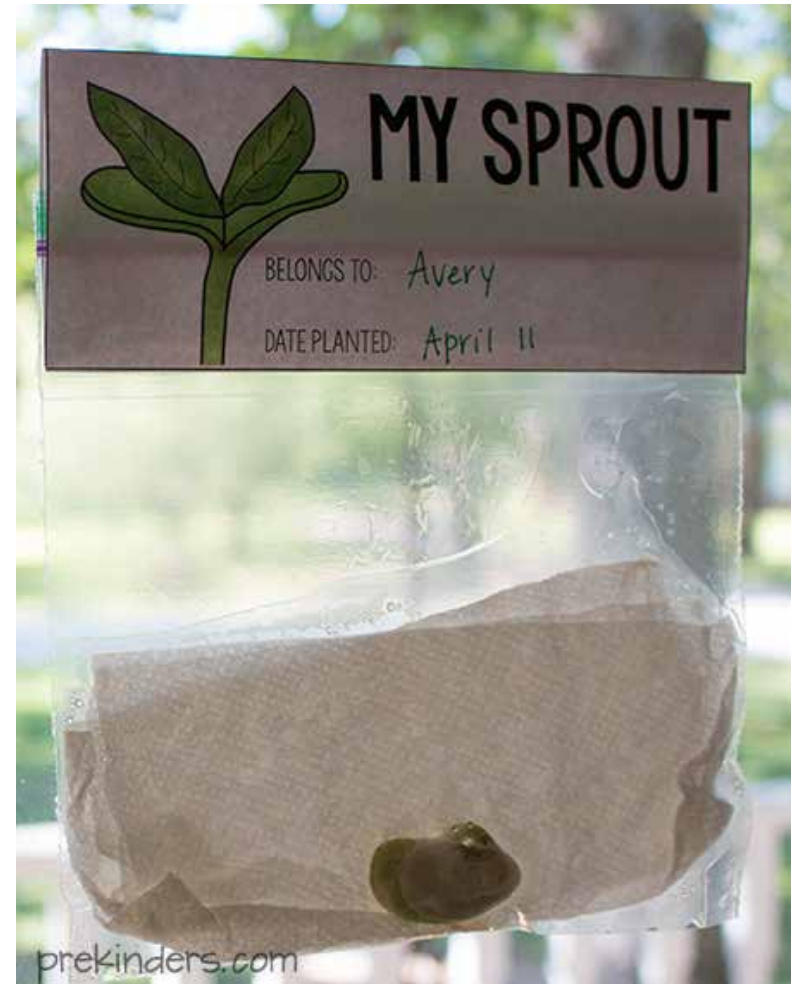
Materials for Classroom Set:

- zipper sandwich size baggies
- copies of handout, pages cut in half
- beans like chickpeas, lentils, red, or black (test that they will sprout before distributing to youth)

### Instructions:

- Cut and fold the student handouts such that the writing is facing outward
- Place one handout in each of the 24 baggies
- Fill each bag with 4-6 beans

**Link to lesson:** <https://extension.wvu.edu/bean-in-a-bag>



**Image Source:**

<https://www.prekinders.com/sprouting-seed-bag-topper-printable/>

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