



Seed Surgeon



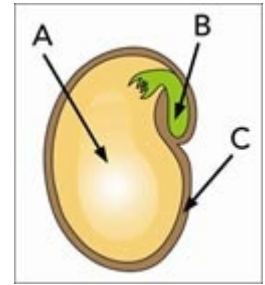
Purpose: Students will dissect a seed, identify the parts, and the importance of each of the parts.

Background:

A - Cotyledons - two halves of the seed that provide the first food for the seedling as it grows

B - Embryo - which is the part that grows into the plant

C - Seed coat - protects the seed while it is dormant (not growing)



Bean Facts:

- There are approximately 400 different types of edible beans.
- Dry edible beans, such as pinto, navy, kidney, pink and black beans, are part of the legume family. A legume plant produces seeds in a pod; dry beans are the mature seeds within these pods. Other members of the legume family include lentils, peas, chickpeas, peanuts, and soybeans.
- Dry edible beans are nutrient-rich foods; they contain a variety of vitamins, minerals and other nutrients while providing a moderate amount of calories. Beans provide protein, fiber, folate, iron, potassium, and magnesium while containing little or no total fat, trans-fat, sodium, and cholesterol.

Materials: Kidney, pinto or lima bean, napkin, dissection paper or science notebook, pencil, optional: hand lens/magnifying glass.

Preparation Before the Lesson: Soak seeds for 12-24 hours.

Activity:

1. Pass out a soaked bean to each student on a napkin. Make observations.
2. Gently rub the seed between two fingers to detach the seed coat.
3. Split the seed in two.
4. Observe what's inside. Option: use a hand lens/magnifying glass.
5. Draw, describe, and label the parts of the seed.