

# SEED STUDY

Seeds are little but they sure are mighty! Have you ever wondered how a little seed grows into a big beautiful plant? Gather some dried beans from your kitchen cabinets or purchase some dried beans from the grocery store and take a closer look to discover the secret life of bean seeds!

## 1. Dry Beans

Place a handful of mixed beans on a paper towel and take a close look. Are they all the same size shape and color? Do some have spots or stripes? Use the space below to sketch the variety of bean seeds on your paper towel.

## 2. Wet Beans

Place your handful of mixed beans into a cup of warm tap water. Let the beans soak overnight (about 8 hours). In the morning, drain the beans and place them on a dry paper towel. How do they look? Did they stay the same size, shape and color? Sketch a picture of what the outside of the bean seeds look like now.

## 3. What's Inside?

After soaking the bean seeds overnight, gently peel away some of the seed's wrinkly outer layer. This outer layer is called a seed coat. It helps keep the seed warm and keeps the seed protected. Sketch a picture of a seed coat below.

## 4. Next....

Carefully break open several seeds. Look carefully at the inside of the seeds. What do you see? Inside each seed is a baby plant. Do you see something that looks like leaves and roots? Sketch what is inside your seed below.

## 5. Watch Me Grow

Gather 2 or 3 dry beans, cotton balls, a Ziploc baggie and some tape. Moisten a cotton ball and place it in the baggie. Choose one dry bean seed and then place it on top of the cotton ball. Close the top of the baggie and tape the bag to a sunny window. Check on your bean seed every day and watch it sprout. Sketch observations of your growing bean seed in the space provided.

# SEED ACTIVITIES

## Seed Soup:

Bean seeds come in all different varieties! Which kind of beans have you tried before? Try a variety of different beans by cooking a delicious bean soup!

1. Soak about 2 cups of assorted beans in water overnight.
2. Put the soaked beans in a pot with 6 cups of water and simmer for several hours until beans are tender.
3. Add two cups of diced vegetables such as carrots, celery, broccoli and potatoes.
4. Add  $\frac{1}{2}$  tsp. of dried parsley, 1 tsp. of onion powder,  $\frac{1}{2}$  tsp. of garlic powder,  $\frac{1}{4}$  tsp. of thyme,  $\frac{1}{4}$  tsp. of basil, 1 bouillon cube, and salt and pepper to taste.
5. Simmer until the vegetables are tender.

## Seed Art

Bean seeds offer a variety of colors, shapes and patterns to use in creating an artful masterpiece. Follow the steps below and create a beautiful mosaic picture using dried bean seeds.

- Gather some thick paper (cardboard and card stock work well) craft glue, paint brushes and an assortment of dried beans.
- Take a close look at the assorted seeds you have gathered. After looking at the various shapes, sizes and colors of beans in front of you, try arranging them to make patterns, designs or pictures.
- Once you have created a design or picture you like, dip a paintbrush into a container of glue and spread the glue out on your paper where you would like your seeds to stick. Bigger, rounder seeds may require big dabs of glue.
- Arrange your seeds on top of the glue. Keep the paper horizontal until the glue dries to keep the beans from falling off.

## Seed Stories

Take a trip to the library and read more about the secret life of seeds.

Look for these favorites:

### The Tiny Seed

Written By: Eric Carle

### One Bean

Written By: Ann Rockwell and  
Megan Halsey

### From Seed to Plant

Written By: Gail Gibbons

### Seeds! Seeds! Seeds!

Written By: Nancy Elizabeth Wallace

