

# How a Seed Grows

by Helene J. Jordan

A charming step-by-step science experiment that engages young readers as they learn how a bean becomes a plant.



## Read

### Before:

Introduce the book and tell the children a little bit about it. Follow with a comment or question that is related to the story such as, *Do you think it is summer or winter? Why?* Encourage a discussion so the children can comment, ask questions, and express their feelings. Set the stage for listening by asking an "I wonder" statement based on the cover illustration.

- I wonder if the child planted all the flowers?

### During:

Encourage the children to comment on the illustrations, ask questions, and predict what will happen next in the story. Children gain confidence and a sense of achievement through being able to correctly predict how a story will end. Point out "rare words" (e.g., those words that are not commonly used in every day conversation) and help the children relate the meaning in a way that makes sense to them.

#### Rare Words in *How a Seed Grows*

- clover: a plant with three-lobed leaves
- wheat: an edible grain used in making bread and pasta
- pole bean: a climbing green bean that is supported on a pole
- bush bean: a low-growing bean that does not require support
- lima bean: a pale green flattish edible seed
- eggshells: the hard cover of an egg
- containers: an object used to hold something
- soil: the top layer of land
- sprinkle: to distribute small amounts of something
- windowsill: the shelf on the bottom edge of a window
- soaks: to immerse in a liquid for a period of time
- root: the underground base of plants
- pale: having little to no color
- shoots: the above ground growth of plants

## After:

Discuss the story. Ask questions...

- What types of plants grew from a bean?
- What animal was in the garden with the child?
- Describe what the tree seed and flower seed looked like.
- How many bean seeds did the child have?
- What kinds of things could you plant seeds in?
- What did the child plant the beans in?
- How did the child mark the eggshells?
- Can you count to 12?
- Where did the children place the eggshells?
- Describe what each seed looked like when the children dug them up.
- What are root hairs?
- What did the children do with the seeds that were left in the eggshells?
- What does a seed need to grow?
- What did the beans grow into?



**Do**

## Eggshell Pots

You will need: 12 eggshells, soil, 12 beans (of any kind), egg carton and water

After reading the story, as a group, talk about the different materials the children used in their science experiment. Have the children help you gather the supplies and number each shell from 1 to 12. Choose 12 children to fill the eggshells half full with soil and choose 12 more volunteers to place one bean in each shell. Choose 12 children to finish filling the shells and place the eggs in the egg carton. Water the eggs and place eggs in either a windowsill or in a well-lit area. Follow the same experiment steps as the children in the book and pull out a bean and describe what each one looks like.

If desired, have each child (or as a group) keep a journal, drawing a picture of what each bean looked like.