# The Fabulous 5



### Enduring Understandings

Interdependence Cycles

- All living things (including the food we eat) have needs.
- Plants need a balance of sun, water, air, space, and soil to grow successfully.
- We rely on each other and other living things to meet our needs.
- We need food to live.
- Our food comes from the land.



### **Objectives**

- Children demonstrate problem-solving by following clues in a scavenger hunt.
- Children cultivate an awareness of the five things a plant needs to survive.
- Children show interest and curiosity in what a plant needs to grow.

• Children build awareness of what living things need to survive.

#### Directions

1. Before the actual lesson, find time to place the clues around your schoolyard, garden, or even classroom. Ideally, it would be outside.

2. Show the children a handful

of bean seeds. Ask the children, "What do you think bean (and other types of) plants might need to grow and live?" Once they have shared some of their ideas, have a "seed" invite the children to go on a scavenger hunt to discover what it needs to grow into a plant! (Read Clue 1.) Tell students that along the way they will be make a bracelet to help them remember what plants need to live.

3. As you visit each station, identify the visual clue that represents one of the "Fab 5": a picture of a sun, water or a spigot, a pinwheel, a bucket with soil, and a picture of plants nicely spaced. At the first station, distribute the pipe cleaners and the first bead. At each of the following stations, help children add a bead to their pipe cleaners. It can be helpful to review what each bead represents each time they add a new one. (Black beads = the seed; yellow beads = the sun,



#### Air Station:

- baggie of clear beads\*
- a pinwheel
- clue card (see p.77)

#### Space Station:

- baggie of green beeds\*
- a picture of plants nicely spaced in a row
- clue card (see p.77)

#### Soil Station:

- baggie of brown beads\*
- bucket (or picture) of soil
- clue card (see p.77)

\*Include enough beads for each child.

#### Extensions

- Using the "Bean Life Cycle Cards" (Appendix, p.\_\_), have children place the cards into the correct order.
- Plant some bean seeds in the garden or a container.
  Eliminate one of the "Fab 5" and see if the plant will still grow.
- Soak lima bean seeds in water for a few hours, then have children dissect a bean to discover the tiny bean plant asleep inside. Try this with other types of seeds and compare your findings.
- Save some dried bean plants and beans from the garden, then have children remove the bean pods and shuck the bean seeds out of the pods. Compare the seeds. What can you do with these beans? Eat them, plant them, or use them in a seed mosaic.
- Who Is in the Garden? By Vera Rosenberry
- How Groundhog's Garden Grew by Lynne Cherry
- **The Carrot Seed** by Ruth Krauss
- **Tops and Bottoms** by Janet Stevens
- **The Ugly Vegetables** by Grace Lin

blue beads = water; clear beads = air; brown beads = soil; green beads = the space the plants need to grow.

- 4. At the last station (soil), make sure to have a spot to plant the bean seeds. Encourage your students to observe if the seeds will grow into a plant that will have all of the "Fab 5"!
- 5. Process and reflect on the experience with the children by engaging in a conversation guided by the discussion questions.

#### **Discussion Questions**

- Do you know any other living things that need the same things that a seed needs to grow?
- Where does the plant get the "Fab 5"?
- What do you think would happen to a plant if it didn't have all of the "Fab 5"?
- What do people need to live?
- Where do people get the things they need to survive?



### Seed

## Clue 1

In order for me to grow big and strong, You are going to need to help me along. Five things I need to stay alive— We'll call them the fabulous five! The first will surely help me wake. It's cold in here for goodness sake! I must warm up and feel the light— Take me where it's warm and bright.

#### Sun

# Clue 2

I'm much warmer now, thanks a bunch, But I think it's getting time to munch. I make my own food whenever I'm hungry, But the problem is, I'm really thirsty!

Look around—you need to think, and find something for plants to drink.

# Clue 3

You need me and I need you! Soon you'll learn a step or two We eat and drink and need to share, 'Cause both of us must breathe the

Look around—think and observe. Can you see where wind is pushing air?

#### Space

Water

### Clue 5

Sun, water, air, and space are things I need to grow. But there's one more thing I need, you know. It's dark and brown, under your feet. Without it my life will be incomplete! Look around—a bucket and a sign complete the 'Fab Five' and your plants will grow fine!

### Air

# Clue 4

Even though I'm little now I'll soon enough be big—somehow. I'll grow with others (it's not a race) Just don't plant me too close, I need my \_

Look around! You'll see a sign, showing plants with room, growing fine.

Soil

### The Fab 5!

Sun Water Air Space Soil

Plant your seeds!

