# Garden Life Loops

Compare how two garden residents grow and begin new life.

**L.4.2.1** "Compare and contrast life cycles of familiar plants and animals."

NAME _____ DATE _____

## 1 READ AND MARK

Read it twice

**YOUR JOB** Underline the life cycle stages of the bean plant in paragraph 1 and circle the life cycle stages of the ladybug in paragraph 2. Use your marks to compare how they grow and begin new life.

### From Seeds and Eggs

1. A bean seed can rest in soil until it has water and warmth. Then a root grows downward, and a shoot pushes upward. The shoot becomes a seedling with leaves that use sunlight to make food. As the plant grows taller, it forms flowers. Some flowers turn into pods. Inside the pods, new bean seeds develop and can grow into more plants.

2. On a bean leaf, a ladybug may lay a cluster of tiny eggs. A young ladybug, called a larva, hatches from each egg. The larva eats small insects called aphids and grows quickly. Next it becomes a pupa, which stays in one place as its body changes. An adult ladybug comes out. Later, the adult can lay eggs on leaves.

3. Picture a garden in late spring. A bean plant has green pods hanging from its stems. Nearby, a ladybug pupa is attached to a leaf. The plant's pods hold seeds while the pupa holds a changing insect. Wind or a gardener may move some seeds to new soil. A ladybug can fly to another plant and lay its eggs there.

## 2 ANSWER WITH EVIDENCE

Use the passage

1. How does each life cycle begin?

2. How does a bean seedling get food? How is this different from a ladybug larva?

3. What changes happen between a bean seedling and new bean seeds? What changes happen between a ladybug larva and new eggs?

4. How can new bean plants and new ladybugs each begin life in a different spot?

## 3 YOUR TURN

Your own words

A gardener plans to throw away every bean pod and every ladybug pupa. In three sentences, compare how these actions could affect the next generation of each, and suggest one change to the plan.

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## PART 1 · READ AND MARK

Underline the life cycle stages of the bean plant in paragraph 1 and circle the life cycle stages of the ladybug in paragraph 2. Use your marks to compare how they grow and begin new life. Accept any marking that follows this job and points at the right text.

## PART 2 · ANSWERS

| # | QUESTION | ANSWER |
|---|---|---|
| 1 | How does each life cycle begin? | **A bean plant begins as a seed, while a ladybug begins as an egg.** |
| 2 | How does a bean seedling get food? How is this different from a ladybug larva? | **A bean seedling uses sunlight to make food. A ladybug larva eats aphids.** |
| 3 | What changes happen between a bean seedling and new bean seeds? What changes happen between a ladybug larva and new eggs? | **The seedling grows into a plant that forms flowers and then seed-filled pods. The larva becomes a pupa, then an adult that can lay eggs.** |
| 4 | How can new bean plants and new ladybugs each begin life in a different spot? | **Wind or a gardener can move bean seeds to new soil. An adult ladybug can fly to another plant and lay eggs there.** |

## PART 3 · YOUR TURN (SAMPLE ANSWER)

Throwing away every bean pod would remove the seeds that could grow into new bean plants. Throwing away every ladybug pupa would keep those pupae from becoming adults that lay eggs. The gardener should leave some pods and pupae in the garden so both life cycles can continue.

Accept answers that correctly compare the two life cycles using passage evidence. For Part 3, the suggested change should protect a source of new bean plants and new ladybugs.