Life Beside the Lot

Use field notes to test a habitat solution

3-LS4-4 "Make an evidence-based claim about the validity of a solution to a change in the environment that affects the types of plants and animals that live there. (SEP: 7; DCI: LS2.C, LS4.D, ETS1.A; CCC: Systems) Alignment may include 3-5-ETS1-1"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the change to the field and the class's solution. Circle observations that could help you decide whether the solution worked.

A Garden Beside the Parking Lot

1. Last spring, workers paved most of a grassy field beside Maple School. Before the paving, milkweed and goldenrod grew there. Monarch butterflies laid eggs on the milkweed, and bees visited the goldenrod flowers. After the paving, students saw no milkweed, monarch eggs, or bees on the new pavement. The parking lot covered almost all the soil where the field plants once grew.

2. The class wanted monarchs and bees to use the area again. They could not pull up the whole parking lot, but they could use a strip of bare soil beside it. In spring, they planted milkweed and goldenrod in that strip. They kept the plants watered while their roots grew. Milkweed gives monarch caterpillars food. Goldenrod flowers give adult butterflies and bees nectar.

3. By late summer, the students found twelve healthy milkweed plants and six goldenrod plants in the strip. They counted four monarch caterpillars on the milkweed and saw bees visiting goldenrod flowers. Before planting, the bare strip had no milkweed, goldenrod, or monarch caterpillars. Most of the old field was still covered by pavement, with no plants growing on that part.

2 ANSWER WITH EVIDENCE

Use the passage

1. Did planting milkweed help monarchs use the area again? Use two observations from the passage to support your claim.

2. Did planting goldenrod help bees use the area? Give an observation that supports your claim.

3. A student says, “The garden replaced everything the field lost.” Does the evidence support that claim? Explain.

4. If the class could keep only one kind of plant to help monarch caterpillars, which should they keep? Use evidence to explain.

3 YOUR TURN

Your own words

A school clears shrubs to make a path, and sparrows stop nesting there. Students plant shrubs beside the path and later find two sparrow nests there, compared with none before planting; write three sentences that claim whether this solution helped, use the nest counts as evidence, and tell one limit of the solution.

ANSWER KEY

Life Beside the Lot

GRADE 3 · 3-LS4-4

PART 1 · READ AND MARK

Underline the change to the field and the class's solution. Circle observations that could help you decide whether the solution worked. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Did planting milkweed help monarchs use the area again? Use two observations from the passage to support your claim.	**Yes. The strip had no monarch caterpillars before planting, but students found four on the milkweed afterward.**
2	Did planting goldenrod help bees use the area? Give an observation that supports your claim.	**Yes. Students saw bees visiting the goldenrod flowers.**
3	A student says, "The garden replaced everything the field lost." Does the evidence support that claim? Explain.	**No. Most of the old field was still covered by pavement, where no plants grew.**
4	If the class could keep only one kind of plant to help monarch caterpillars, which should they keep? Use evidence to explain.	**They should keep milkweed. It is food for monarch caterpillars, and students found four caterpillars on it.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Planting shrubs seems to have helped sparrows nest near the path. Students found two nests after planting, compared with none before. The path still takes up some of the space where shrubs once grew.

Accept claims that planting helped some plants or animals if students cite matching observations. For the open task, the limit may be that the path still takes up space or that two nests do not show whether many sparrows can live there.