# Fox Family Clues

Use trait data to find similarities and differences in a fox family.

**3-LS3-1** "Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms..."

NAME _____ DATE _____

## 1 READ AND MARK

Read it twice

**YOUR JOB** Underline each trait that a kit shares with a parent. Circle words that show a trait varies among the foxes, then use your marks as evidence.

### Red Fox Family Data

1. This invented classroom data set describes a red fox family at Pine Creek. The mother had a white-tipped tail, pointed ears, and thick gray-brown fur. The father had a white-tipped tail, pointed ears, and reddish-brown fur. In spring, the pair had four kits. The data lists each kit's tail tip, ear shape, and fur color. These observations are data about traits, or body features.

2. The data showed that all four kits had pointed ears and white-tipped tails. Those traits matched both parents. Kit 1 and Kit 2 had reddish-brown fur, like their father. Kit 3 had gray-brown fur, like their mother. Kit 4 had fur that was brown with some gray and red hairs. The kits were similar in several traits, but their fur colors were not all alike.

3. The invented data also describes another red fox family at a nearby field. In the second family, each parent and all three kits had white-tipped tails. Their fur colors included reddish-brown, gray-brown, and mixed brown. Across both families, the data gave evidence that kits shared traits with parents. The data also showed variation because similar red foxes did not all have the same fur color.

## 2 ANSWER WITH EVIDENCE

Use the passage

1. Which two traits did all four kits share with both parents?

2. Choose one kit whose fur color matched a parent. Name the kit, its fur color, and the parent it matched.

3. What evidence shows variation among the four kits? Use fur-color data from at least two kits in your answer.

4. What trait was the same in both fox families, and what trait varied across the families?

## 3 YOUR TURN

Your own words

Use this invented plant data: Two bean parent plants both have purple flowers and oval leaves. Four new bean plants all have purple flowers. Plants A and B have oval leaves, while Plants C and D have narrow leaves. Write two sentences that explain one shared trait and one variation in the new plants.

ANSWER KEY

# Fox Family Clues

GRADE 3 · 3-LS3-1

## PART 1 · READ AND MARK

Underline each trait that a kit shares with a parent. Circle words that show a trait varies among the foxes, then use your marks as evidence. Accept any marking that follows this job and points at the right text.

## PART 2 · ANSWERS

| # | QUESTION | ANSWER |
|---|---|---|
| 1 | Which two traits did all four kits share with both parents? | **Pointed ears and white-tipped tails.** |
| 2 | Choose one kit whose fur color matched a parent. Name the kit, its fur color, and the parent it matched. | **Kit 1 or Kit 2 had reddish-brown fur like the father, or Kit 3 had gray-brown fur like the mother.** |
| 3 | What evidence shows variation among the four kits? Use fur-color data from at least two kits in your answer. | **The kits had different fur colors. For example, Kits 1 and 2 were reddish-brown, Kit 3 was gray-brown, and Kit 4 had mixed brown, gray, and red fur.** |
| 4 | What trait was the same in both fox families, and what trait varied across the families? | **White-tipped tails were the same. Fur color varied.** |

## PART 3 · YOUR TURN (SAMPLE ANSWER)

All four new bean plants have purple flowers, which match both parent plants. Their leaf shapes vary because A and B have oval leaves, while C and D have narrow leaves.

Accept answers that use the data as evidence that offspring share at least one trait with parents and that a trait varies within the group. For the open task, students should identify purple flowers as shared and leaf shape as varied. Red foxes typically have white tail tips; coat colors vary. Species reference: National Park Service, Red Fox, https://www.nps.gov/articles/red-fox.htm (checked October 9, 2026). The family and plant data are classroom examples, not documented field observations; no genetic mechanism or prediction is required.