Cat Family Clues

Use family data to find shared traits and differences.

L.3.2.4 "Obtain and communicate data to provide evidence that plants and animals have traits inherited from both parent organisms and that variations of these traits exist in groups of similar organisms (e.g...."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline one trait a kitten shares with Parent A, circle one trait it shares with Parent B, and number two places where the kittens differ.

Three Kittens, Two Parents

1. At a neighborhood animal shelter, Maya records traits of two parent cats and their three grown kittens. A trait is a feature of a living thing, such as coat pattern or tail length. Kittens get inherited information from both parents. Looking at several traits can show which features the kittens share with each parent.

2. Maya writes her observations in the table. The first two rows show the parents, and the next three rows show their kittens. She records coat pattern, fur length, and tail length. All three kittens grew up in the same home. Even so, they do not look exactly alike.

MAYA'S CAT FAMILY DATA

Cat	Coat pattern	Fur length	Tail length
Parent A	striped	long	long
Parent B	solid	short	short
Kitten 1	striped	short	long
Kitten 2	solid	long	short
Kitten 3	striped	long	short

3. Kitten 1 has a coat pattern like Parent A and fur length like Parent B. Kitten 2 has a coat pattern like Parent B and fur length like Parent A. Two kittens have short tails, but one has a long tail. The observations show that kittens can share traits with both parents and still differ from one another.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which trait does Kitten 1 share with Parent A, and which does it share with Parent B?

2. Use two traits to show how Kitten 2 is like both parents.

3. How does fur length vary among the three kittens? Use the data in your answer.

4. Do all striped kittens have the same tail length? Use two rows of data as evidence.

3 YOUR TURN

Your own words

Imagine a fourth kitten in this family. In two sentences, choose a coat pattern, fur length, and tail length from the parents, then explain how your kitten is like both parents but different from at least one kitten in the table.

ANSWER KEY

Cat Family Clues

PART 1 · READ AND MARK

Underline one trait a kitten shares with Parent A, circle one trait it shares with Parent B, and number two places where the kittens differ. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which trait does Kitten 1 share with Parent A, and which does it share with Parent B?	**Kitten 1 shares its striped coat with Parent A and its short fur with Parent B.**
2	Use two traits to show how Kitten 2 is like both parents.	**Kitten 2 shares its solid coat with Parent B and its long fur with Parent A.**
3	How does fur length vary among the three kittens? Use the data in your answer.	**Kitten 1 has short fur, while Kittens 2 and 3 have long fur.**
4	Do all striped kittens have the same tail length? Use two rows of data as evidence.	**No. Kittens 1 and 3 both have striped coats, but Kitten 1 has a long tail and Kitten 3 has a short tail.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

My fourth kitten has a solid coat and short fur like Parent B, but a long tail like Parent A. Its tail is different from Kitten 2's short tail.

Accept any imagined kitten that uses trait versions in the table, shares at least one trait with each parent, and differs from a named kitten. The response must be two sentences.