Puppy Trait Patterns

Use family observations as evidence for shared and varied traits.

3.6 "Use data to provide evidence that plants and animals have observable traits inherited from parents and that variations of these traits exist in groups of similar organisms."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the sentence that shows a puppy shares traits with both parents, and circle two sentences that show how the puppies vary.

A Family of Puppies

1 At an animal shelter, three puppies play beside their mother and father. The dogs all have fur and ears, but those traits do not look exactly alike. A trait is a feature you can observe, such as fur color or ear shape. The shelter worker records each dog in the table. All three puppies came from these two parents.

OBSERVATIONS OF ONE DOG FAMILY

Dog	Family role	Fur color	Ears
Mother	Parent	Brown	Floppy
Father	Parent	Black	Upright
Puppy A	Puppy	Brown	Floppy
Puppy B	Puppy	Black	Upright
Puppy C	Puppy	Brown	Upright

2 Look at the fur colors in the table. The mother has brown fur, and the father has black fur. Two puppies have brown fur, and one has black fur. This pattern is evidence that fur color can be passed from parents to puppies. It does not mean every puppy must match one parent in every trait.

3 Ear shape shows another pattern. The mother has floppy ears, and the father has upright ears. One puppy has floppy ears, while two have upright ears. Puppy C has brown fur like the mother but upright ears like the father. The puppies are from one family, yet their traits vary. That means the puppies do not all look alike.

2 ANSWER WITH EVIDENCE

Use the passage

1. What two matches in the table support the idea that puppies can share fur color with their parents?

2. How does Puppy C show traits seen in both parents? Name one trait it shares with each parent.

3. What evidence shows that fur color varies among the puppies? Include how many puppies have each color.

4. Compare Puppy A and Puppy C. Which trait is the same, and which trait varies?

3 YOUR TURN

Your own words

Invent a family of four rabbits: two parents and two young rabbits. Choose a visible trait other than fur color or ear shape, then write three sentences describing the trait in all four rabbits, naming a young rabbit that shares it with a parent, and explaining how the young rabbits vary.

ANSWER KEY

Puppy Trait Patterns

GRADE 3 · 3.6

PART 1 · READ AND MARK

Underline the sentence that shows a puppy shares traits with both parents, and circle two sentences that show how the puppies vary. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What two matches in the table support the idea that puppies can share fur color with their parents?	**Puppies A and C have brown fur like the mother. Puppy B has black fur like the father.**
2	How does Puppy C show traits seen in both parents? Name one trait it shares with each parent.	**Puppy C has brown fur like the mother and upright ears like the father.**
3	What evidence shows that fur color varies among the puppies? Include how many puppies have each color.	**Two puppies have brown fur, and one puppy has black fur.**
4	Compare Puppy A and Puppy C. Which trait is the same, and which trait varies?	**Both have brown fur. Puppy A has floppy ears, while Puppy C has upright ears.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

One parent rabbit has long fur, and the other parent has short fur. Young Rabbit A has long fur like the first parent, while Young Rabbit B has short fur like the second parent. The young rabbits vary in fur length because one has long fur and the other has short fur.

Accept accurate matches and counts from the table. For Your Turn, accept a plausible visible trait other than fur color or ear shape if the response describes all four rabbits, identifies a shared parent and offspring trait, and shows variation between the young rabbits.