Family Traits

How young plants and animals get their traits

L.3.2 "Students will demonstrate an understanding that through reproduction, the survival and physical features of plants and animals are inherited traits from parent organisms but can also be influenced by the environment..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline a sentence about traits from one parent, circle a sentence about traits from two parents, and number the two different results of watering the young strawberry plants.

New Plants and Kittens

1. In a garden, a strawberry plant sends out a long stem called a runner. The runner touches the soil and grows roots. Soon a new strawberry plant grows there. It has just one parent, the plant that made the runner. It gets the same inherited traits as that parent. Inherited traits are features passed from a parent to a young plant or animal.

2. Across the yard, two parent cats have four kittens. One parent has black fur, and the other has white fur with black spots. Two kittens have black fur, but the other two have white fur with black spots. Fur color and pattern are inherited traits. Each kitten gets traits from both parents, even when it looks more like one of them. The kittens show that young animals can vary.

3. Back in the garden, two young strawberry plants grow from runners on the same parent. One gets enough water. Its leaves grow wide and green. The other gets very little water, so its leaves stay small. Both plants began with the same inherited traits, but they do not look exactly alike now. Water changed how well one plant grew. It did not change the traits passed on by the parent.

2 ANSWER WITH EVIDENCE

Use the passage

1. How many parents does a strawberry plant grown from a runner have? How do its inherited traits compare with that parent's?

2. What do you notice about the kittens' fur that shows young animals can vary?

3. How is the way a kitten gets traits different from the way a strawberry plant grown from a runner gets traits?

4. The two young strawberry plants have the same inherited traits. Why are their leaves different sizes?

3 YOUR TURN

Your own words

Imagine two parent rabbits and two baby rabbits. In three sentences, describe a trait each baby gets from each parent, one way the babies differ, and how food could affect one baby's growth.

ANSWER KEY

Family Traits

GRADE 3 · L.3.2

PART 1 · READ AND MARK

Underline a sentence about traits from one parent, circle a sentence about traits from two parents, and number the two different results of watering the young strawberry plants. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How many parents does a strawberry plant grown from a runner have? How do its inherited traits compare with that parent's?	**It has one parent and the same inherited traits as that parent.**
2	What do you notice about the kittens' fur that shows young animals can vary?	**Two kittens have black fur, while two have white fur with black spots.**
3	How is the way a kitten gets traits different from the way a strawberry plant grown from a runner gets traits?	**A kitten gets traits from two parents. A strawberry plant grown from a runner gets traits from one parent.**
4	The two young strawberry plants have the same inherited traits. Why are their leaves different sizes?	**One plant gets enough water and grows wide leaves. The other gets very little water, so its leaves stay small.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

One baby rabbit has brown fur like its father and short ears like its mother. The other has gray fur like its mother and long ears like its father, so the babies differ in fur color and ear length. If the second baby gets too little food, it may grow more slowly, but the traits it inherited do not change.

For Part 3, accept other possible rabbit traits if each baby has a trait from each parent and the babies differ. The food example should affect growth, not change an inherited trait.