

Inherited Traits

Grade 3 • SCIENCE • Students distinguish inherited traits from other characteristics and recognize that offspring can have traits similar to their parents. • Standards: 3-LS3-1

Read each question carefully and think about which traits can be passed from parents to their offspring. Write your answer on the line.

1. A mother cat has orange fur. Her kitten also has orange fur. Is fur color an inherited trait?
2. A sunflower plant is 6 feet tall and has yellow petals. Which trait can the sunflower pass to its seeds: its height or its petal color?
3. A dog learned to fetch a ball from its owner. Can this dog pass the ability to fetch to its puppies?
4. Two parent rabbits both have long ears. Their baby rabbits also have long ears. Why do the baby rabbits have long ears?
5. A tree lost a branch during a storm. Will the tree's seeds grow into trees that are also missing that same branch?
6. A horse has a scar on its leg from an old injury. A farmer braids the horse's mane every day. Which of these can the horse pass to its foal: the scar, the braided mane, or neither?
7. Two parent birds have red feathers and short beaks. Their chicks have red feathers and short beaks. Name two traits the chicks inherited from their parents.
8. A tomato plant produces red tomatoes. A gardener waters it every morning. Which characteristic can be passed to the plant's seeds: producing red tomatoes or being watered every morning?
9. A mother duck has webbed feet that help her swim. She teaches her ducklings where to find food in the pond. Which of these will the ducklings inherit: webbed feet or knowing where to find food?

10. Two parent beetles have hard wing covers and six legs. Their offspring also have hard wing covers and six legs, even though the offspring never met their parents. Explain why the offspring have these same traits.

Answer Key — Inherited Traits

For the teacher / parent. Do not distribute with the worksheet.

1. Yes (*Fur color is passed from parents to offspring through inheritance.*)
2. Petal color (*Petal color is inherited, but the exact height of a plant depends on growing conditions as well as genes.*)
3. No (*Fetching is a learned behavior, not an inherited trait.*)
4. They inherited long ears from their parents. (*Ear length is an inherited trait passed from parents to offspring.*)
5. No (*Injuries are not inherited traits and cannot be passed to offspring.*)
6. Neither (*Scars are injuries and braids are temporary changes made by people, so neither can be inherited.*)
7. Red feathers and short beaks (*Both feather color and beak shape are inherited traits.*)
8. Producing red tomatoes (*Tomato color is inherited, but watering is something done by a person, not a trait of the plant.*)
9. Webbed feet (*Webbed feet are an inherited physical trait, while knowing where to find food is learned behavior.*)
10. The offspring inherited these traits from their parents. (*Inherited traits are passed through genes from parents to offspring, even without direct contact or teaching.*)