Inherited Traits and Variation

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. Pea plants from the same parents are tall and short. A student thinks the short ones got less water. Which plan would test this idea?
   count the purple flowers on each plant
   look at the parent plant's flowers
   grow more seeds from the same plant with equal water and compare
   give each plant a different soil and water

2. A student says, 'A dog that learns tricks will have puppies that know tricks.' Which evidence shows this is wrong?
   puppies of a trained dog have the same fur
   puppies often look like their father
   puppies of a trained dog still have to be taught
   trained dogs are often larger

3. Two tomato plants grew from seeds of the same parent. Which difference is most likely caused by the environment?
   one has smooth leaves and one has fuzzy leaves
   one has red fruit and one has yellow fruit
   one has more fruit after getting fertilizer
   one has round fruit and one has pear-shaped fruit

4. Which statement about traits is true?
   every trait comes from the environment
   traits are either learned or inherited, never both
   some inherited traits can still be changed by the environment
   the environment cannot change any trait

5. Seeds from one tall corn plant are planted in poor, dry soil. The new plants are short. What is the best explanation?
   corn height is never inherited
   the seeds learned to grow short
   they inherited shortness from the tall plant
   they inherited tallness, but poor soil limited growth

6. A farmer wants calves that make more milk. Which plan uses inherited traits?
   keep the calves in a bigger field
   teach the calves to come when called
   give all the calves the same blanket
   breed the cows that make the most milk

7. Hydrangeas grown from cuttings of one plant have blue flowers in one garden and pink in another. What does this show about hydrangea flower color?
   the soil can change it
   it depends only on the parent plant
   it is a learned behavior
   it changes with the plant's age

8. Which observation is evidence that a trait is inherited?
   a foal gets a scar from a fence
   a foal grows stronger from running
   a foal learns to follow its mother
   a foal has the same white face marking as its mother

9. Ten kittens from the same two parents are measured. Their tails are 20 to 26 centimeters long. What does the range show?
   tail length is learned by playing
   the kittens have ten different mothers
   all the kittens inherited the same tail length
   variation in an inherited trait

10. Two goldfish from the same parents live in different tanks. The fish in the larger tank grows bigger. Both fish are orange. Which trait was shaped by the environment?
    body size fin shape number of fins orange color

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Answer Key - Grade 3 Science Worksheet - Challenge Me

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