# Inherited Traits and Variation

Grade 3 Science Worksheet - Challenge Me

Name _____ Date _____

Circle the answer.

1. The same kind of sunflower seeds are planted in sun and in shade. The sunny plants grow taller. Which trait was most affected by the environment?

   petal color  seed shape  leaf shape  plant height

2. Twin puppies have the same fur color. One is fed more, exercises less, and becomes heavier. Which statement is true?

   both traits are inherited

   fur color is inherited; weight is shaped by environment

   weight is inherited; fur color is shaped by environment

   both traits are shaped by environment

3. 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

   give each plant a different soil and water

   look at the parent plant's flowers

   grow more seeds from the same plant with equal water and compare

4. A student says, 'A dog that learns tricks will have puppies that know tricks.' Which evidence shows this is wrong?

   trained dogs are often larger

   puppies of a trained dog still have to be taught

   puppies often look like their father

   puppies of a trained dog have the same fur

5. Two tomato plants grew from seeds of the same parent. Which difference is most likely caused by the environment?

   one has round fruit and one has pear-shaped fruit

   one has more fruit after getting fertilizer

   one has smooth leaves and one has fuzzy leaves

   one has red fruit and one has yellow fruit

6. Which statement about traits is true?

traits are either learned or inherited, never both

the environment cannot change any trait

some inherited traits can still be changed by the environment

every trait comes from the environment

7. Seeds from one tall corn plant are planted in poor, dry soil. The new plants are short. What is the best explanation?

the seeds learned to grow short

they inherited shortness from the tall plant

corn height is never inherited

they inherited tallness, but poor soil limited growth

8. A farmer wants calves that make more milk. Which plan uses inherited traits?

teach the calves to come when called

breed the cows that make the most milk

give all the calves the same blanket

keep the calves in a bigger field

9. 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?

it depends only on the parent plant

the soil can change it

it is a learned behavior

it changes with the plant's age

10. Which observation is evidence that a trait is inherited?

a foal gets a scar from a fence

a foal has the same white face marking as its mother

a foal learns to follow its mother

a foal grows stronger from running

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Answer Key - Grade 3 Science Worksheet - Challenge Me

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