Inherited Traits and Variation

Grade 3 Science Worksheet

Name _____ Date _____

Circle the answer.

1. A dog with a trimmed coat has puppies. Will the puppies be born with trimmed coats?
   - no, because puppies have no fur
   - yes, because the puppies saw the haircut
   - yes, all traits are passed to offspring
   - no, a haircut is not passed to offspring

2. Which shows variation among pea plants grown from seeds of the same parent?
   - all of them grow from seeds
   - some have purple flowers and some have white
   - all of them grow pods
   - all of them have green leaves

3. Why do sunflower seedlings look like the parent plant?
   - they get the shape from the soil
   - they copy the flowers they see
   - they inherit traits from the parent plant
   - they learn the shape from nearby plants

4. Which pair shows an inherited trait and then a learned behavior?
   - a zebra's stripes; a dog fetching a ball
   - a dog fetching a ball; a horse jumping on command
   - a cat's whiskers; a tiger's stripes
   - a zebra's stripes; a cat's whiskers

5. Puppies in a litter have different ear shapes. Their parents also have different ear shapes. What is the best explanation?
   - ear shape changes with exercise
   - each puppy learned its ear shape
   - ear shape comes from the food they eat
   - each puppy inherited a mix of traits from both parents

6. A girl has curly hair like her mother and brown eyes like her father. What does this show?

offspring can inherit traits from both parents

hair and eye color are learned

offspring inherit traits from one parent only

offspring look exactly like one parent

7. Which trait is most likely inherited by a pet rabbit?

hopping to its owner for food

fur trimmed short for summer

the length of its ears

a short tail from an injury

8. Which detail about a kitten is learned, not inherited?

the pattern of its fur the shape of its ears the color of its eyes using a litter box

9. A litter of puppies all have spots like their mother, but each has a different number of spots. What does this show?

an inherited trait can vary among offspring

the puppies have different mothers

spots appear only after an injury

spots are learned from the mother

10. Why might two oak seedlings from the same tree have slightly different leaf shapes?

the gardener chose the leaf shapes

one seedling copied a maple tree

offspring vary even with the same parent

one seedling learned a new leaf shape

Scan to get this marked free. No screen time for your child.
Print it · do it in pencil · scan it · PencilGo picks the next sheet.

Inherited Traits and Variation

Answer Key - Grade 3 Science Worksheet

Circle the answer.

1. A dog with a trimmed coat has puppies. Will the puppies be born with trimmed coats?

   no, because puppies have no fur

   yes, because the puppies saw the haircut

   yes, all traits are passed to offspring

   no, a haircut is not passed to offspring

2. Which shows variation among pea plants grown from seeds of the same parent?

   all of them grow from seeds

   some have purple flowers and some have white

   all of them grow pods

   all of them have green leaves

3. Why do sunflower seedlings look like the parent plant?

   they get the shape from the soil

   they copy the flowers they see

   they inherit traits from the parent plant

   they learn the shape from nearby plants

4. Which pair shows an inherited trait and then a learned behavior?

   a zebra's stripes; a dog fetching a ball

   a dog fetching a ball; a horse jumping on command

   a cat's whiskers; a tiger's stripes

   a zebra's stripes; a cat's whiskers

5. Puppies in a litter have different ear shapes. Their parents also have different ear shapes. What is the best explanation?

   ear shape changes with exercise

   each puppy learned its ear shape

   ear shape comes from the food they eat

   each puppy inherited a mix of traits from both parents

6. A girl has curly hair like her mother and brown eyes like her father. What does this show?

offspring can inherit traits from both parents

hair and eye color are learned

offspring inherit traits from one parent only

offspring look exactly like one parent

7. Which trait is most likely inherited by a pet rabbit?

hopping to its owner for food

fur trimmed short for summer

the length of its ears

a short tail from an injury

8. Which detail about a kitten is learned, not inherited?

the pattern of its fur the shape of its ears the color of its eyes

using a litter box

9. A litter of puppies all have spots like their mother, but each has a different number of spots. What does this show?

an inherited trait can vary among offspring

the puppies have different mothers

spots appear only after an injury

spots are learned from the mother

10. Why might two oak seedlings from the same tree have slightly different leaf shapes?

the gardener chose the leaf shapes

one seedling copied a maple tree

offspring vary even with the same parent

one seedling learned a new leaf shape