

## Genetics

Name:

### Genes & Traits Practice Questions

Period:

Try these practice questions by first using just your brain. Then make sure you got the answers right by checking in Chapter 6, Sections 1 and 2.

- \_\_\_\_\_ 1. What do you call the mathematical chance that something will happen?  
a. possibility      b. probability      c. percentage      d. ratio
- \_\_\_\_\_ 2. What is an organism's appearance called?  
a. its genotype      b. its phenotype      c. its dominant trait      d. its recessive trait
- \_\_\_\_\_ 3. What kind of traits seem to disappear in the first generation?  
a. genotypes      b. phenotypes      c. dominant traits      d. recessive traits
- \_\_\_\_\_ 4. How many genes influence eye color and fur color of a white tiger?  
a. one      b. two      c. three      d. four
- \_\_\_\_\_ 5. What is the ratio of dominant traits to recessive traits in second-generation plants?  
a. 1:1      b. 2:1      c. 3:1      d. 4:1

Use the Punnett square below to answer questions 6 through 8. For each question, write the letter of the correct answer in the space provided. The Punnett square shows a self-pollination cross of a true-breeding purple flower (PP) and a true-breeding white flower (pp).

	<i>P</i>	<i>P</i>
<i>P</i>	<i>Pp</i>	
<i>P</i>	<i>Pp</i>	<i>Pp</i>

- \_\_\_\_\_ 6. Look at the Punnett square. What is a Punnett square used to predict?  
a. chromosome pairs for parents      c. possible genotypes of offspring  
b. chromosome pairs for offspring      d. possible genotypes of parents
- \_\_\_\_\_ 7. Look at the Punnett square. What genotype should be shown in the empty box?  
a. PP      b. Pp      c. pp      d. P × p
- \_\_\_\_\_ 8. Look at the Punnett square. What are the possible phenotypes of the offspring?  
a. two white flowers, two purple flowers      c. four white flowers  
b. three purple flowers, one white flower      d. four purple flowers
9. \_\_\_\_\_ causes differences in sets of alleles between individuals in a population
10. \_\_\_\_\_ describes traits passing from parents to offspring

Match the correct description with the correct term. Write the letter in the space provided.

- \_\_\_\_\_ 11. one set of instructions for an inherited trait      a. allele
- \_\_\_\_\_ 12. a different form of a characteristic      b. characteristic
- \_\_\_\_\_ 13. a feature that has different forms in a population      c. gene
- \_\_\_\_\_ 14. the version of a gene that an offspring gets from one parent      d. trait