

Directed Reading A

Section: Traits and Inheritance

- _____ 1. What ratio did Mendel find for dominant to recessive traits?
- 1 to 1
 - 2 to 1
 - 3 to 1
 - 4 to 1

A GREAT IDEA

- _____ 2. What are the instructions for an inherited trait?
- alleles
 - phenotype
 - albinism
 - genes
- _____ 3. Two forms of a gene, one from each parent, are called
- alleles.
 - phenotypes.
 - albinism.
 - genes.
- _____ 4. When gene pairs are written, the dominant allele has a(n)
- D in front of it.
 - capital letter.
 - bold letter.
 - underlined letter.
- _____ 5. The genotype Pp can also be written
- pP*
 - pp*
 - PP*
 - Ppp*
- _____ 6. When purple is dominant, the white offspring of purple and white parents will be
- pP*
 - pp*
 - PP*
 - Ppp*

Directed Reading A *continued*

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

- | | |
|---|--|
| <p>_____ 7. used to organize possible offspring combinations</p> <p>_____ 8. an organism's appearance</p> <p>_____ 9. a plant with one dominant and one recessive gene</p> <p>_____ 10. condition that causes colorless hair, skin, and eyes</p> <p>_____ 11. a plant with either two dominant or two recessive genes</p> <p>_____ 12. genetic makeup formed from both inherited alleles together</p> <p>_____ 13. instructions for traits passed to offspring from parents</p> | <p>a. phenotype</p> <p>b. heterozygous</p> <p>c. genotype</p> <p>d. homozygous</p> <p>e. genes</p> <p>f. albinism</p> <p>g. Punnett square</p> |
|---|--|

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

	<i>P</i>	<i>p</i>
<i>P</i>	<i>PP</i>	<i>Pp</i>
<i>p</i>	<i>pP</i>	<i>pp</i>

14. Look at the Punnett square on the left. What genotype do the offspring have?

15. Look at the Punnett square on the left. What will happen to the recessive allele?

16. Look at the Punnett square on the right. Which genotypes contain a dominant allele?

17. Look at the Punnett square on the right. Which two genotypes are exactly the same?

Directed Reading A *continued*

WHAT ARE THE CHANCES?

- _____ 18. The mathematical chance that something can happen is called
- a. genotype.
 - b. albinism.
 - c. probability.
 - d. trait.

19. What is the probability of inheriting two *p* alleles?

20. Why are the traits that Mendel studied in pea plants easy to predict?

MORE ABOUT TRAITS

21. When each allele has its own degree of influence, it is known as _____.

22. How is a snapdragon an example of incomplete dominance?

23. Sometimes one gene can influence more than one _____.

24. Besides genes, what else can have an influence on traits?
