

Chapter 11 Introduction to Genetics**Chapter Vocabulary Review**

Matching *On the lines provided, write the letter of the definition of each term.*

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|-------------------------|---|
| _____ 1. genetics | a. likelihood that something will happen |
| _____ 2. trait | b. process by which the number of chromosomes per cell is cut in half |
| _____ 3. hybrid | c. specific characteristic |
| _____ 4. gene | d. offspring of crosses between parents with different traits |
| _____ 5. allele | e. containing a single set of chromosomes |
| _____ 6. gamete | f. sex cell |
| _____ 7. probability | g. factor that determines traits |
| _____ 8. Punnett square | h. diagram showing possible gene combinations |
| _____ 9. haploid | i. the scientific study of heredity |
| _____ 10. meiosis | j. form of a gene |

Completion *On the lines provided, complete the following sentences:*

11. Organisms that self-pollinate, producing offspring identical to themselves, are _____.
12. Although organisms with the same physical characteristics have the same _____, they might have different _____, or genetic makeup.
13. According to the principle known as _____, genes that segregate independently do not influence each other's inheritance.
14. _____ and _____ are similar because the heterozygous phenotype is different from the homozygous dominant phenotype.
15. _____ results in the exchange of alleles and produces new combinations of alleles.

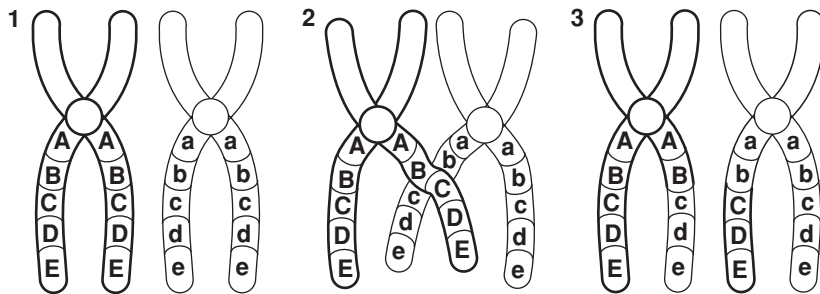
Multiple Choice *On the lines provided, write the letter of the answer that best completes the sentence or answers the question.*

- _____ 16. In what process do male and female reproductive cells join during sexual reproduction?

a. segregation	c. self-pollination
b. fertilization	d. cross-pollination
- _____ 17. The separation of alleles during gamete formation is called

a. segregation.	c. meiosis.
b. true-breeding.	d. crossing-over.

- _____ 18. Organisms that have identical alleles for a particular trait are
- heterozygous.
 - polygenic.
 - diploid.
 - homozygous.
- _____ 19. An organism that has an allele for brown eyes and an allele for blue eyes is
- true-breeding.
 - homologous.
 - heterozygous.
 - homozygous.
- _____ 20. Genes that have more than two alleles have
- crossing-over.
 - meiosis.
 - multiple alleles.
 - independent assortment.
- _____ 21. Traits controlled by two or more genes are
- haploid.
 - polygenic traits.
 - homologous.
 - multiple alleles.
- _____ 22. The diagram below illustrates which type of chromosomes that may cross over and exchange portions of their chromatids during meiosis?
- diploid
 - homozygous
 - haploid
 - homologous



- _____ 23. What type of cell has two sets of chromosomes?
- diploid
 - haploid
 - tetrad
 - gene
- _____ 24. There are four chromatids in a
- polygenic trait.
 - tetrad.
 - gamete.
 - genotype.
- _____ 25. Which of the following shows the relative locations of each known gene in an organism?
- polygenic trait
 - gamete
 - Punnett square
 - gene map