

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 of reduction division |
| _____ 3. hybrid | c. specific characteristic |
| _____ 4. gene | d. produced by crossing parents with different alleles |
| _____ 5. allele | e. containing a single set of chromosomes |
| _____ 6. gamete | f. reproductive cell |
| _____ 7. probability | g. factor that controls traits |
| _____ 8. Punnett square | h. diagram showing possible gene combinations |
| _____ 9. haploid | i. branch of biology that studies 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. When organisms have the same physical characteristics, they have the same _____.
13. According to the principle known as _____, genes that segregate independently do not influence each other's inheritance.
14. _____ and _____ are similar because the phenotypes of organisms are not produced by a single dominant allele.
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.*

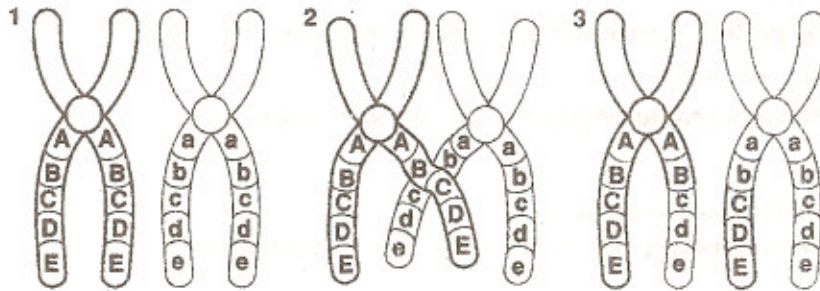
- _____ 16. The separation of alleles is called

a. segregation.	c. meiosis.
b. true-breeding.	d. crossing-over.
- _____ 17. Organisms that have identical alleles for a particular trait are

a. heterozygous.	c. diploid.
b. polygenic.	d. homozygous.
- _____ 18. An organism that has an allele for brown eyes and an allele for blue eyes is

a. true-breeding.	c. heterozygous.
b. homologous.	d. homozygous.

- _____ 19. The genetic makeup of an organism is its
 a. genotype. c. genetics.
 b. meiosis. d. crossing-over.
- _____ 20. Genes that can have more than two alleles have
 a. crossing-over. c. multiple alleles.
 b. meiosis. d. independent assortment.
- _____ 21. Traits controlled by two or more genes are
 a. haploid. c. homologous.
 b. polygenic traits. d. multiple alleles.
- _____ 22. The diagram below illustrates which type of chromosomes that may cross over and exchange portions of their chromatids during meiosis?
 a. diploid c. haploid
 b. homozygous d. homologous



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