Name _____ Class _____ Date _____

Chapter 11 Introduction to Genetics — Chapter Vocabulary Review

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

_____	**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

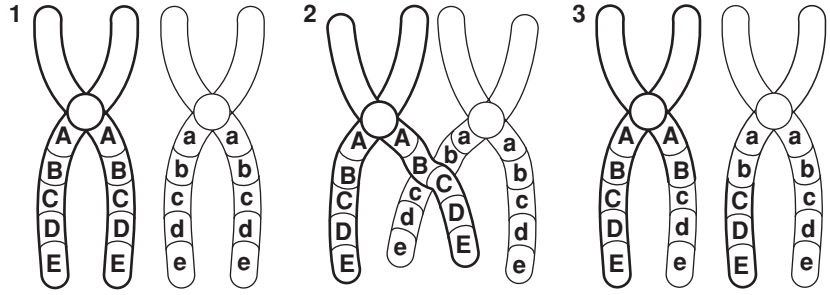
a. haploid. c. homologous.

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