Back Print

Name _____ Class _____ Date _____

Skills Worksheet

Vocabulary Review

In the space provided, write the letter of the description that best matches the term or phrase.

_____ **1.** heredity

_____ **2.** genetics

_____ **3.** monohybrid cross

_____ **4.** true-breeding

_____ **5.** P generation

_____ **6.** F_1 generation

_____ **7.** F_2 generation

_____ **8.** alleles

_____ **9.** dominant

_____ **10.** recessive

_____ **11.** homozygous

_____ **12.** heterozygous

_____ **13.** genotype

_____ **14.** phenotype

_____ **15.** law of segregation

_____ **16.** law of independent assortment

a. the alleles of a particular gene are different

b. the two alleles for a trait separate when gametes are formed

c. the alleles of different genes separate independently of one another during gamete formation

d. not expressed when the dominant form of the trait is present

e. passing of traits from parents to offspring

f. all the offspring display only one form of a particular trait

g. the expressed form of a trait

h. first two individuals crossed in a breeding experiment

i. physical appearance of a trait

j. a cross that considers one pair of contrasting traits

k. offspring of the F_1 generation

l. when the two alleles of a particular gene are the same

m. branch of biology that studies heredity

n. different versions of a gene

o. offspring of the P generation

p. set of alleles that an individual has

Name _____ Class _____ Date _____

Vocabulary Review *continued*

Write the correct term from the list below in the space next to its definition.

codominance	pedigree	Punnett square
incomplete dominance	polygenic trait	sex-linked trait
multiple alleles	probability	test cross

_____ **17.** diagram that predicts the outcomes of a genetic cross

_____ **18.** cross of a homozygous recessive individual with an individual with a dominant phenotype of unknown genotype

_____ **19.** the likelihood that a specific event will occur

_____ **20.** a family history that shows how a trait is inherited

_____ **21.** trait whose allele is located on the X chromosome

_____ **22.** when several genes influence a trait

_____ **23.** when an individual displays a trait that is intermediate between the two parents

_____ **24.** two dominant alleles are expressed at the same time

_____ **25.** genes with three or more alleles

SECTION: MENDEL'S THEORY

1. by writing the first letter of the trait as a capital letter
2. by writing the first letter of the trait as a lowercase letter
3. Two of the same alleles for seed color are present in the plant.
4. The plant possesses two different alleles for flower color.
5. *Yy*
6. *pp*
7. *Pp*
8. *b*

SECTION: STUDYING HEREDITY

1. It defines the key term *Punnett square*.
2. They represent the possible gametes produced by each parent.
3. Each combination is formed by taking one allele along the top of the box and one allele along the side of the box.
4. the possible genotypes of offspring produced from these two parents
5. the number of plants expressing either purple flowers or white flowers
6. *YY*
7. *yy*
8. 1
9. 1
10. 2
11. 1
12. 3
13. d

SECTION: COMPLEX PATTERNS OF HEREDITY

1. It defines the key term *multiple alleles*.
2. It clarifies the term *blood groups*, which precedes it.
3. The letters refer to two carbohydrates on the surface of red blood cells.
4. Both I^A and I^B are dominant over the recessive allele i. But neither I^A nor I^B is dominant over the other.
5. Both I^A and I^B are present in the individual. Because they are codominant, the individual shows both forms of the trait.
6. d

Vocabulary Review

1. e
2. m
3. j
4. f
5. h
6. o
7. k
8. n
9. g
10. d
11. l
12. a
13. p
14. i
15. b
16. c
17. Punnett square
18. test cross
19. probability
20. pedigree
21. sex-linked trait
22. polygenic trait
23. incomplete dominance
24. codominance
25. multiple alleles

Concept Mapping

1. heredity
2. modern genetics
3. probabilities or Punnett squares
4. probabilities or Punnett squares
5. multiple alleles or mutations or polygenic traits or codominance
6. multiple alleles or mutations or polygenic traits or codominance
7. multiple alleles or mutations or polygenic traits or codominance
8. multiple alleles or mutations or polygenic traits or or codominance

Science Skills

ANALYZING EXPERIMENTS

1. **a.** *R*
   b. *R*
   c. *r*
   d. *Rr*
   e. *Rr*
   f. *r*
   g. *Rr*
   h. *Rr*
   i. *R*
   j. *r*
   k. *R*
   l. *RR*
   m. *Rr*
   n. *r*
   o. Rr
   p. *rr*
2. Only one phenotype is present—plants with round seeds; only one genotype is present—*Rr*.
3. There are two phenotypes present—round seeds and wrinkled seeds. They are present in the ratio of three with round seeds to one with wrinkled seeds.