

Assessment

Quiz**Section: Mendel's Theory**

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. Which of the following is a genotype for an individual heterozygous for a trait?
- Rr*
 - tt*
 - YY*
 - Pr*
- _____ 2. Which of the following is *not* one of Mendel's major hypotheses?
- An individual receives two copies of a gene for each character.
 - Genes have alternative versions, which we now call alleles.
 - Gametes carry several alleles for each inherited trait.
 - When two alleles appear together, one may be dominant.
- _____ 3. Mendel's law of segregation states that each pair of alleles
- is linked to sex chromosomes during gamete formation.
 - separate independently of one another after gamete formation.
 - remain together when gametes are formed.
 - is separated when gametes are formed.
- _____ 4. Which of the following is a phenotype for Mendel's pea plant with a heterozygous flower color?
- | | |
|-------------------|---------------------|
| a. white flowers | c. pink flowers |
| b. purple flowers | d. speckled flowers |

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

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| _____ 5. homozygous | a. form of a trait that is not expressed when the dominant allele is present |
| _____ 6. heterozygous | b. different versions of a gene |
| _____ 7. alleles | c. for example, <i>pp</i> |
| _____ 8. genotype | d. set of all the alleles that an individual has |
| _____ 9. dominant | e. for example, <i>Pp</i> |
| _____ 10. recessive | f. fully expressed form of a trait when a single allele is present |