

● Human Genetics

Complete the following sentences using the appropriate words from the textbook.

1. Some _____, or alterations in DNA, have resulted in genetic disorders.
2. The inherited disease in which red blood cells are sickle-shaped instead of disc-shaped is called _____.
3. Sickle-shaped cells cannot carry enough _____ for the body.
4. In cystic fibrosis, a thick _____ affects the lungs and digestive system.
5. The disease in which blood does not clot properly and puts the affected person in danger of bleeding to death from even a small scrape is called _____.
6. A heterozygous individual who has one allele for a disease but is not affected by it is a _____.
7. Scientists use a chart called a _____ to study the inheritance pattern of a trait.
8. The branch of science in which scientists change genes is called _____.

Write the letter of the term or phrase that best completes each sentence.

9. Sickle-cell anemia and cystic fibrosis are caused by _____ alleles.
 a. recessive b. dominant
10. A person who is heterozygous for a disorder caused by a homozygous recessive allele combination _____ affected by the disorder.
 a. will be b. will not be
11. In order to be affected by hemophilia or color blindness, a male must inherit _____ for the disease.
 a. one allele b. two alleles
12. In order to be affected by hemophilia or color blindness, a female must inherit _____ for the disease.
 a. one allele b. two alleles
13. Males are affected by sex-linked genetic disorders _____ than females.
 a. more often b. less often
14. A male has _____ in his cells.
 a. an X and a Y chromosome
 b. two X chromosomes
15. A female has _____ in her cells.
 a. an X and a Y chromosome
 b. two X chromosomes