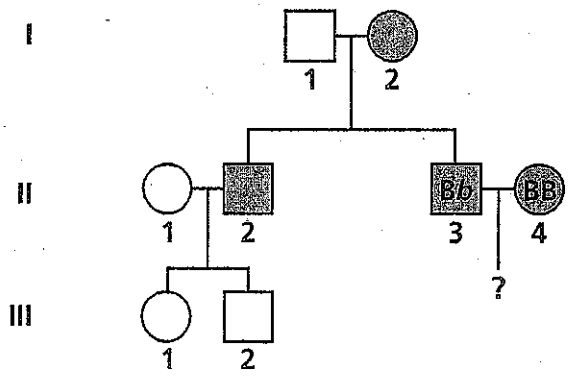
Genetics Unit Study Guide

1. Any change in DNA, on purpose or random is called a____?
2. True/False: Some mutations cause no effect.
3. _____ takes a gene from one organism and uses it to replace a gene in another organism.
4. An _____twin is an organism that is genetically identical to the other twin.
5. Which toll would you use to show how a particular trait is distributed within a family?
6. What is a genetic disorder?
7. A cancer is a type of genetic mutation that _____?
8. _____ is the genetic disorder that affects the mucus membranes of the digestive and respiratory systems.
9. A half-shaded circle in a pedigree represents a _____.
10. The blood of people with the genetic disorder_____, lacks the ability to clot properly.
11. _____ describes a trait that is controlled by genes on the X and Y chromosomes.
12. People who have one gene for a disease but show no symptoms are called_____.
13. _____ is a genetic disorder caused by the presence of an extra chromosome or an extra part of a chromosome_____.
14. Albinism is a genetic disorder that affects the body's ability to produce melanin. What lifestyle choices should an individual with albinism make?
15. Which is the best description of offspring produced by asexual reproduction?
16. Which would occur as a result of limited variation in the offspring of asexually reproduced organisms?
17. Which describes the cells that are created by the process of mitosis?
18. Which is an accurate description for offspring produced from sexual reproduction?
19. Which will cause an increase in variation of offspring?
20. During asexual reproduction, how much of the genetic information is passed to the offspring?
21. The following diagram shows the dominant trait of brown fur in deer, B.
    Family members with two recessive genes will have white fur trait, bb
    Provide an accurate prediction for any offspring from Individuals 3 and 4 in generation II.

Pedigree of Brown Fur in Deer Family



Key
☐ = male with white fur
○ = female with white fur
▨ = male with brown fur
◍ = female with brown fur