Science Test – Chapter 8 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Score:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Matching: Match each term with the correct definition

|  |  |
| --- | --- |
| 1. \_\_\_\_\_ breed | 1. A group of organisms that is purebred for certain characteristics |
| 1. \_\_\_\_\_ chromosomal mutation | 1. Having one pair of each type of chromosome in an organism |
| 1. \_\_\_\_\_ crossbreeding | 1. Choosing certain organisms with desirable traits to breed in the hope that their offspring also will have the desired traits |
| 1. \_\_\_\_\_ diploid | 1. A mutation involving the number of chromosomes or the number or location of genes in a chromosome |
| 1. \_\_\_\_\_ gene mutation | 1. A mutation that occurs in the body cells (those cells that do not make gametes) |
| 1. \_\_\_\_\_ genetic engineering | 1. Breeding animals from different varieties to produce a breed with traits of both parents |
| 1. \_\_\_\_\_ germ mutation | 1. A change in the genetic material of a cell |
| 1. \_\_\_\_\_ inbreeding | 1. The mating of closely related organisms |
| 1. \_\_\_\_\_ lethal mutation | 1. A mutation in a gamete or gamete-forming cell |
| 1. \_\_\_\_\_ mutation | 1. A change in the sequence of the nucleotides in a gene |
| 1. \_\_\_\_\_ selective breeding | 1. The use of special techniques to control the genetic make-up of an organism |
| 1. \_\_\_\_\_ somatic mutation | 1. A mutation that causes death |

True or False: determine whether each statement is true or false.

1. \_\_\_\_ The Ancon sheep are the type of sheep that have short legs, thus making them unable to escape out of the pasture as easily.
2. \_\_\_\_ Down’s syndrome is a type of ploidy mutation.
3. \_\_\_\_ Identical twins are formed from two separate zygotes.
4. \_\_\_\_ Natural human clones are called fraternal twins.
5. \_\_\_\_ Dog breeds are produces by inbreeding.
6. \_\_\_\_ Tay-Sachs is one disease famous for affect European royalty.
7. \_\_\_\_ A somatic mutation affects the offspring of an organism.
8. \_\_\_\_ Crossbreeding usually produces breeds.
9. \_\_\_\_ It is called *hybrid vigor* when the organisms produced by crossbreeding are stronger than their parents.
10. \_\_\_\_ Chromosomes normally occur in sets.

Give a brief description of the following diseases.

Hemophelia

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cystic Fibrosis

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Down’s Syndrome

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Extra Credit:

1. A complete set of an organism’s genes is called an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?
2. A group of organisms that have identical genes are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?