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## Biology Turmes



## Across

5. the mathematical probability of any offspring showing a certain trait. This is determined by counting the number of boxes in the punnett square (this will be the denominator) and counting the number of boxes that would show the trait in question (this would be the numerator). A fraction can then be converted to a percentage.
6. The determination of a given characteristic, such as weight, height, or skin color, by the interaction of many genes
7. A cross between individuals differing in only one inheritable trait, or in which only one trait is considered by an experimenter.
8. An inherited trait, such as color discrimination or hemophilia determined by a gene located on a sex chromosome. Because of the fact that the trait is locat ed on a sex chromosome, the pattern of inheritance will be different between males and females
9. Any chromosomes other than the sex chromosomes. For example, humans have 22 pairs of autosomes and one pair of sex chromosomes ( X and Y ).
10. The situation where more than two alleles exist. A good example is the three alleles of the ABO blood groups in humans
11. The failure of Homologous Chromosomes or sister chromatids to separate during meiosis, resulting in one or more extra chromosomes in some game te and correspondingly fewer in others.

## Down

1. Chromosomes that are different in the two sexes and are involved in sex determination. (In humans, X for female and Y for males); (males are XY and female are XX)
2. this form of a gene will show even if only one of the pair of genes is dominant.
3. the genetic makeup of an individual - (this will be shown with letters).
4. possessing a pair of genes for each trait. Humans are diploid.
5. A cross between individuals differing in two inheritable characte ristics, or in which only an experimenter considers two such different characteristics.
6. A specific segment of DNA that controls a specific cellular function; the foundation of inher itable characteristics
7. the expression of the genes. Commonly this will be the appearance of the individual. 12. different forms of the same kind of gene. i.e. The gene for eye color can be dark (D) or light (d)
8. The breaking off of a piece of a chromosome with its reattachment on a non homologous chromosome
9. Condition in which both alleles are expressed in the phenotype of a heterozygote
