Genetics Crossword Puzzle

Across
2. traits that are controlled by a group of nonallelic genes
5. ancestral lines or charts depicting the lineage or descent of an individual
8. the genotype of an individual with 2 recessive of dominant alleles
10. genes that are closer together on the chromosome are more likely to be inherited together
14. containing two complete sets of chromosomes, one from each parent
16. the phenotype is somewhere between the two traits
20. having a single set of unpaired chromosomes
21. Cell division process that forms gametes
22. determines the physical appearance of an individual
24. the exchange of chromosome segments between homologous chromosomes
25. the more powerful gene
27. one of a pair of genes that appear at a particular location on a particular chromosome and control the same characteristic
28. the less powerful gene
29. uses a Punnett Square to observe the possible outcomes and probabilities for two traits
30. genetic makeup of an individual
31. determine sex or gender

Down
1. uses a Punnett Square to observe the possible outcomes and probabilities for one trait
3. a unit of heredity that is transferred from a parent to offspring and is held to determine some characteristic of the offspring
4. Organisms inherit two copies of each gene, one from each parent. Organisms donate only one copy of each gene in their gametes
6. allele pairs separate independently of each other during gamete formation
7. pairs of chromosomes that have similar genetic information
9. the phenotype is somewhere between the two traits
11. both traits are fully expressed
12. the genotype of an individual with one dominant and one recessive allele
13. genes located in the sex chromosome
15. the extent to which an event is likely to occur
16. determine all traits except gender
17. a grid system that is used to predict all possible genotypes resulting from a cross
18. genetically determined characteristics
19. sex cells
23. a person or other organism that has inherited a recessive allele for a genetic trait or mutation but does not display that trait or show symptoms of the disease
26. a genetic cross between a homozygous recessive individual and a corresponding suspected heterozygote to determine the genotype of the latter