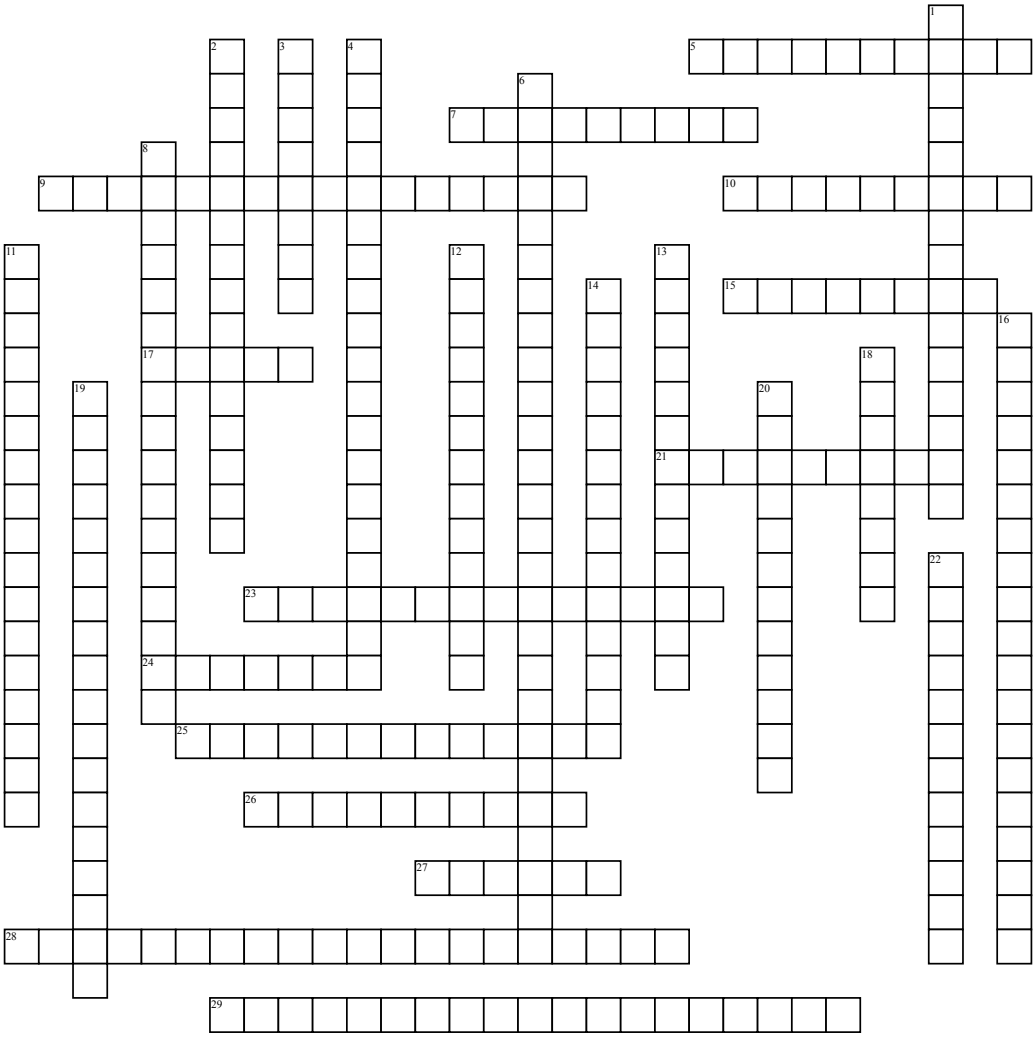
Name: _____ Date: _____ Period: _____

Mendelian Genetics



Across

5. having two identical alleles for a given gene

7. An observable heritable feature that may very among individuals

9. Mendel's first law, stating that the two alleles in a pair segregate into different gametes during gamete formation

10. The observable physical and psychological traits of an organism which are determined by its genetic make up

15. an organism that is heterozygous with respect to two genes of interest.All the offspring from a cross between parents double homozygous for different alleles are dihybrids.For example, parents of genotypes AABB and aabb produce a dihybrid of genotype AaBb

17. One of two or more detectable variants In a genetic character

21. Breeding an organism of unknown genotype with A homozygous recessive individual to determine the unknown genotype.The ratio of phenotypes in offspring reveals the unknown genotype

23. Referring to a phenotypic character that Is influenced by multiple genes and environmental factors

24. In genetics, an individual who is heterozygous at a given genetic locus for a recessively inherited disorder.The heterozygote is a generally phenotypically normal for the disorder but can pass on the recessive allele to offspring.

25. A cross between two organism that are each heterozygous for both of the characters being followed (or the self-pollination of a plant that is heterozygous for both characters)

26. An organism that has a pair of identical alleles for a gene (encoding a character)

27. Any of the alternative Versions of a gene that may produce distinguishable Phenotypic effects

28. An additive effect of two or more genes on a single phenotypic character

29. the situation in which the phenotype of heterozygote is intermediate between the phenotypes of individuals homozygous for either allele

Down

1. A cross between two organisms that are heterozygous For the character being followed (Or the self-pollination of a heterozygous plant)

2. an allele whose phenotype effect is not observed I'm a heterozygote

3. A diagram of a family tree with conventional symbols, showing the occurrence of heritable characters in parents and offspring over multiple generations

4. a heritable feature that varies continuously over a range rather than in an either-or fashion

6. Mendel's second law, stating that each pair of alleles segregates, or assorts, independently of each other pair during gamete formation; applies when genes for two characters are located on different pairs of homologous chromosomes or when they are far enough apart on the same chromosome to behave as though they are in different chromosomes.

8. The situation in which the phenotypes of the heterozygote and the dominant how much I got

11. The situation in which the phenotypes of the heterozygote and dominant homozygote are indistinguishable

12. a diagram used in the study of inheritance To show the predicted genotypic results of random fertilization and genetic crosses between individuals of known genotype

13. a

14. A human genetic disorder caused by a recessive allele For a chloride channel protein;Characterized by an Excessive secretion Of mucus and consequent vulnerability to infection; fatal if untreated

16. Human genetic disease caused by a dominant allele he characterized by Uncontrollable body movement and degeneration of the nervous system usually fatal 10 to 20 years after the onset of symptoms

18. The genetic makeup, or set of alleles, of an organism

19. A roll of probability stating that the probability of two or more independent events occurring together can be determined by multiplying their individual probabilities

20. An organism that has two different alleles for a gene

22. A rule of probability stating that the probability of any of two or more mutually exclusive events occurring can be determined by adding their individual probabilities

Word Bank

dihybrid	character	quaternary character	incomplete dominance	cystic fibrosis
homozygous	trait	allele	carrier	Phenotype
polygenic inheritance	multifactorial	genotype	Multiplication rule	complete dominance
Huntington's disease	monohybrid cross	testcross	punnett square	Punnett square
homozygote	Law of segregation	recessive allele	pedigree	complete dominance
heterozygote	law of independent assortment	addition rule	dihybrid cross	