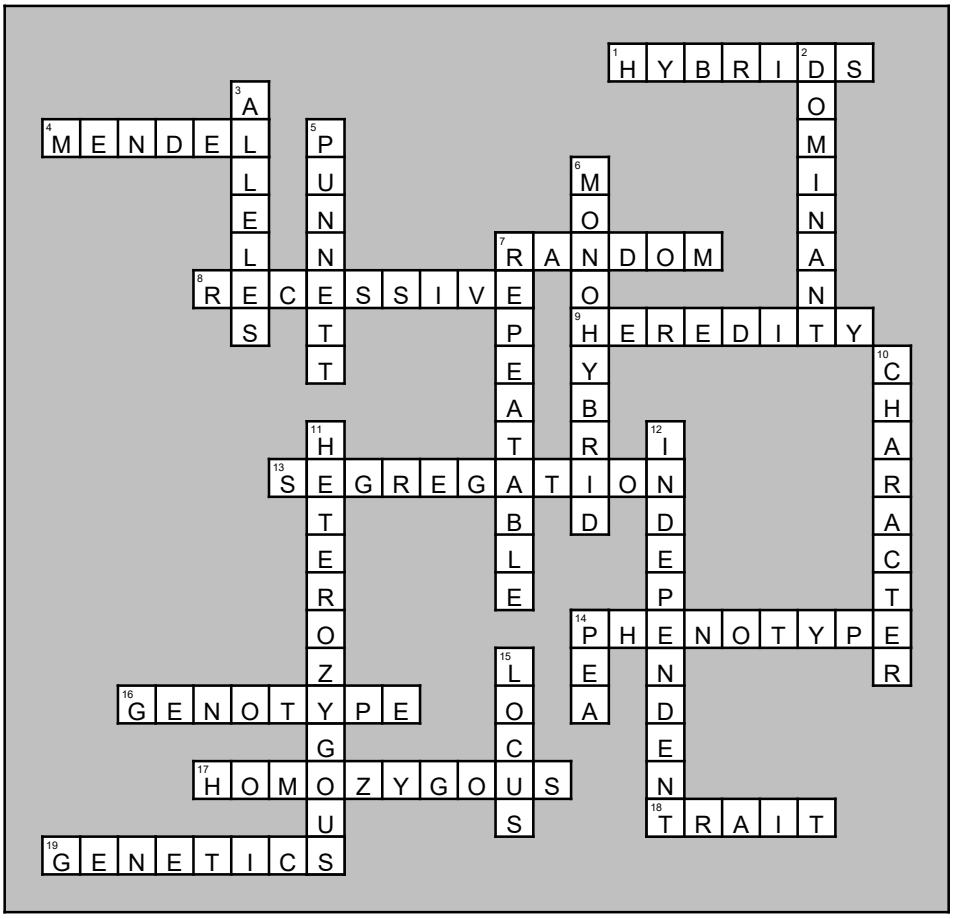
Crossword



Across

1. The offspring of two different varieties are ___.
4. The former monk whose scientific investigations with pea plants established the basis for modern Genetics.
7. Mendel assumed that an equal number of male and female gametes are produced that could contribute to fertilization (zygote). He also assumed that gametes combine at ___.
8. Gene alleles that are masked by the dominant alleles. They usually must appear in pairs in order to be expressed phenotypically.
9. Genetics is the study of ___. Transmission of traits from one generation to the next.
13. The law of ____ states that alleles will separate during meiosis. Each parent cell contributes only one allele to the daughter cell.
14. The actual appearance of a trait which can be observed. E.g. hair color is brown and curly.
16. The actual genetic make up of the alleles. Alleles can be homozygous or heterozygous and appear the same phenotypically.
17. A ___ genotype has identical alleles.
18. Each variant for a character, such as purple or white flowers, is a ___.
19. The study of the transmission of traits from parent to offspring through successive generations.

Down

2. For each trait, when one gene Allele can mask the expression of the other gene allele, this is called the ___ trait. The gene allele that gets masked is called the RECESSIVE allele.
3. ___ are alternative versions of genes that account for variations in inherited characters. For each character, an organism inherits two alleles, one from each parent.
5. A ___ square is a diagram showing the allele combinations that might result from a genetic cross between two parents.
6. A cross between two individuals differing in a single character is a ___ Cross.
7. Mendel chose definite and measurable hereditary traits that were scientific because they were ___.
10. A heritable feature that varies among individuals, such as flower color, is called a ___.
11. A ___ genotype has two different alleles.
12. The law of ___ assortment is revealed by tracking two Characters at once (dihybrid cross). The inheritance of one character has no effect on the inheritance of another.
14. Mendel is famous for his work with ___ plants while in the monastery.
15. A ___ is the specific location of a gene along a chromosome. For a pair of homologous chromosomes (homologs), alleles of a gene reside at the same ___.