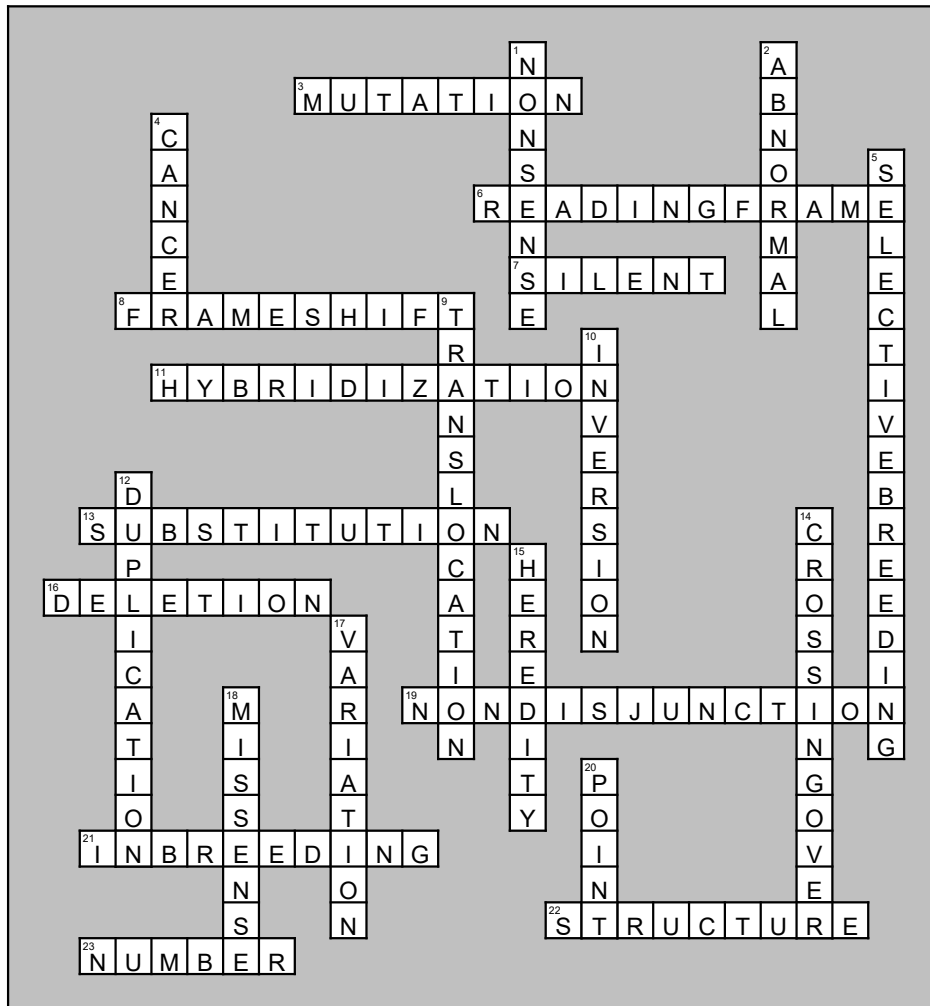


# Crossword



## Across

- Any change in structure or genetic material. Gene \_\_\_\_ is a change in genetic material (DNA) which are usually recessive and harmful.
- Since RNA translates DNA 3 base sequences (codons), the exact sequence must be maintained.
- Substitution point mutation that does NOT affect the organism.
- Result from deletion or addition point mutations. Changes the sequence of nucleotides and, therefore, amino acids.
- Breeding between individual organisms with different parentage; reproduction between organisms that are distantly related. "Vigor".
- Point mutation in which an incorrect nucleotide is inserted into the DNA instead of the correct one.
- Type of mutation in which a portion of the chromosome is lost completely.
- The failure of homologous chromosomes to separate during meiosis so offspring have extra chromosomes. e.g. Down's, Turner's & Klinefelter's syndromes. Usually causes mental retardation.
- Mating closely related organisms that have desirable traits in an attempt to maintain those traits. This increases the likelihood of undesirable traits and mutations.
- Deletions, translocations, duplications, inversions are examples of changes in chromosome \_\_\_\_.
- Aneuploidy and polyploidy are example of change in chromosome \_\_\_\_.

## Down

- Substitution point mutation that alters an amino acid encoding group of nucleotides into a STOP signaling group.
- Mutation is a form of \_\_\_\_ genetic variation that may occur in somatic cells or gametes.
- Abnormal cell division produced by environmental conditions (radiation, drugs, viruses, chemicals, hazardous materials).
- Artificial breeding that can greatly enhance food supplies often through hybridization.
- Type of mutation in which a section of a chromosome is transferred to a non-homologous chromosome.
- Type of mutation in which parts of a chromosome are detached and then reattached in reversed order.
- Type of mutation in which a section of DNA in a chromosome is doubled and left in that sequence.
- The exchange of parts of a chromosome during prophase of meiosis allowing great variation in the offspring.
- \_\_\_\_ + environment = the organism. Genes determine potential capacities, but interactions of genotypes and the environment determine the phenotype of an organism.
- Normal and abnormal \_\_\_\_ exists to ensure survival of a population. Occurs as a result of different alleles for a trait.
- Substitution point mutation that changes a group of nucleotides resulting in the insertion of an incorrect amino acid during protein synthesis. Sickle Cell.
- Mutation that changes a single nucleotide during mitosis or meiosis.