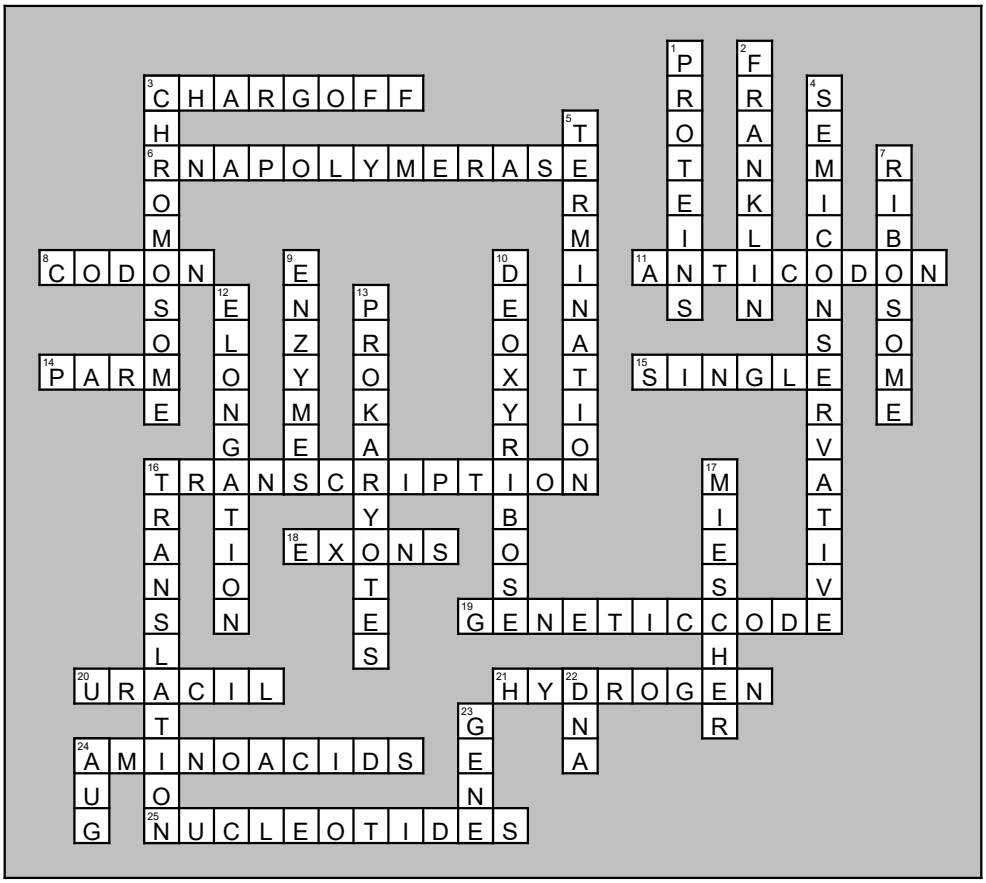
Crossword



Across

3. Scientist who linked adenine with thymine and cytosine with guanine.
6. Enzyme that separates the DNA strands during transcription.
8. A series of non-overlapping DNA and RNA nitrogen bases that yield genetic instructions.
11. Special triplet of bases in tRNA that recognizes the appropriate codons of RNA to sequence amino acids.
14. shortest segment of a chromosome above the centromere. "q arm" is the longest segment below the centromere.
15. RNA is ___-stranded, unlike DNA.
16. Done by mRNA in the nucleus of Eukaryotes to take the genetic code to the ribosomes for protein synthesis.
18. Sections of mRNA (sequences of nitrogen bases) that are involved in protein synthesis. Spliced together by lipase.
19. Codons of mRNA specify amino acids to make proteins. Collated in a chart and a "spin wheel" diagram.
20. Nitrogenous base only found in RNA that complements adenine.
21. Bonds that hold the two strands of DNA together at the nitrogenous bases.
24. Nucleotide sequences are converted to these which are linked by peptide bonds to form polypeptides, determining traits.
25. DNA is made up of these: sugar, phosphate group, nitrogen bases.

Down

1. The link between genes and traits of an organism. Gene expression is the process by which DNA directs their synthesis.
2. Scientist who took x-ray images of DNA that led Watson and Crick to the double helix idea.
3. Molecule that contains DNA coding genes and non-coding DNA.
4. Replication of DNA in which each new strand is complementing and old strand.
5. Codons "UAD" "UAA" and "UGA" signal the end of the polypeptide chain assembly.
7. Site of protein synthesis (its surface) where tRNA translates the mRNA codon.
9. Molecules that direct DNA to unwind, unzip, and replicate.
10. DNA sugar that links with phosphate group and nitrogen base to form nucleotides.
12. Second step of translation inbetween initiation (start codon) and termination (stop codon).
13. In __ translation can begin before transcription is complete because there is no nuclear boundary.
16. The synthesis of proteins under the direction of RNA in the cytoplasm.
17. Swiss scientists who discovered "nuclein" (DNA) and believed that proteins were molecules of heredity.
22. Deoxyribonucleic acid.
23. A segment of DNA that codes for a protein (polypeptide).
24. Methionine. Start codon.