

Year 13 Biology
Worksheet 1 – April, 2021

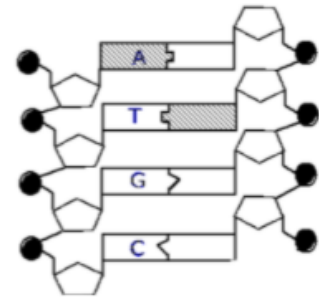
Gene Concept

1. Using **50 words or less**, write briefly on the following. Use examples where possible.
 - a. Gene Structure
 - b. Chargaff's Rules
 - c. Types of RNA
 - d. Role of DNA

2. A diagram of a section of DNA is given below:

On the diagram (right), circle and name the following:

- a. a nucleotide
- b. a sugar and a phosphate
- c. the bases that are not labelled
- d. the 5' end and the 3' end.



3. Complete the following cross word puzzle:

					1						2							
					3												4	
		5																
6	7										8							
					9			10										
											11							
					12													

Across

3. The bonds that occur between complementary nucleotide pairs
5. A pyrimidine that is paired with guanine in DNA
6. The subunit of DNA composed of a nitrogenous base, a sugar and a phosphate
9. A change occurring in DNA
11. A long macromolecule that carries genetic Information
12. A pyrimidine that is paired with adenine in DNA

Down

1. A threadlike structure made of DNA wrapped around protein
2. A portion of a DNA molecule that determines the traits of living things
4. The sugar in DNA that is bonded to a nitrogenous base and a phosphate
7. A pyrimidine that is paired with adenine in RNA
8. A purine that is paired with cytosine in DNA
9. A purine that is paired with thymine in DNA