Structure of DNA

1. DNA is made up of subunits called nucleotides
	1. Below shows what a DNA nucleotide is made up of.



1. There are 4 different bases that can be in DNA
	1. A = adenine
	2. C = cytosine
	3. T = thymine
	4. G = guanine

 Can you tell which bases go to together?

 Hint: look at the shapes

1. Shape of DNA

The shape is called a double helix (a twisted ladder)

* The backbone is made up of Phospahate and sugar
* The bases make up the rungs of the ladder (the part you step on)



1. What holds the bases together?
* Hydrogen bonds



1. What bases go to together and what are they called.



A PAIRS T

C PAIRS G

* The order of the bases is called the BASE SEQUENCE.



The base sequence of this unwound DNA is………………….

 C T G C A G T

What is a COMPLIMENTARY base sequence……

* The complimentary sequence is the bases that would connect to the original sequence.
* For the above base sequence the complimentary sequence would be..
	+ G A C G T C A

Practice: What is the complimentary DNA sequence for the following sequence of DNA

A C T C G G T A C G A T T T G A C