

Structure of DNA

DNA 900,000x

Structure of DNA

- DNA = Deoxyribonucleic Acid
- "The genetic code"
- stores and passes on information from generation to generation

Structure of DNA

- DNA is made of attached nucleotides

- Each nucleotide has 3 parts
 - 1) 5 carbon sugar (deoxyribose)
 - 2) Phosphate group (phosphoric acid)
 - 3) Nitrogen base (A, T, C or G)

Phosphate

1 Nucleotide

Deoxyribose (sugar)

Base (A, T, C or G)

Left Side!

Structure of DNA

Nitrogen Bases

- Purines
 - Adenine
 - Guanine
- Pyrimidines
 - Thymine
 - Cytosine

Structure of DNA

- Sides of the "ladder" are made up of **sugar** and **phosphates**

Structure of DNA

- Nitrogen bases stick out from the sides of the ladder (rungs)

Structure of DNA

- When the two sides of the ladder are connected, it's a complete DNA molecule

Structure of DNA

- Adenine bonds with Thymine
- Guanine bonds with Cytosine
- Hydrogen bonds connect the bases

