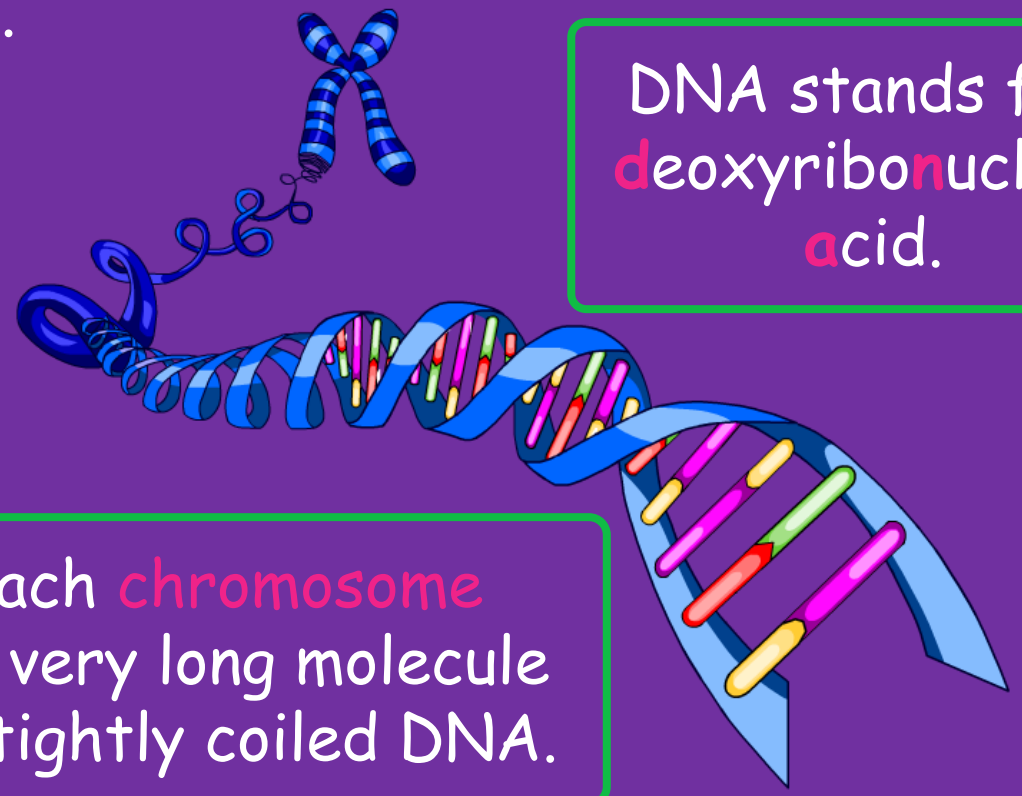
Has anyone ever told you that you have features from your mother, father or an aunt, uncle, a grandmother or grandfather?
Do you have a sibling that you look like or are you completely different?

Talk or write down similarities and differences with you and your family.

Let’s find out about DNA!

What is DNA?

Chromosomes and their genes are made of a molecule called DNA.



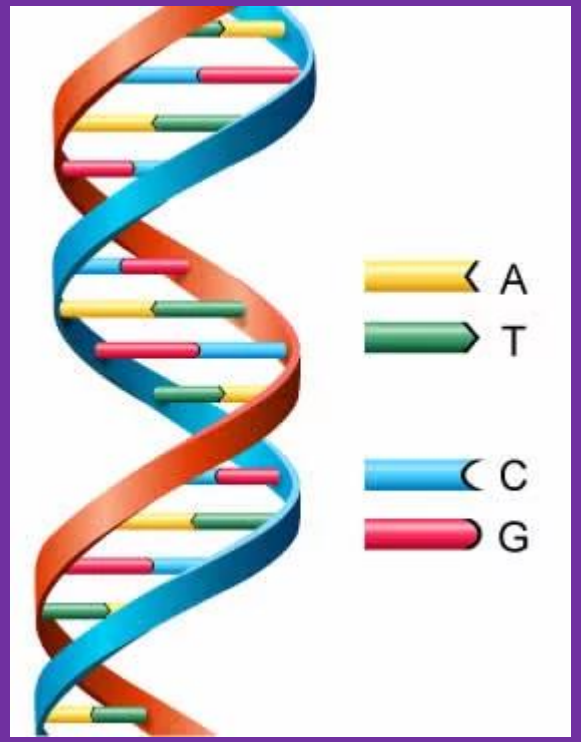
DNA stands for deoxyribonucleic acid.

The DNA molecule looks like a twisted ladder this spiral shape is called a DOUBLE HELIX

Each chromosome is a very long molecule of tightly coiled DNA.

DNA molecules carry the code that controls what cells are made of and what they do.

DNA acts like a recipe holding the instructions telling all living things how to develop and function.



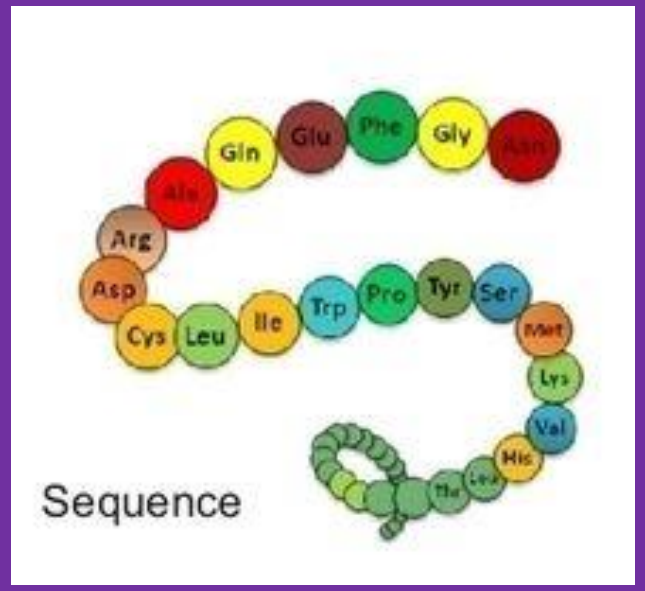
- Your DNA contains genes. Your genes code your characteristics like eye colour and hair colour.

- A gene is a stretch of DNA on a chromosome that has the instructions for making a protein.

You are made of proteins.

There are 100,000 different proteins in your body.

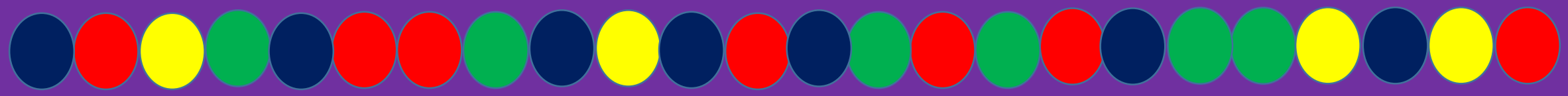
- Each protein is a long chain of amino acids.
- The longest protein in your body is made up of over 34,000 amino acids.



There are 20 different amino acids.

DNA tells your body how to build proteins.

DNA is like a computer code.



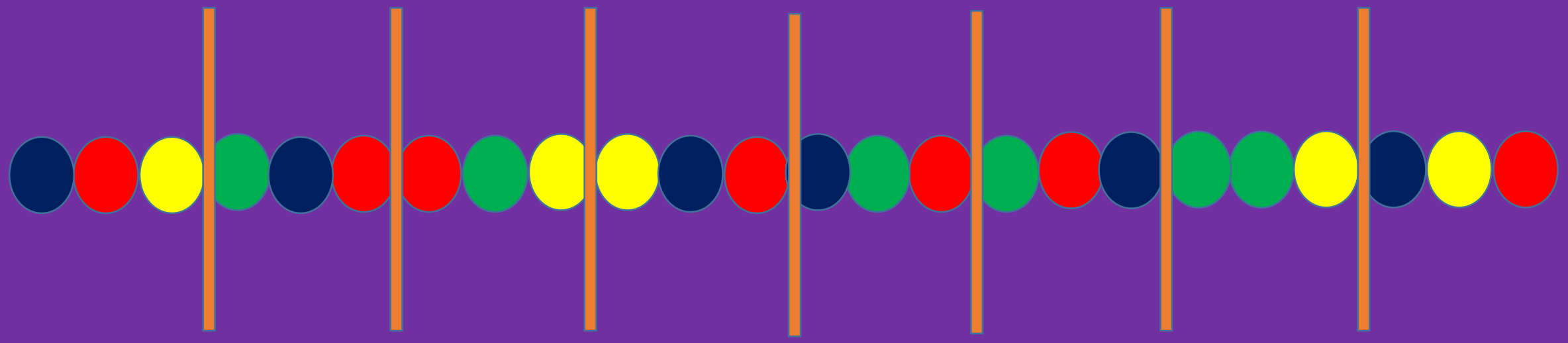
It is a long string of 4 different things.

Each 3 colours = 1 amino acid.

Your DNA is 3,000,000,000 links long.

The code that translates DNA to amino acids

			Phenylalanine				Serine				Tyrosine				Cysteine
			Leucine								Stop				Stop
											Stop				Tryptophan
							Proline				Histidine				Arginine
											Glycine				
			Isoleucine				Threonine				Asparagine				Serine
											Lysine				Arginine
			Methonine												
			Valine				Alanine				Aspartic Acid				Glycine
											Glutamic Acid				



Valine - Serine - Tryosine - Arginine - Aspartic Acid - Methonine - Asparagine - Alanine

Now have a go at decoding the DNA on the sheet!