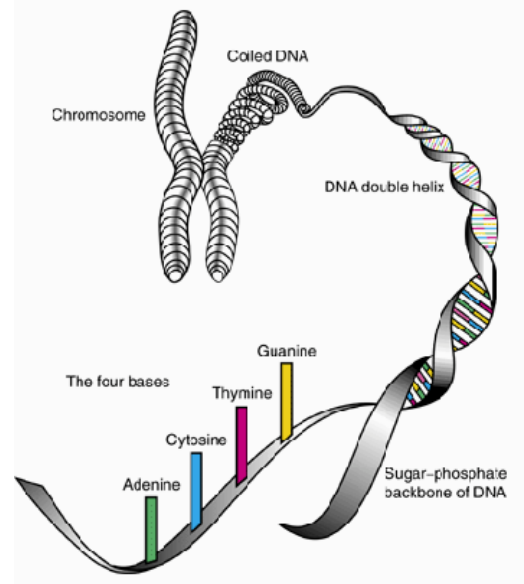


DNA Facts

What is DNA?

- DNA stands for Deoxyribonucleic Acid
- DNA is shaped like a double helix
- DNA is made up of four nucleotide bases : Adenine, Cytosine, Guanine, and Thymine
- DNA structure was discovered in 1953 by James Watson, Francis Crick, and Rosalind Franklin
- DNA provides the blueprint for how to make an organism
- DNA is the primary component of the genome



About Human DNA

- Humans have 50 trillion cells
- One cell contains six to nine feet of DNA
- Most cells contain two copies of your DNA

What is a Genome?

- A genome contains all of an individual's DNA
- Every organism has a genome provides instructions for how to make that organism; for example, a beetle has a beetle genome and a cabbage has a cabbage genome
- We have two copies of our genome, one from our mom and one from our dad

How Big is a Genome?

- Our genome has 3 billion bases
- Your genome unwound would reach to the moon and back 6,000 times, to the sun and back 600 times
- It would take 57 years to recite your ACTGs if you started tomorrow morning

How Different are Genomes?

- All humans share about 99.9% of the same DNA sequence
- You share 50% of your DNA with bananas and 21% with worms



Your DNA identifies you as you!