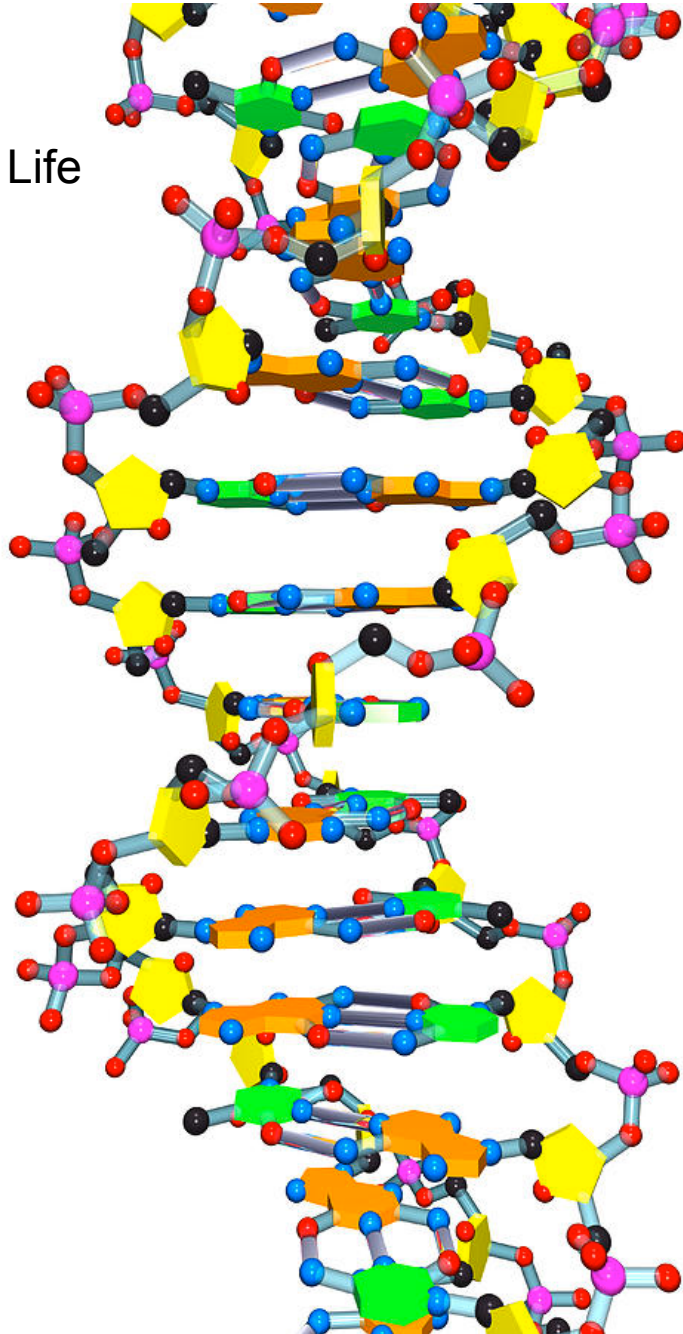


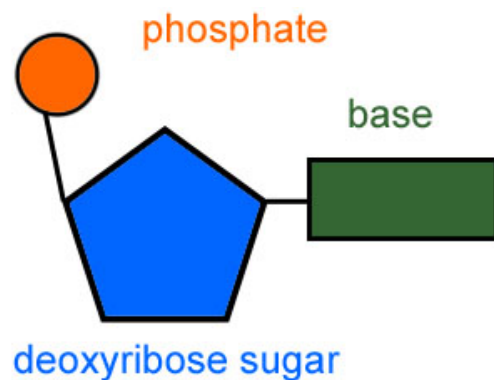
DNA

The Double Helix of Life

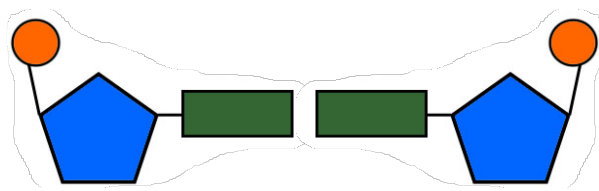


Q 25

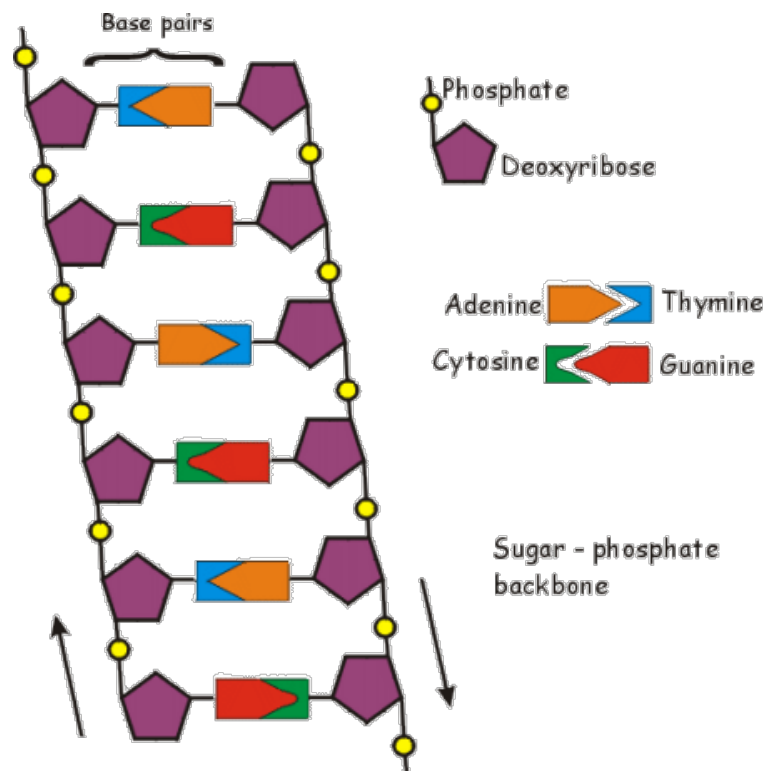
- DNA are what chromosomes are made of.
- They contain the instructions for all cells in your body to carry out all of the biological processes that keep you alive.
- The typical "double helix" shape is made up of nucleotides

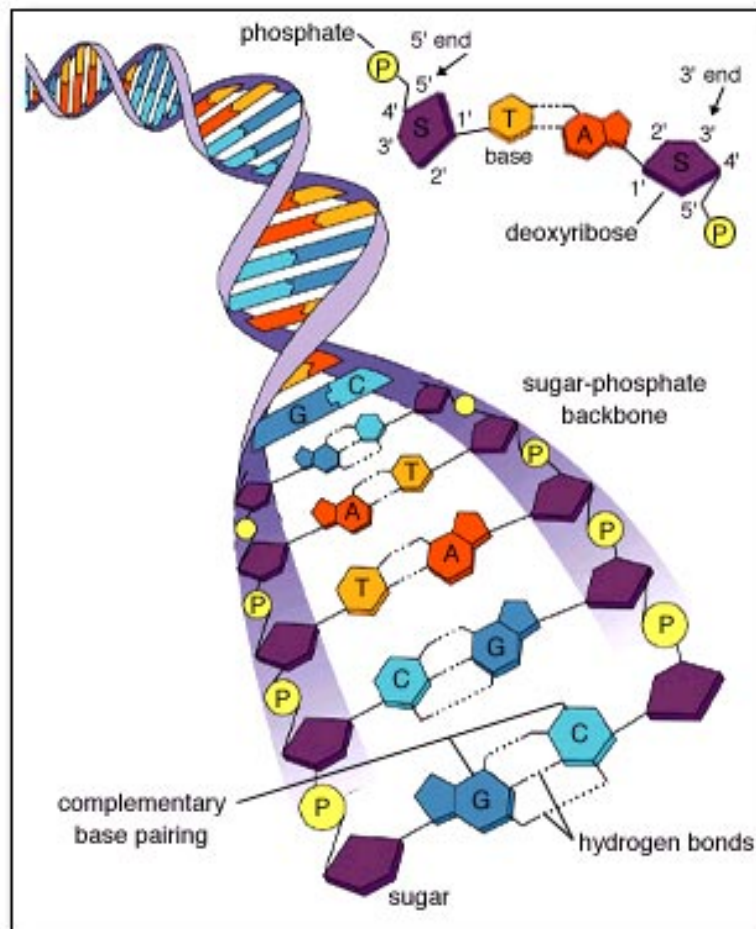


© scienceaid.co.uk



4 different types of nitrogen bases - these 4 bases make up the alphabet in which genetic instructions are written





Assignment p109 #29, 30

DNA makes DNA



The genetic code that cells follow, not only is written with a "4 letter alphabet" but all the words in this language have 3 letters.

Each 3 letter word codes for a specific amino acid

Amino acids are combined to form proteins

Proteins are large, complex molecules that play many critical roles in the body. They do most of the work in cells and are required for the structure, function, and regulation of the body's tissues and organs.

		Second Base of Codon								
		U		C		A		G		
First Base of Codon	U	UUU	phe	UCU	ser	UAU	tyr	UGU	cys	Third Base of Codon
		UUC	phe	UCC	ser	UAC	tyr	UGC	cys	
		UUA	leu	UCA	ser	UAA	STOP	UGA	STOP	
		UUG	leu	UCG	ser	UAG	STOP	UGG	trp	
	C	CUU	leu	CCU	pro	CAU	his	CGU	arg	
		CUC	leu	CCC	pro	CAC	his	CGC	arg	
		CUA	leu	CCA	pro	CAA	gln	CGA	arg	
		CUG	leu	CCG	pro	CAG	gln	CGG	arg	
	A	AUU	ile	ACU	thr	AAU	asn	AGU	ser	
		AUC	ile	ACC	thr	AAC	asn	AGC	ser	
		AUA	ile	ACA	thr	AAA	lys	AGA	arg	
		AUG	met*	ACG	thr	AAG	lys	AGG	arg	
		* = START								
G	GUU	val	GCU	ala	GAU	asp	GGU	gly		
	GUC	val	GCC	ala	GAC	asp	GGC	gly		
	GUA	val	GCA	ala	GAA	glu	GGA	gly		
	GUG	val	GCG	ala	GAG	glu	GGG	gly		

Assignment p114 #33, 34

A08 eTest