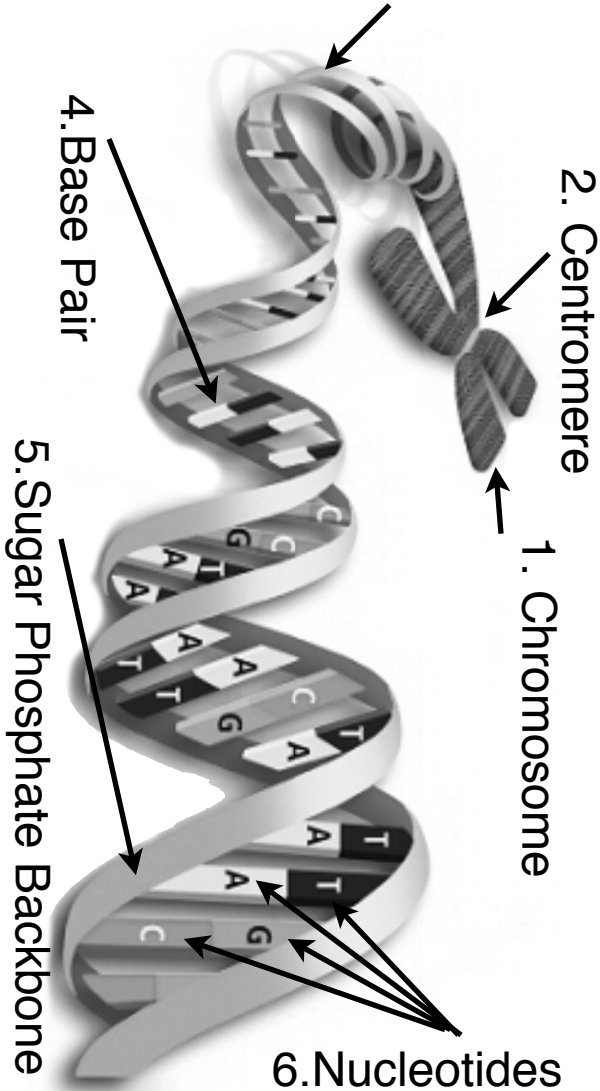


PHYSICAL AND CHEMICAL PROPERTIES OF DNA!

3. Double Helix



THE INFORMATION IN DNA!

Write out your gene sequence.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
TAC	TGA	GTG	CTT	GCG	TAA	CCT	GTG	TGA	CGA	TTG	AGG	ACC	CTC	TCC



Transcribe your sequence.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
AUG	ACU	CAC	GAA	CGC	AUU	GGA	CAC	ACU	GCU	AAC	UCC	UGG	GAG	AGG



Using the table below translate your sequence.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
M	T	H	E	R	I	G	H	T	A	N	S	W	E	R

		Second base					
		U	C	A	G		
First base	U	UUU } Phenyl-alanine F UUC } UUA } Leucine L UUG }	UCU } Serine S UCC } UCA } UCG }	UAU } Tyrosine Y UAC } UAA } Stop codon UAG } Stop codon	UGU } Cysteine C UGC } UGA } Stop codon UGG } Tryptophan W	U	C
	C	CUU } Leucine L CUC } CUA } CUG }	CCU } Proline P CCC } CCA } CCG }	CAU } Histidine H CAC } CAA } Glutamine Q CAG }	CGU } Arginine R CGC } CGA } CGG }	C	A
	A	AUU } Isoleucine I AUC } AUA } AUG } Methionine start codon M	ACU } Threonine T ACC } ACA } ACG }	AAU } Asparagine N AAC } AAA } Lysine K AAG }	AGU } Serine S AGC } AGA } Arginine R AGG }	A	G
	G	GUU } Valine V GUC } GUA } GUG }	GCU } Alanine A GCC } GCA } GCG }	GAU } Aspartic acid D GAC } GAA } Glutamic acid E GAG }	GGU } Glycine G GGC } GGA } GGG }	G	U

Name the ingredients used to extract DNA!

1. _Saline
2. _SDS (Soap)
3. _Ethanol

HUMAN GENOME PROJECT

What is a genome?

All the DNA within an organism.

What is DNA sequencing?

Reading the order of nucleotides in a DNA molecule.

Has the human genome been sequenced?

Yes! Except for highly repetitive regions.