Name: | **Date:** Oct. 7. 2014

Period: | **Do Now#** 2.1 | **Homework#** 2.1

Aim: How do we explain the importance of nucleic acids?

Vocabulary: (10)

1. Nucleic Acid
2. nucleotides
3. DNA
4. RNA
5. double helix
6. Deoxyribose
7. nucleotides
8. ribose
9. Uracil
10. replicate

What is a **NUCLEIC ACID**?

- Organic compound.
- Complex molecule. (size)

importance →

- Stores genetic information.

function(job) →

- Carries instructions for making proteins.

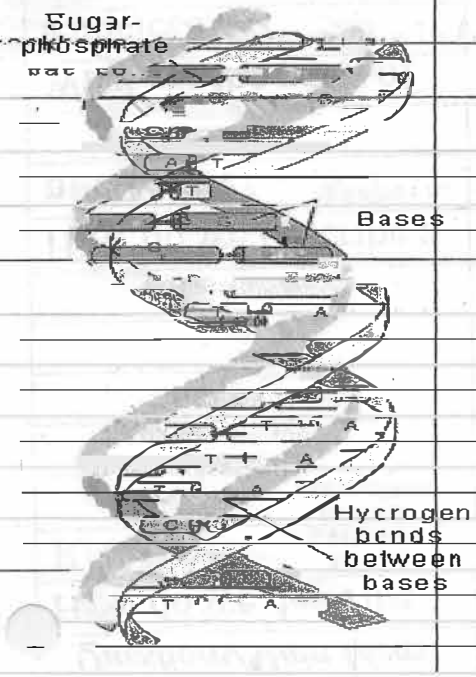
building blocks →

- Made of nucleotides.

What are the 2 types of nucleic acid?

1. DNA
2. RNA

How do we describe DNA?

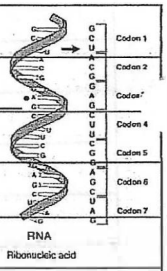


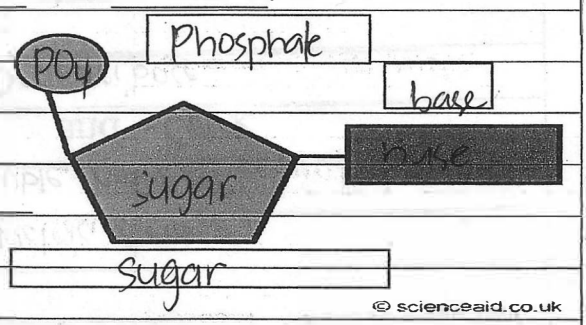
- DNA is Deoxyribo Nucleic Acid.
- Shape of DNA is: double helix.
- Made by: Watson and Crick.
- Sugar in DNA is: Deoxyribose.
- DNA has 2 strands.
- Sides of the DNA ladder: PO4 and sugar
- Rungs(steps) of the ladder: bases
- DNA is made of nucleotides.

Why is your DNA important?

carries the genes that determines the traits

Questions/Main Ideas:	**Notes:**
How do we describe **RNA**?	• RNA is Ribo Nucleic Acid RNA has 1 strand. • Sugar in RNA is: Ribose. RNA is made of nucleotides.
	Why is your RNA important? Involved in protein synthesis.
How do we describe a **nucleotide**?	• Repeating units of a nucleic Acids. • Found both in DNA and RNA.
What are the parts of a nucleotide?	1. Phosphate or PO_4 2. Sugar 3. base
What are the 2 groups of nitrogen bases?	1. **PURINES** A a. Adenine G b. Guanine
	2. **PYRIMIDINES**
Complementary bases (DNA)	T **a.** Thymine **------only in DNA**
A=	C b. Cytosine
G=	U c. Uracil **------only in RNA**
Complementary bases (RNA)	
A=	**A-G-T-C-C-A-A-T-G-C**
G=	*DNA:* T C A G G
	RNA:
	T-G-A-A-T-C-C-A-T-G
	DNA: A C U U
Which 2 organelles can **replicate** on their own?	• Mitochondria and Chloroplast. • Both can divide itself. • They have their own genetic material.





Summary: 2 points

The importance of DNA is
The importance of RNA is
The DNA complement of ATGCAT is
The difference between DNA and RNA is