

Name \_\_\_\_\_

Date \_\_\_\_\_

Blk \_\_\_\_\_

# Cracking the Genetic Code

## Cracking the Genetic Code

A. **Draw** and **label** a double strand of DNA that has 3 nucleotides joined together on each side the "ladder".

B. What are the names of the **NITROGEN BASES** for **DNA**. Then beside it, write down the name of the base pair.

	Nitrogen Base	Its Base pair
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

C. Write down the **base pairs** for the following strand of DNA.

**TAC GAA AGT TCT CCG CGT TGT CAC**

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## Cracking the Genetic Code

DNA's instructions are very specific and are held in a code. The code is written with only 4 different nitrogen bases, but can be in any order and in various lengths.

--> think of an alphabet with only 4 letters

The four different nitrogen bases are:

- Adenine (A)**
- Cytosine (C)**
- Guanine (G)**
- Thymine (T)**

The bases will only join together in a specific way:

**A --- T**                      and                      **C --- G**

This is called **base pairing**.

Ex. Write in the correct base pair for the following strand of DNA:

A T T C A G G T A C C A C G T

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**Activity 4-1B Creating DNA Messages** ~15 minutes

**Video: DNA Replication**

**Activity 4-1C Modelling DNA** - or cut & paste activity

Base-pairing notes

**Lab: 4-1D Extracting DNA from Strawberries**