Bio 3
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Ch. 5: DNA, Gene Expression & Biotechnology

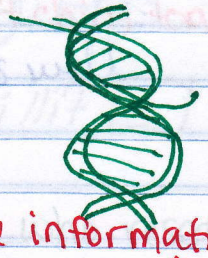
- DNA is a nucleic acid, a macromolecule that stores info
  - nucleotides
  - contains instructions on how to maintain your body
  - how you pass genetic info to offspring

Need to Know

1. Structure
2. How it works: DNA to Proteins
3. How it replicates: when & where

Structure:

- like a spinning ladder
  - watson & crick - first to figure out shape of DNA - 1950's
- double helix w/ bases in middle
- consistant twist rate & spiral
- wrungs of ladder are bases
  - consists of 2 polynucleotides twisted
  - if split DNA still carries the same information
  - increase heat DNA splits & replicates itself/cool off = new strand
    - repeated process



Pairs
A-T
C-G

- order of bases determines who you are
- 4 letter code (genetic)

How it works:

- DNA is all the same/only order is different

Genes - in vocab
Genome - } in vocab
Alleles - }

* Not all DNA contains instructions for making proteins
  - coding vs. non-coding DNA