Source: [KBBiologyMasterIndex]

1 | DNA/RNA

1.1 | Nucleic Acids

d-Oxy Ribone Nucleic Acid: DNA Ribone Nucleic Acid: RNA

All nucleic acids are comprised of monomer units that's synthesized together into polymers. => Just like [KBhBIO101Carbs] or [KBhBIO101AminoAcids]

1.2 | 3 basic parts of a Nucleic Acid

Two parts of the backbone (phosphate and sugar) + a nitrogenous base that labels what type of nucleotide this is.

1.2.1 | Backbone

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- phosphate group
- sugar (Ribos => sugar in RNA, di-oxy Ribos => sugar in DNA)
    - In di-oby Ribos: a OH pair is replaced with a hydrogen **only in one position.** Hence "di-oxy"
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- nitrogenous base
    - Bases in DNA
        - A, T, G, C
    - Bases in RNA
        - A, U, G, C

SONIRE

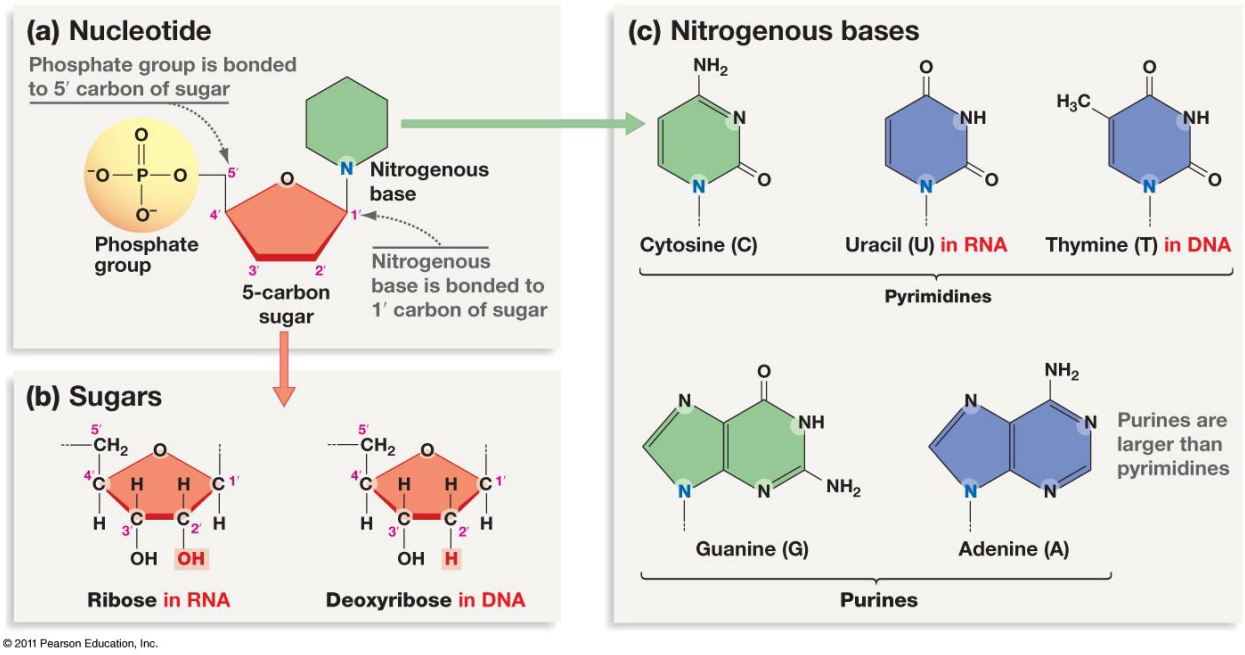

Figure 1: d_na.jpg

How do we make nucleic acids? Can you guess? Huh? **Dehydration synthesis!** #TODO make that actually a note, at this pont

5’ => one end of an RNA/DNA part

3’ => another end of a RNA/DNA part

- DNA is supposed to be double stranded
- RNA is supposed to be single stranded

DNA is *anti-parallel* to each other => 5’ to 3’ backbone parallel to 3’ to 5’ backbone

Temp copies of genome is RNA, permanent record in DNA

The Central Dogma The process of the central dogma is a rough path by which DNA is converted into Proteins. This helps us understand how proteins are made in a cell, and also how viruses could hijack this process to make themselves.

See [[KBhBIO101CentralDogma]]