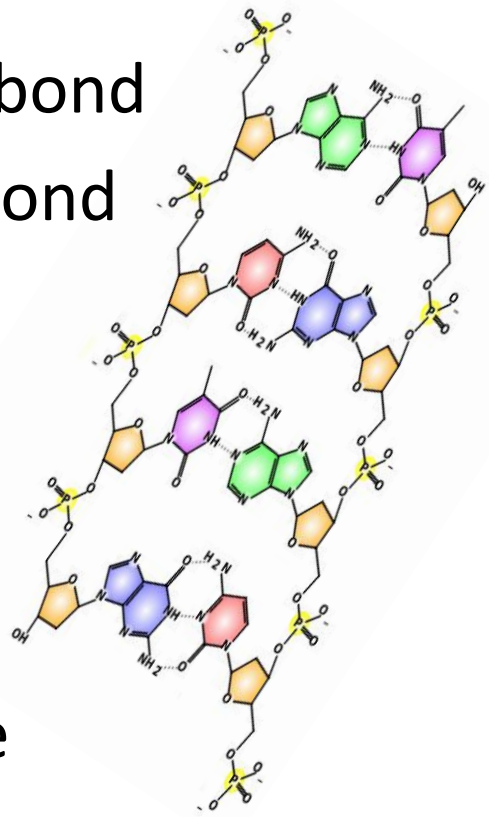
DNA Structure

Be able to label the following:

1. 5’ end
2. 3’ end
3. Phosphate (circled)
4. Deoxyribose (circled)
5. Purine
6. Pyrimidine
7. Deoxyribose carbon numbering
8. Hydrogen bond
9. Covalent bond
10. Adenine
11. Thymine
12. Guanine
13. Cytosine
14. Nucleotide



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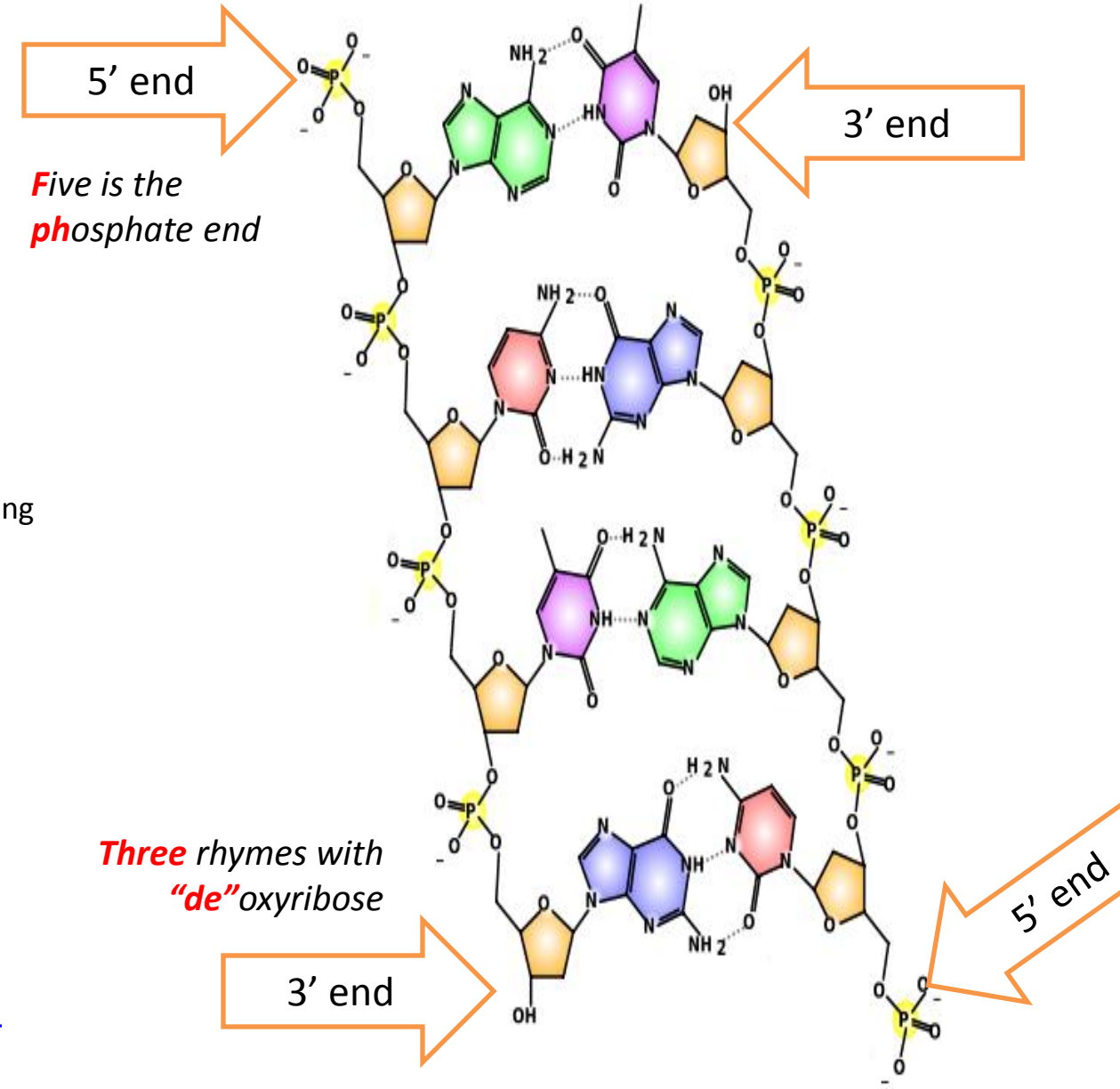
Video clip:

[What do we mean when we talk about the 3’ and 5’ ends of DNA?]



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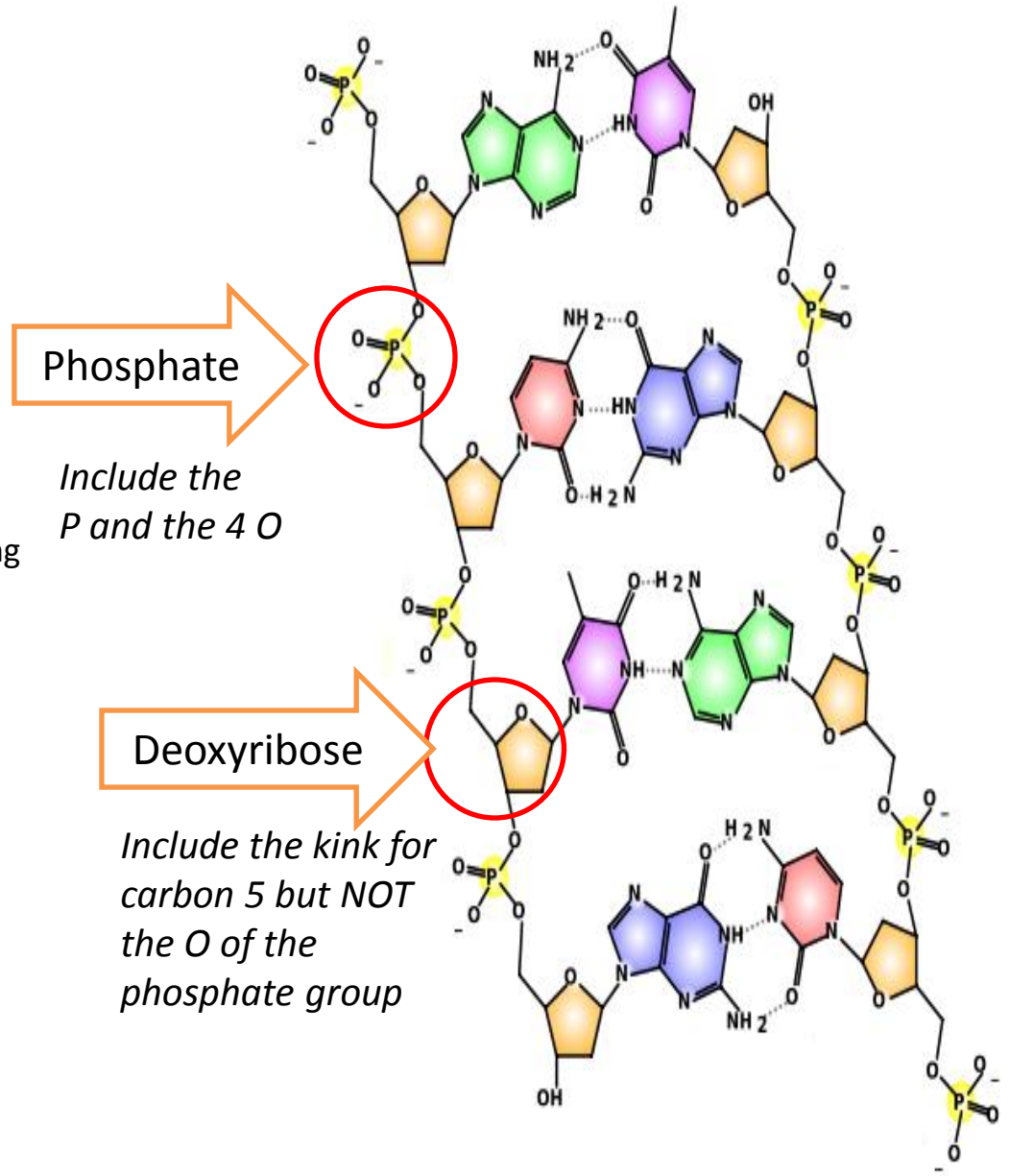

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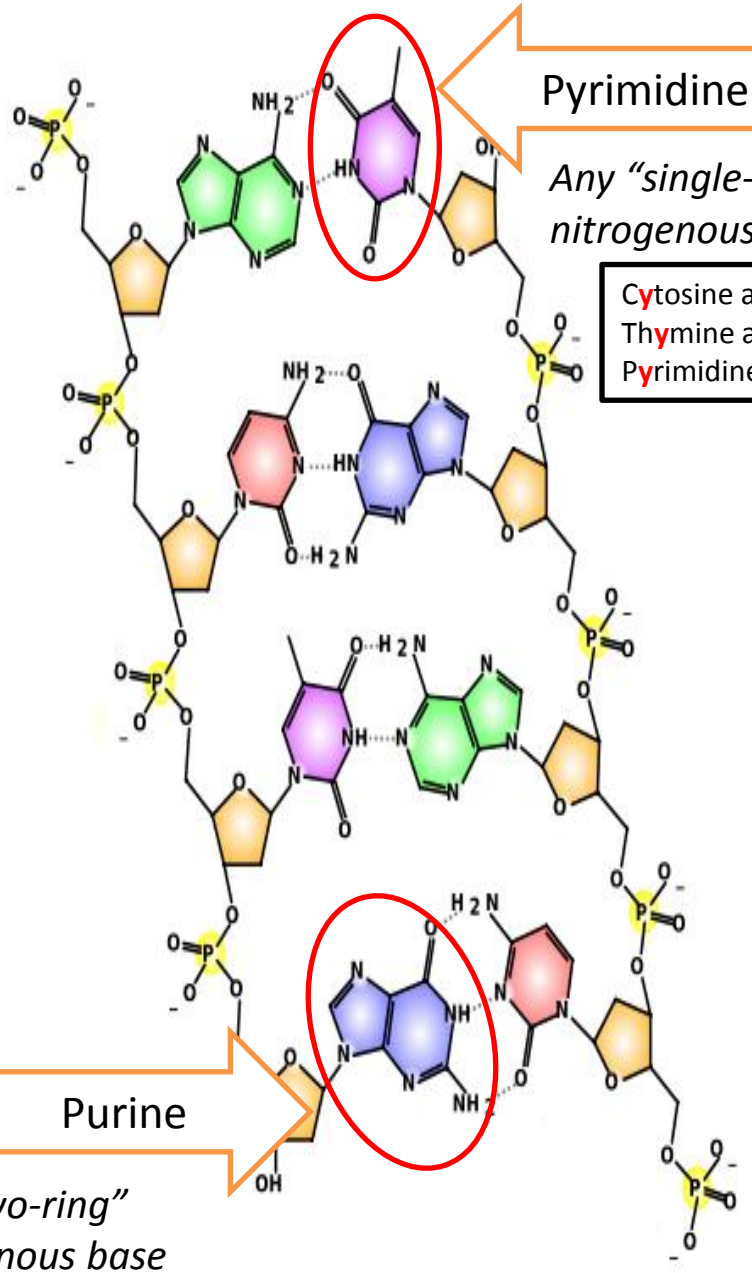

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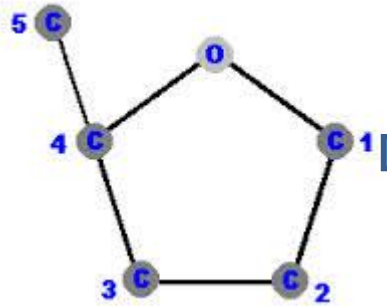

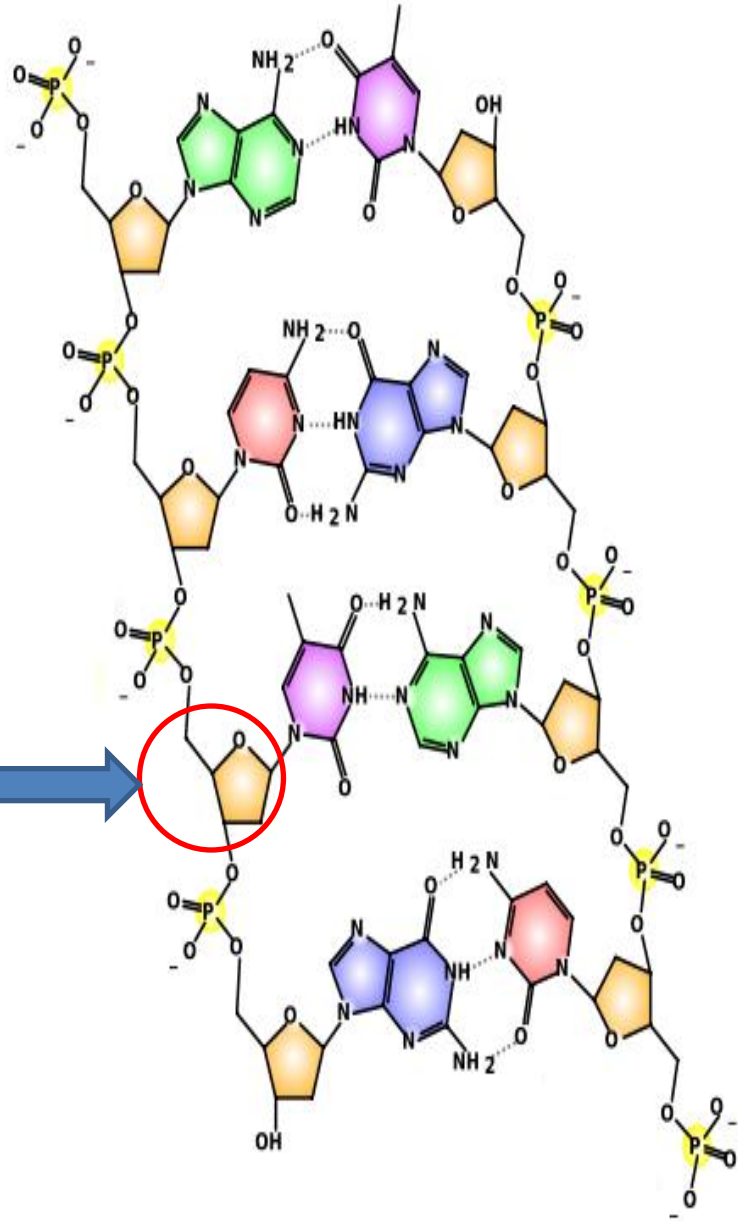

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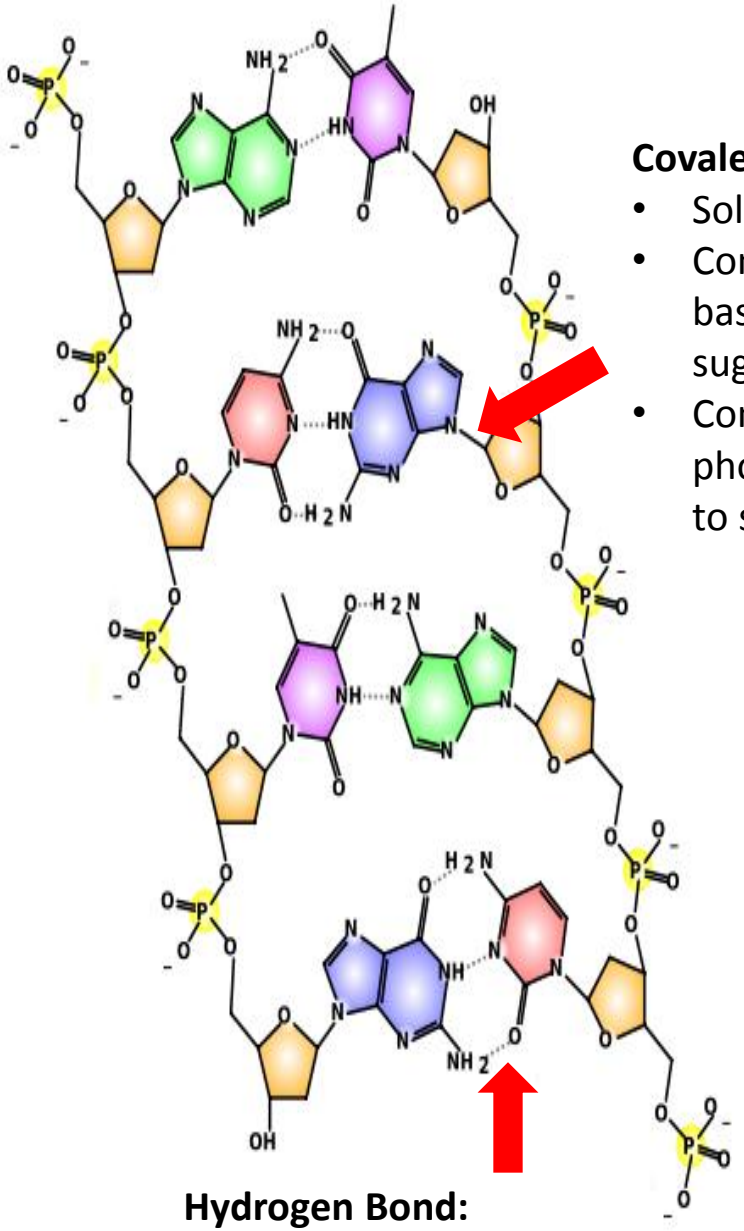

Covalent Bond:

- Solid line
- Connects base to sugar
- Connects phosphate to sugar

Hydrogen Bond:

- Dotted line
- Connects base to base

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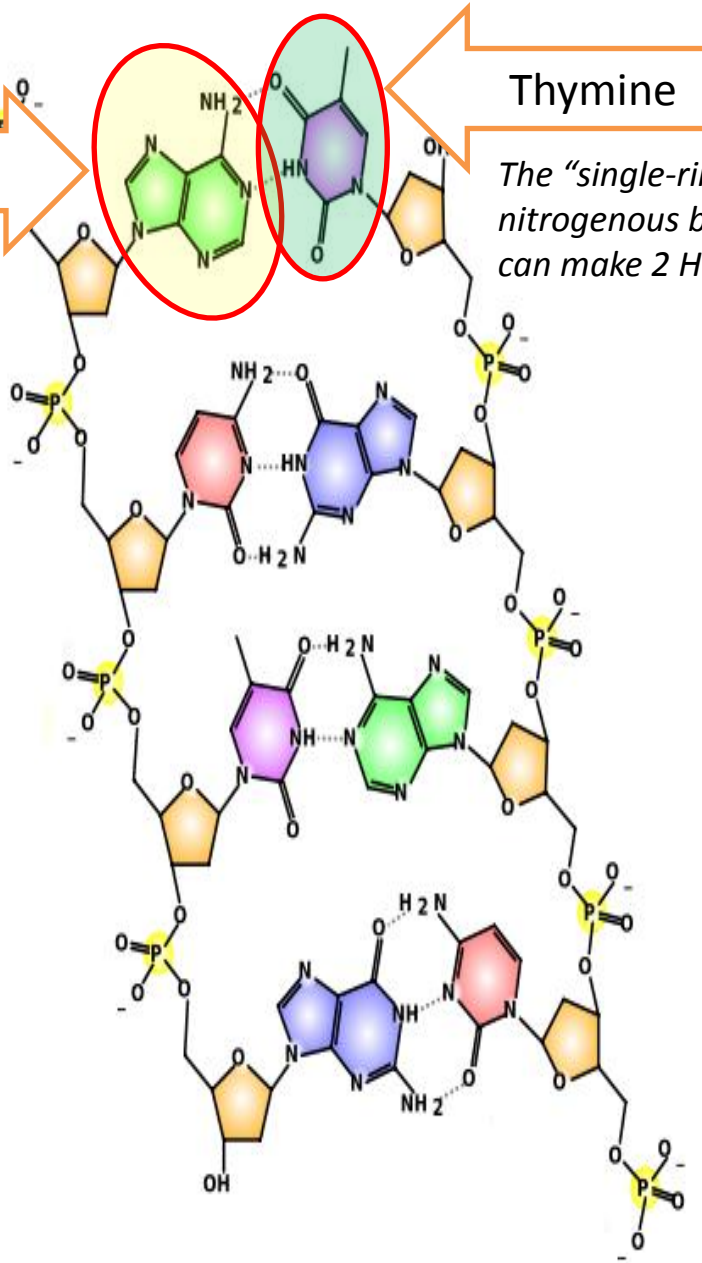
Adenine

The "double-ring" nitrogenous base that can make 2 H-bonds

Thymine

The "single-ring" nitrogenous base that can make 2 H-bonds



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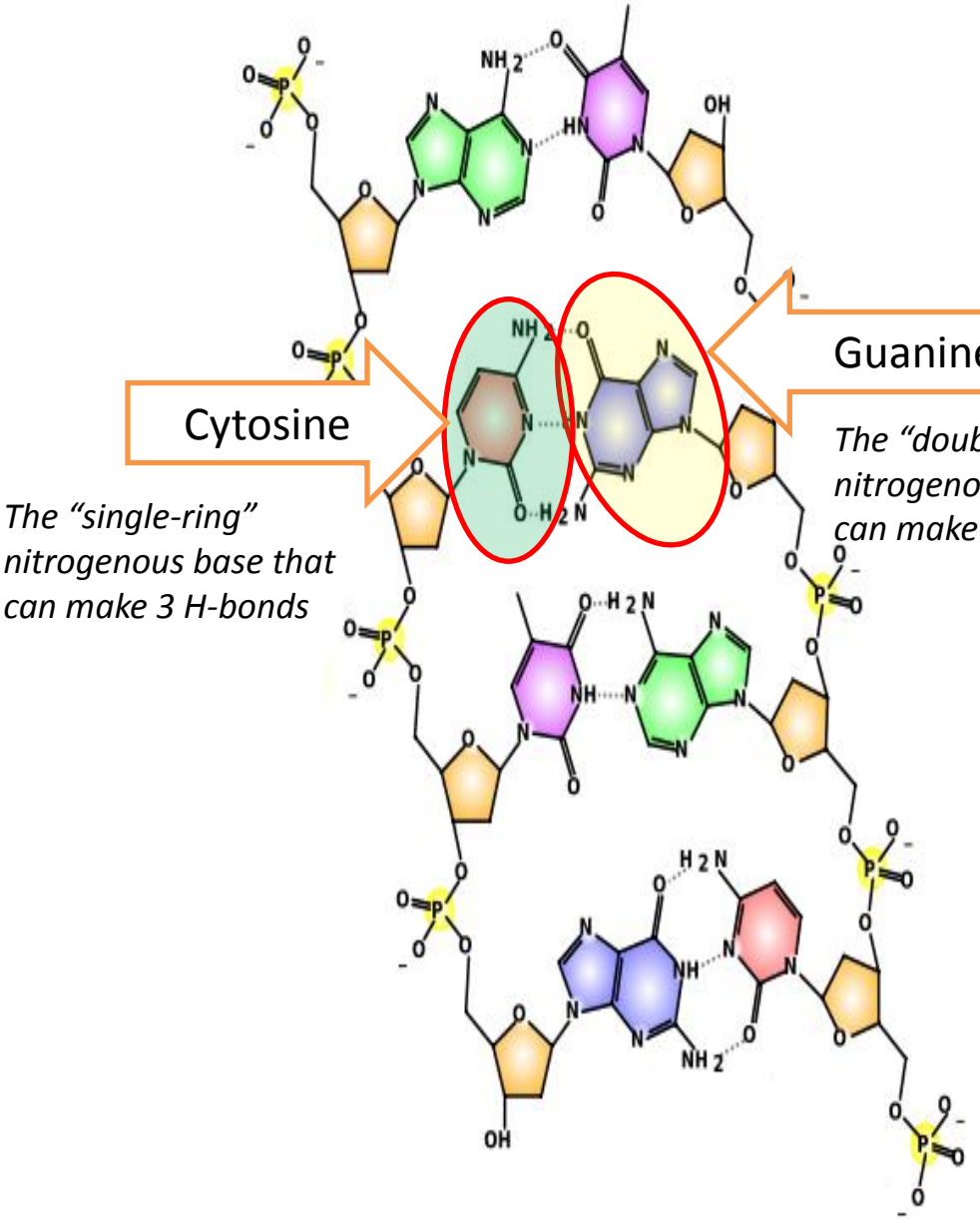

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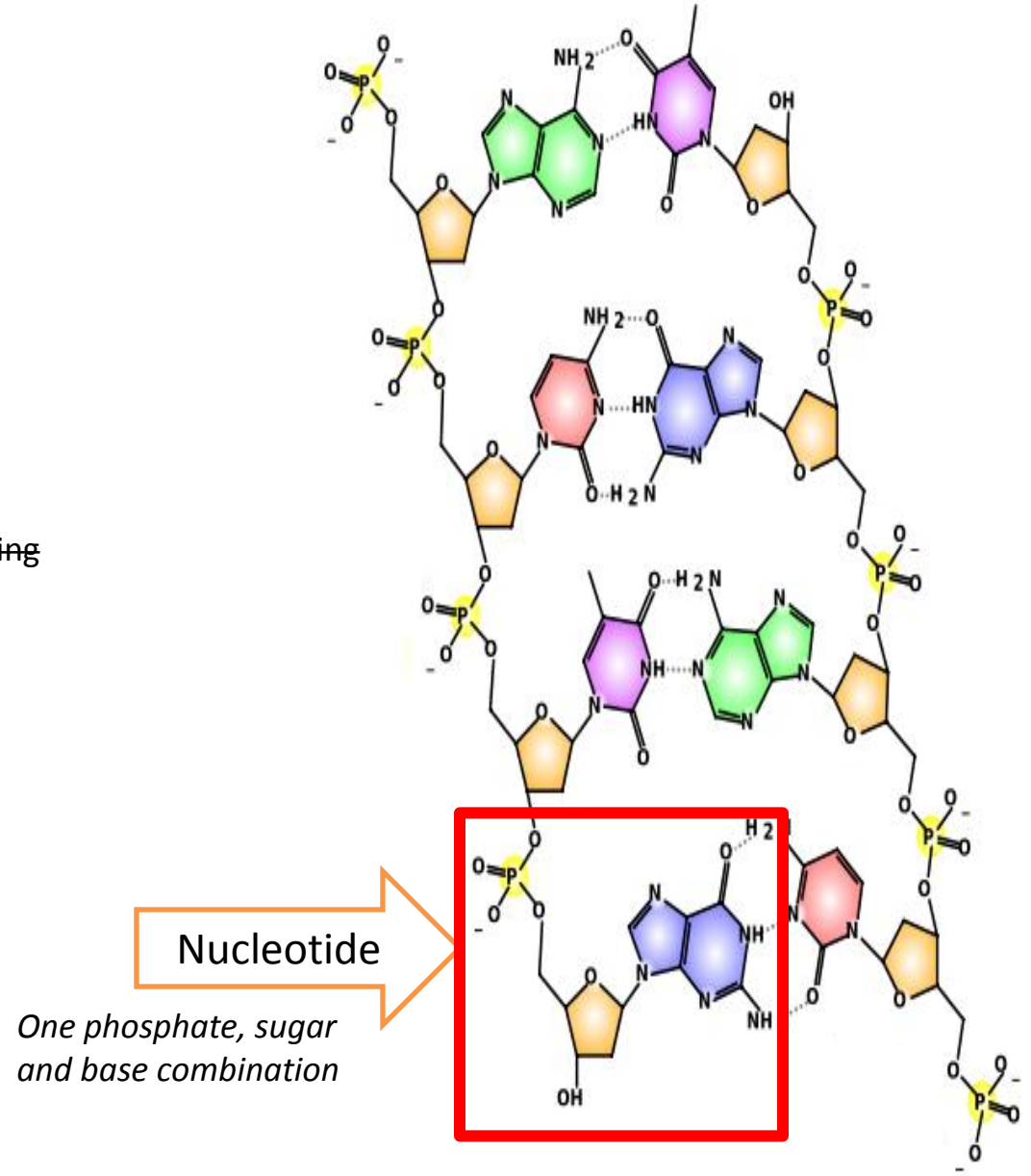

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Here’s a blank diagram for you to practice your labeling!