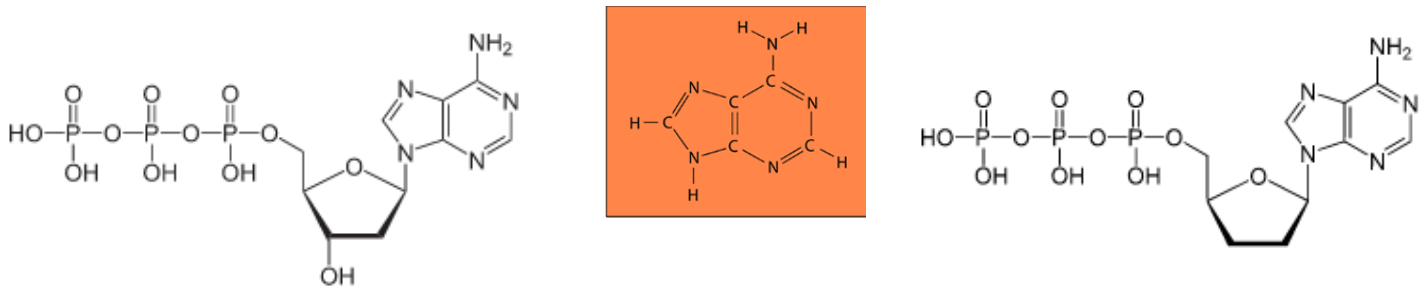


CONCEPT: DNA SEQUENCING

- DNA polymerase requires a RNA primer, template, and deoxynucleotide triphosphates to synthesize DNA
 - $\text{Primer}_n + \text{dNTP} \Rightarrow \text{Primer}_{n+1} + \text{PP} + \text{H}^+$
- Dideoxy DNA sequencing – an early sequencing method that relied on the use of dideoxynucleotide triphosphates



- ddNTPs terminate elongation of the strand because there is no available 3' –OH group to continue the polymerization.

