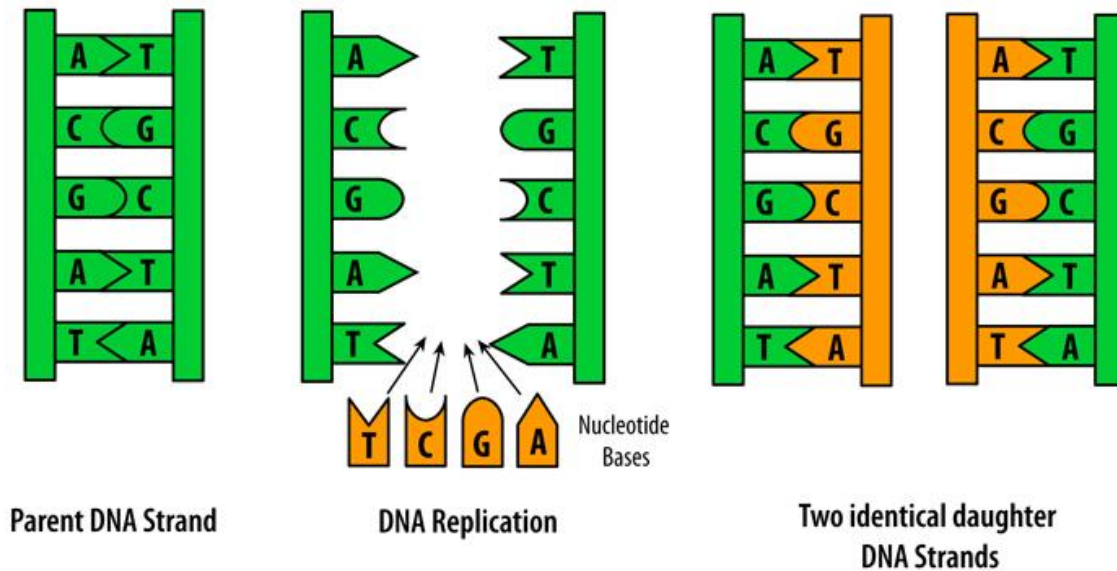


## DNA Replication (How a Cell Copies DNA)

- **WHY** would a cell need to copy its DNA?
  - Before cell division (mitosis or meiosis), cells need to copy their DNA so that the daughter cells end up with the proper number of chromosomes
- **WHERE** is the DNA located in a eukaryotic cell?
  - In the nucleus
- **HOW** does a cell copy its DNA? (see below)



**Figure 9: Schematic of DNA replication method proposed by Watson and Crick.** In this model, the two strands of the original DNA molecule are first pried apart. Then, complimentary nucleotides (A with T, G with C, etc.) are added opposite of both of the original strands. The result is two DNA molecules, both identical to the original strand (and thus to each other), and both with one old strand and one new strand.