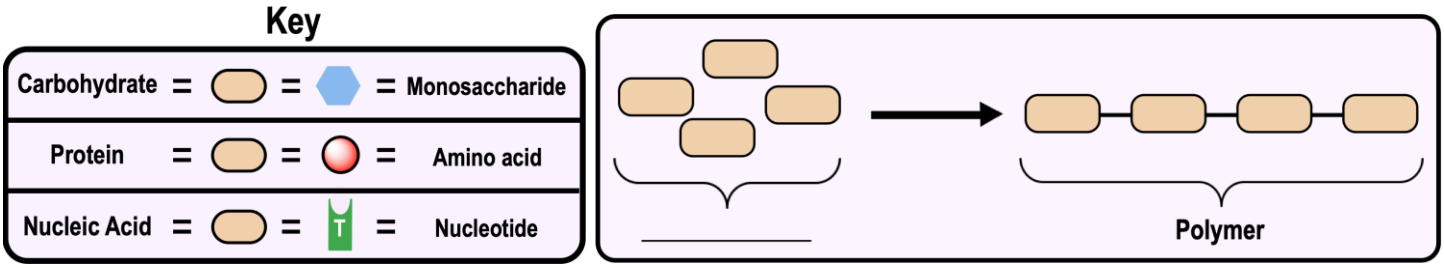
CONCEPT: MONOMERS & POLYMERS

- **Monomers**: _____, individual *building blocks* that can be repetitively linked together to form *polymers*.
  - □ **Polymers**: *long* chains of _____ monomers *linked together*.
  - □ Monomers will _____ depending on the type of biomolecule polymer.
  - □ *Carbohydrates, proteins*, & *nucleic acids* use *consistent* monomers to form polymers, but _____ do NOT.

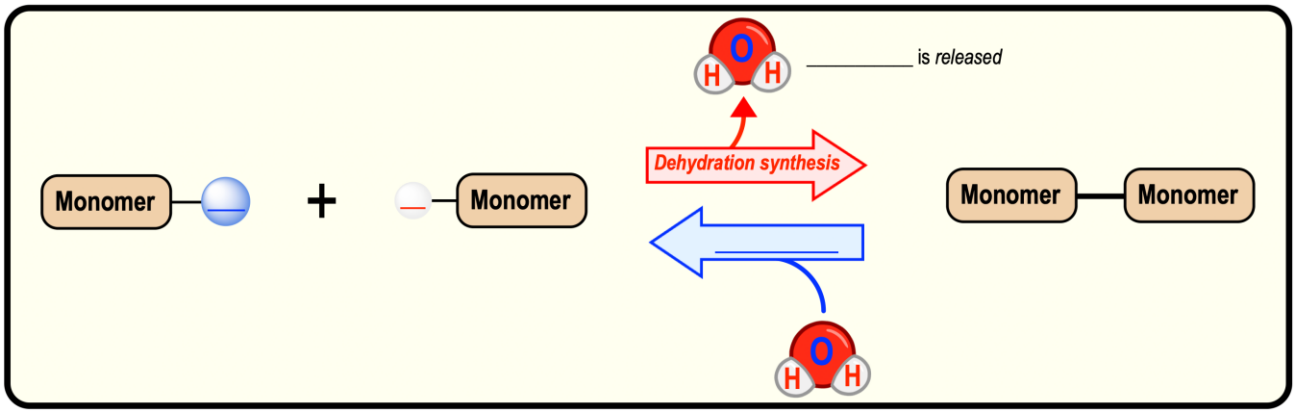
EXAMPLE: Monomers vs. Polymers.



Building & Breaking-Down Polymers

1) ***Dehydration*** _____: *forms* covalent bonds to *link* individual monomers & _____ a polymer.
2) _____: *cleaves* covalent bonds to _____ *down* a *polymer*.

EXAMPLE: Formation & Breakdown of Polymers.



PRACTICE: Which of the following statements concerning dehydration reactions and hydrolysis is correct?

a) Dehydration reactions allow solutions to evaporate; hydrolysis reactions dissolve solutes.
b) Dehydration reactions and hydrolysis reactions assemble polymers from monomers.
c) Hydrolysis reactions create polymers from monomers; and dehydration reactions create monomers from polymers.
d) Dehydration reactions create polymers from monomers; hydrolysis reactions break down polymers.

PRACTICE: _____ bonds are formed between monomers to form a polymer.

a) Ionic bonds. b) Covalent bonds. c) Hydrogen bonds. d) Hydrophobic bonds. e). Nuclear bonds.