<u>**CONCEPT:**</u> PEPTIDES
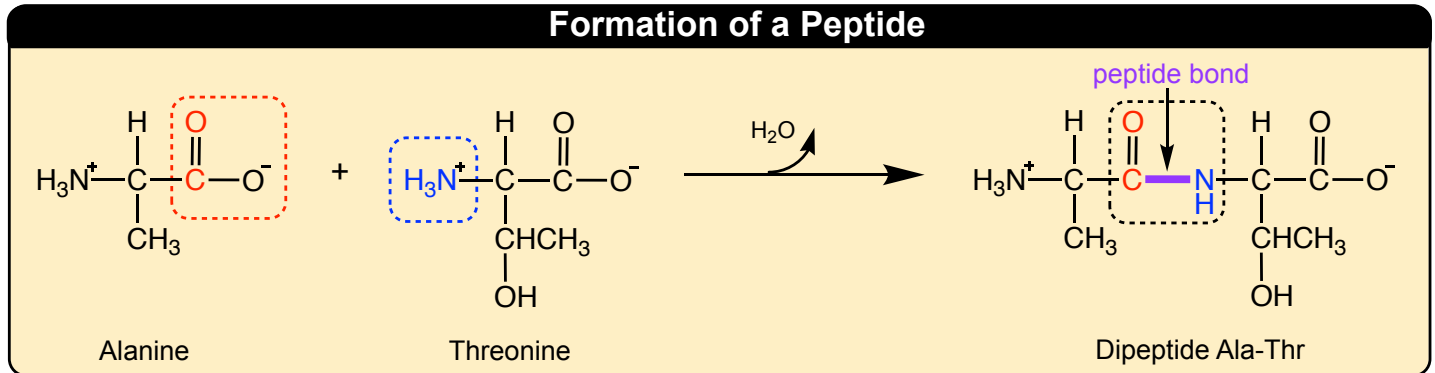
● **Peptides** are formed when 2 or more _____ _____ bond with each other through a *peptide bond*.

   □ **Peptide (amide) bond:** _____ of one amino acid covalently bonds with _____ of another amino acid.

Formation of a Peptide

Alanine   Threonine   Dipeptide Ala-Thr

● Number of amino acids in peptides is indicated by prefixes: ____, ____, _____.

   □ **Polypeptide**: peptide consisting of larger number of *amino* _____.

   - **Residues**: individual amino acids contained within a _____.

EXAMPLE: Circle all peptide bonds and amino residues in following tetrapeptide.
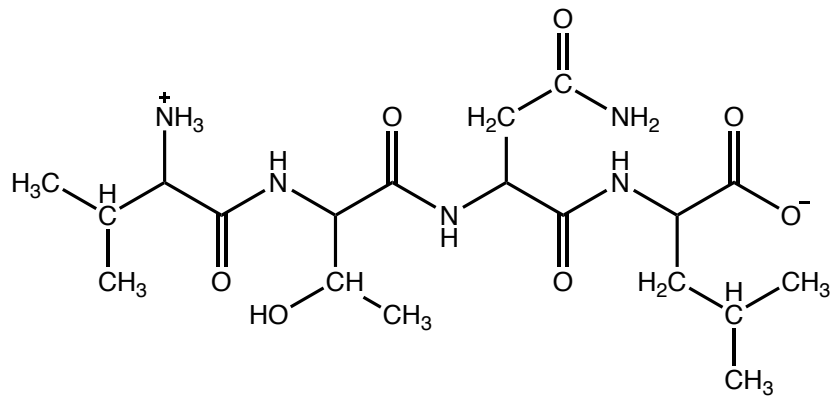
Drawing & Naming Peptides

● Every peptide has directionality: *N-terminus* and *C-terminus* ends.

    □ **N-terminus**: residue with free _____ group.   □ **C-terminus**: residue with free _____ group.

         - When drawing or naming, always arrange from _____ to _____, N-terminus to C-terminus.
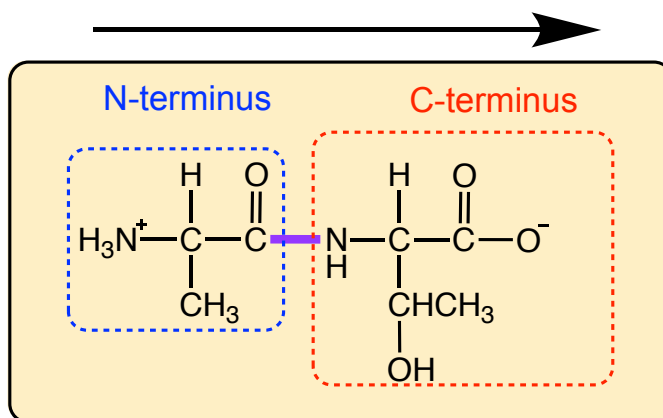
EXAMPLE: Draw a dipeptide structure consisting of given amino acids in following order. Name dipeptide using 3 letter codes, separated by hyphens.
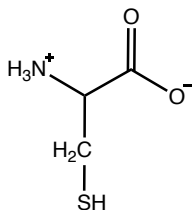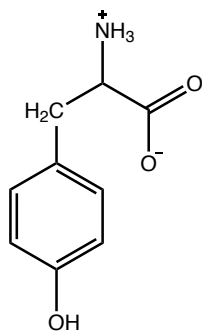
PRACTICE: Draw a tripeptide structure consisting of following amino acids in following order. Name tripeptide using 3 letter codes.