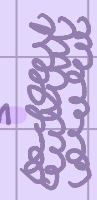
PROTEINS

Contains C H O & N

Building blocks for amino acids

Most varied in STRUCTURE & FUNCTION

1. COLLAGEN: Provides TENSILE strength, resists tension



2. HEMOGLOBIN: Transports oxygen through our blood

3. ENZYMES: Proteins acted as biological catalysts; speeds up reaction all while * not changing

STRUCTURAL ORGANIZATION

→ Made of AMINO ACIDS

→ Forms bond by dehydration synthesis

↳ Forms PEPTIDE BONDS

PRIMARY LVL: the sequence of amino acids → $AA + AA_2 + AA_3 + \ldots$ 1000 AA_s

SECONDARY LVL: the interactions between charges of functional groups that cause **local changes** in shape, formed by H-BONDS

TERTIARY LVL: the overall 3 dimensional shape of single strand of amino acids (POLYPEPTIDE)

* MOST proteins are made of 2 or more POLYPEPTIDE subunits,

QUATERNARY LVL: 2 or more subunits, are put together to make/form a FUNCTIONAL PROTEIN

Enzymes are HIGHLY SPECIFIC & have diff. + dependable functions

* HIGHLY EFFICIENT ONLY IN THEIR APPROPRIATE ENVIRONMENT