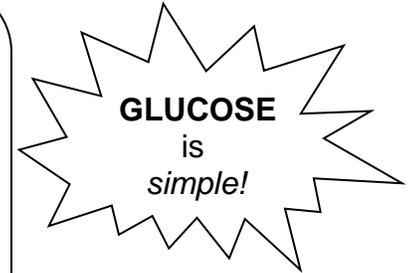


REVIEW: Biochemistry

SIMPLE compounds are SMALL

We call them: BUILDING BLOCKS
Or
SUBUNITS
or
MONOMERS

They are used to SYNTHESIZE (build) COMPLEX compounds!



COMPLEX compounds are BIG

We call them: POLYMERS

They are made when SIMPLE compounds are linked together!



Mono = 1

di = 2

poly = many

The BIG 4!



Carbohydrates.....sugars (GLUCOSE).....made of SIMPLE SUGARS

Protein.....polypeptides.....made of AMINO ACIDS

Lipids.....fats..... made of FATTY ACIDS

Nucleic Acids.....DNA & RNA.....made of NUCLEOTIDES

These are their building blocks



The BIG 4 are ORGANIC!

ORGANIC compound or INORGANIC compound?

★ **Remember:**

CARBON (C) and HYDROGEN (H) together make it ORGANIC!

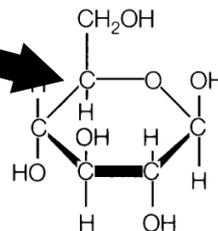
Think "CH-ORGANIC!"

Remember: WATER is INORGANIC!



Sugars/Carbohydrates end in "OSE" (like *glucose* and *fructose*!)

★ **Remember:** CarbOhydrates.....LOOK for the "RING"!



Carbohydrates = source of ENERGY

Glucose = monsaccharide

Lipids: Fats and Oils

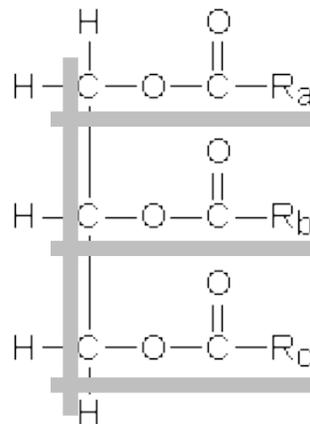
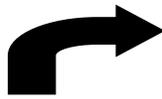
✓ = source of STORED ENERGY

✓ = ORGANIC



Remember: Is it a LIPID?

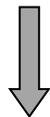
LOOK for the "BIG E".



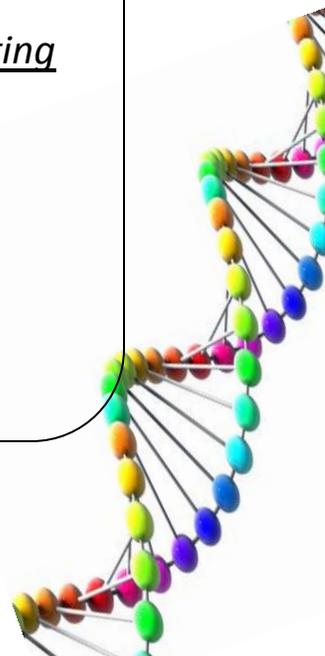
Nucleic Acids:

✓ The BUILDING BLOCKS are NUCLEOTIDES(repeating units)

✓ DNA = Nucleic Acid



Stores HEREDITARY INFORMATION from parents!



Nucleotides are SMALL(tiny)

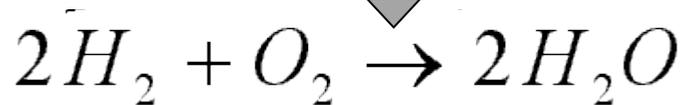
nucleic acids are LARGE(complex)

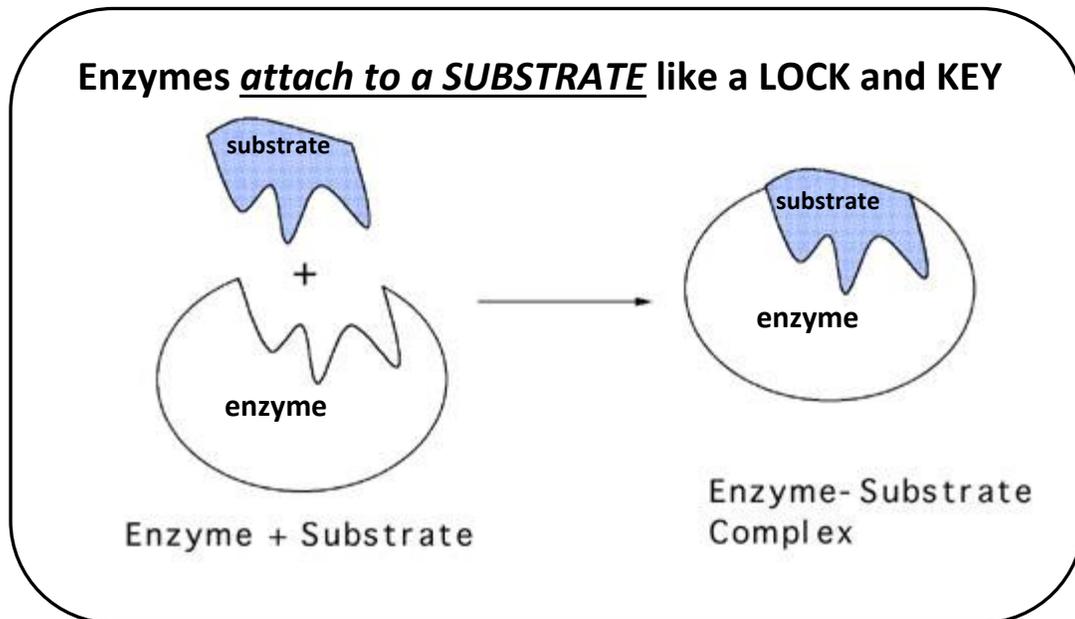
Proteins: ➡ think AMINO ACIDS(building blocks!)
➡ The SHAPE of the protein is determined by the SEQUENCE of AMINO ACIDS.

★ **Enzymes:**

- ✓ SPEED up the rate of reaction.
- ✓ STAY the SAME during reaction.
- ✓ Enzymes are catalysts!

An ENZYME would be here(on the arrow!)





- ★ Enzymes work BEST at **OPTIMAL Ph** and **OPTIMAL TEMPERATURE**
- ★ If an enzyme shape has been destroyed it has been **DENATURED** **(it will not work correctly!)**
- ★ Well **balanced diet** = **better enzyme function** in your body!