

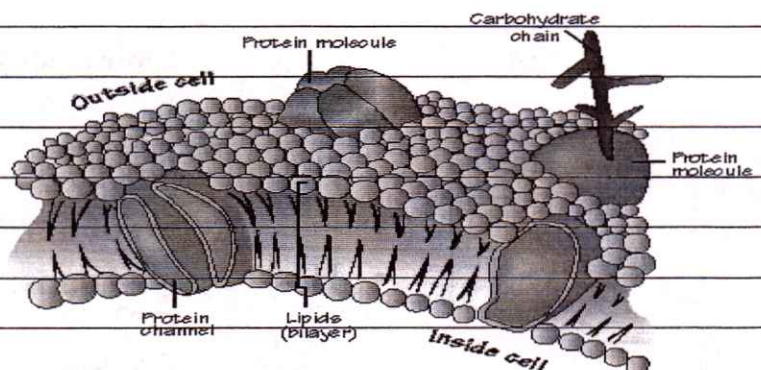
Name:	Date:
Period:	Do Now# 1.10
Homework: 1.10	

Aim: How do PROTEINS and LIPIDS differ?

- Vocabulary:(8)**
- | | | | |
|---------------|--------------------------|---------------|-----------------|
| 1. Lipids | 3. Glycerol | 5. Hydrolysis | 7. amino acid |
| 2. Fatty Acid | 4. Dehydration Synthesis | 6. Protein | 8. peptide bond |

What are LIPIDS?

- Organic compound.
- Fats, oils and waxes.
- Major part of the cell membrane.



- Found in milk, peanuts, fatty meat, olives and butter.
- Made of Fatty acid and GLYCEROL.

How does one LIPID molecule look like?

- 1 GLYCEROL and 3 FATTY ACIDS.




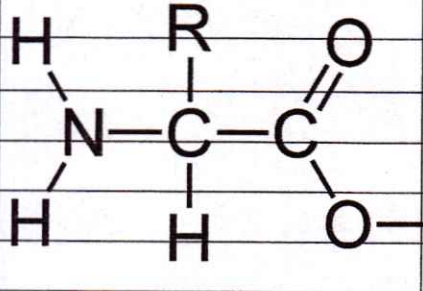
How do saturated and unsaturated fats differ?

- Saturated fats have more Hydrogen.
- Unsaturated fats have double bonds.

How do we combine small molecules?

- Dehydration SYNTHESIS.
- Combining molecules by releasing water.

1 molecule + 1 molecule = 2 molecules + water

Questions/Main Ideas:	Notes:
How do we break up large molecules?	<ul style="list-style-type: none"> Hydrolysis Breaking up large molecules by adding water.
	$2 \text{ molecules} + \text{water} = 1 \text{ molecule} + 1 \text{ molecule}$
What do we need to know about PROTEINS? 	A. The most abundant <u>organic</u> molecule in living things. B. The only source of <u>Nitrogen</u> for living things. C. Needed to build new <u>cells</u> . D. Made of <u>Amino acids</u> . (building blocks of protein)
What is an amino acid? 	<ul style="list-style-type: none"> Building blocks of <u>protein</u>. <u>20</u> types of amino acids in living things. Has 2 main groups: <ol style="list-style-type: none"> <u>Amino</u> group. <u>Carboxyl</u> group.
How do we combine amino acids to form a protein?	<ul style="list-style-type: none"> Amino acid + amino acid = dipeptide + <i>water</i> <u>Dehydration synthesis</u> $1 \text{ amino acid} + 1 \text{ amino acid} + 1 \text{ amino acid} = \text{protein} + \text{H}_2\text{O}$
What bond connects amino acids together?	<ul style="list-style-type: none"> <u>Peptide</u> bond.
How are proteins broken into amino acids?	<ul style="list-style-type: none"> dipeptide + water = amino acid + amino acid <u>Hydrolysis</u> Protein + <u>Water</u> = amino acid + amino acid + aa

Summary: 2 points