AP BIOLOGY BIOCHEMISTRY ACTIVITY #6

NAME

DATE_____HOUR____

LIPIDS

General Characteristics:

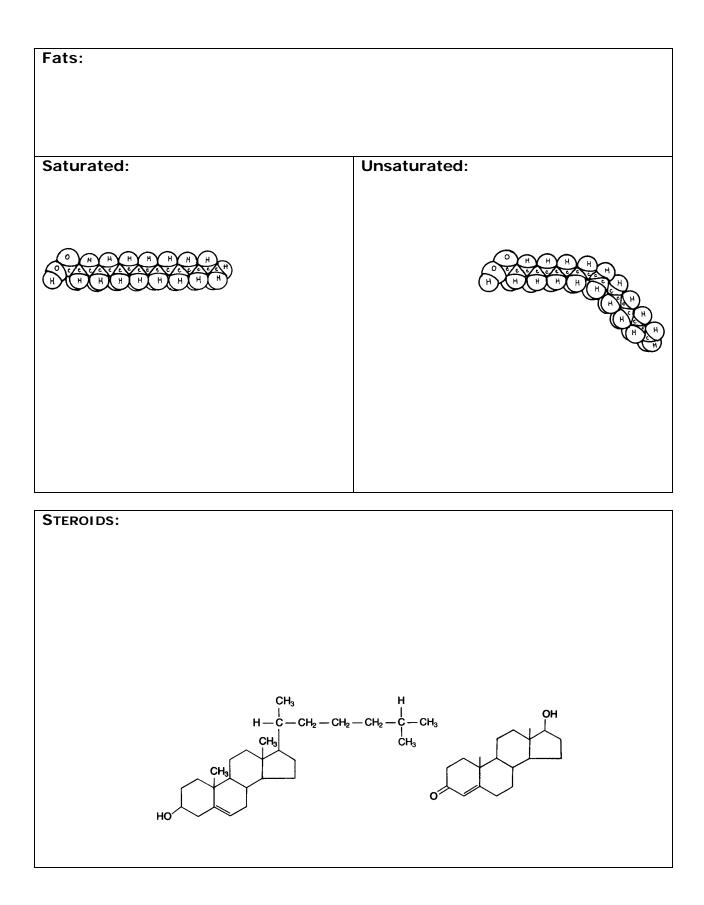
Building Blocks:

$$H = C = OH = HO = C = (CH_2)_{n} CH_3$$

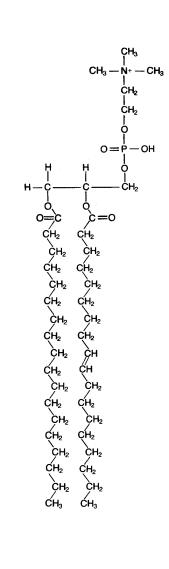
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PHOSPHOLIPIDS:



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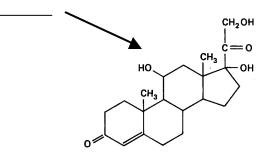
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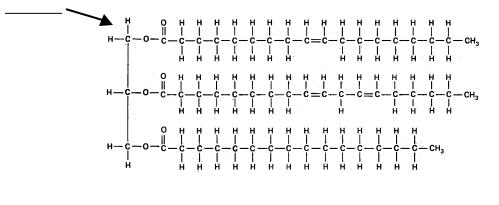
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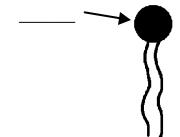
QUESTIONS:

1. Why are lipids insoluble in water?

- 2. Indicate if each of the following is true of a <u>F</u>at, <u>P</u>hospholipid, or a <u>S</u>teroid.
 - _____ Consists of glycerol and three fatty acids
 - _____ Energy source
 - _____ Cushions and insulates
 - _____ Consists of glycerol, 2 fatty acids, and a phosphate group
 - _____ Triglycerides
 - _____ Part of the molecule is hydrophilic and the other part is hydrophobic
 - _____ Major component of cell membranes
 - Consists of four fused carbon rings three 6-sided rings and one 5sided

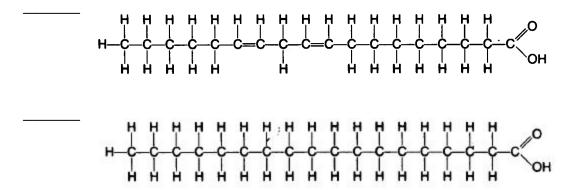






3. List three importances of cholesterol.

- 4. Indicate if each of the following is true of <u>Saturated or Unsaturated fats</u>.
 - _____1 or more double bonds
 - _____ Usually solid at room temperature
 - _____ Molecules are tightly packed together
 - _____ Usually liquid at room temperature
 - _____ Most plant fats
 - _____ Most animal fats



5. Why aren't unsaturated fats solid at room temperature?