AP BIOLOGY BIOCHEMISTRY ACTIVITY #6

NAME
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DATE\_\_\_\_\_HOUR\_\_\_\_

## LIPIDS

General Characteristics:

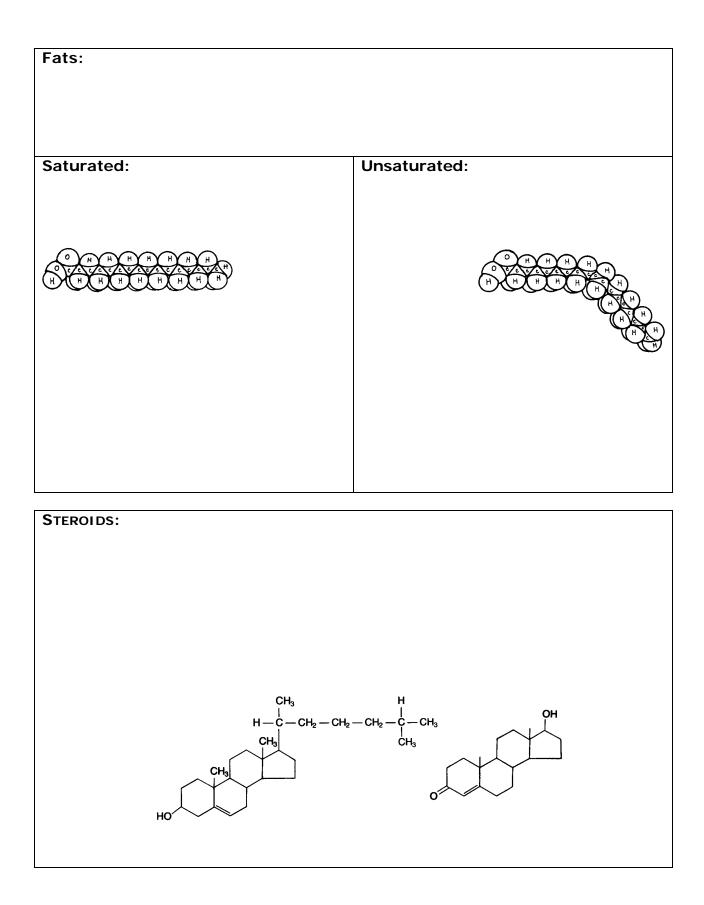
**Building Blocks:** 

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

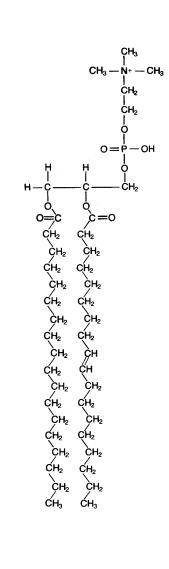
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## PHOSPHOLIPIDS:



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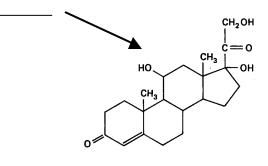
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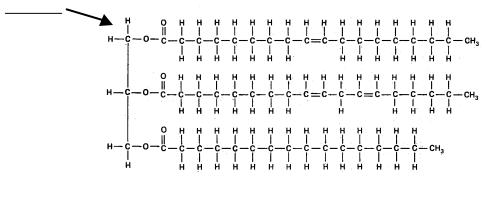
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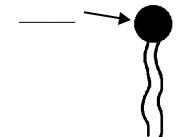
## QUESTIONS:

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

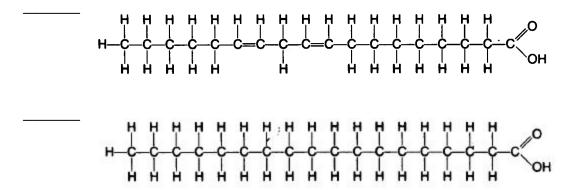






3. List three importances of cholesterol.

- 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?