

## FUNCTIONAL GROUPS & MACROMOLECULES WORKSHEET

Name \_\_\_\_\_

BIO181 Section 0471 (T/Th)

1. What is a condensation or dehydration reaction? Provide an example.
2. What is a hydrolysis reaction? Provide an example.
3. Distinguish between the major functional groups:

| FUNCTIONAL GROUP             | STRUCTURAL FORMULA | NAME OF COMPOUND              | EXAMPLES |
|------------------------------|--------------------|-------------------------------|----------|
| Hydroxyl                     |                    | Alcohols<br>End in <u>-ol</u> | Ethanol  |
| Carbonyl ( <u>aldehyde</u> ) |                    | End in <u>-al</u>             |          |
| Carbonyl ( <u>ketone</u> )   |                    | End in <u>-one</u>            |          |
| Carboxyl                     |                    | Carboxylic <u>acids</u>       |          |
| <u>Amino</u>                 |                    | End in <u>-ine</u>            |          |
| Sulfhydryl                   |                    | Thiols<br>End in <u>-iol</u>  |          |
| Phosphate                    |                    | Phosphates                    |          |