

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

Acid/Base Worksheet #1

1. For the following descriptions, identify each as a property of an acid only(A), base only (B), or either (C).

- \_\_\_\_\_ a. Bitter taste (we never taste chemicals in the lab)
- \_\_\_\_\_ b. Reacts with active metals to generate hydrogen gas.
- \_\_\_\_\_ c. Sour taste (we never taste chemicals in the lab)
- \_\_\_\_\_ d. Is slippery when placed on the skin
- \_\_\_\_\_ e. Undergoes neutralization.
- \_\_\_\_\_ f. Turns blue with litmus

2. Define the terms acid and base using both the Arrhenius and Bronsted/Lowry definitions.

|      | Arrhenius | Bronsted/Lowry |
|------|-----------|----------------|
| Acid |           |                |
| Base |           |                |

3. Identify each of the following as an Arrhenius acid (a), Arrhenius base (B), or salt (s).

- \_\_\_\_\_ a. NaCl
- \_\_\_\_\_ b. KOH
- \_\_\_\_\_ c. HCl
- \_\_\_\_\_ d.  $\text{Mg}(\text{OH})_2$
- \_\_\_\_\_ e.  $\text{MgCl}_2$
- \_\_\_\_\_ f.  $\text{H}_2\text{SO}_4$

4. What volume of 0.45 M LiOH would be needed to neutralize 60.0 mL of 0.15 M HI? (Clearly show your work, formula, rearranged formula, substitution, and answer.)