

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Acid Base Worksheet

1. Identify whether each is an acid or base:

- \_\_\_\_\_ Turns blue litmus paper red
- \_\_\_\_\_ Turns red litmus paper blue
- \_\_\_\_\_ Tastes sour
- \_\_\_\_\_ Tastes bitter

2. A Bronsted-Lowry acid is an proton \_\_\_\_\_.

3. A Bronsted-Lowry base is an proton \_\_\_\_\_.

4. A Lewis acid is an electron pair \_\_\_\_\_.

5. A Lewis base is an electron pair \_\_\_\_\_.

6. True or False

\_\_\_\_\_ According to the Arrhenius system, water is neither an acid nor a base.

\_\_\_\_\_ A solution with a pH of 13 would be acidic.

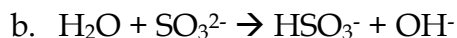
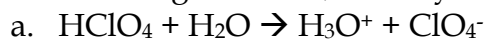
\_\_\_\_\_ A solution with a pH of 2 would be acidic.

\_\_\_\_\_ A solution with a pOH of 13 would be basic.

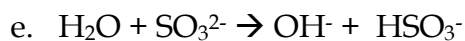
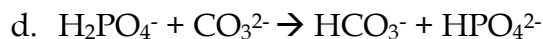
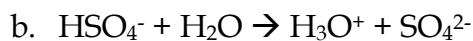
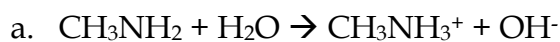
\_\_\_\_\_ A solution with a pOH of 2 would be basic.

## Bronsted-Lowry Worksheet

1. In the following reactions, identify whether H<sub>2</sub>O behaves as a Bronsted acid or base.



2. In the following reactions, circle the Bronsted acid and box the Bronsted base.



3. Fill in the following table with the appropriate conjugate acid or base:

ACID	CONJUGATE BASE	BASE	CONJUGATE ACID
H <sub>2</sub> O			
H <sub>2</sub> SO <sub>4</sub>			
		H <sub>2</sub> O	
		HPO <sub>4</sub> <sup>2-</sup>	