

CHAPTER 6	Identifying Acids and Bases	BLM 6.1.4
ASSESSMENT		

- Use each statement to determine if the solution described is acidic (A), basic (B), or neutral (N).
 - Produces a gas when a drop is placed on a piece of magnesium metal
 - Neither red litmus paper nor blue litmus paper change color
 - Produces $\text{OH}^-(\text{aq})$ ions in solution
 - Has a pH of 5
 - Feels slippery
 - Tastes bitter
 - Changes blue litmus paper to red.
 - Has a pH of 7
 - Tastes sour
 - Has a pH of 9
 - Produces $\text{H}^+(\text{aq})$ ions in solution
- Which of the statements made in Question 1 are empirical?
- Which of the observations made in Question 1 would be unsafe to perform in a laboratory?
- You are given four solutions. You know that one is an acid, one is a base, one is made with a neutral ionic compound, and one is made with a neutral molecular compound. Create a flow chart that you could use in the lab that would allow you to tell them apart.

CHAPTER 6	Identifying Acids and Bases (continued)	BLM 6.1.4
ASSESSMENT		

5. Some acidic and basic solutions were tested in a lab. For each solution, **one** of the results was discrepant. Identify which one would be unexpected and state what would have been expected based on the known empirical properties of acids and bases.

Solution number	Conductivity	Litmus test	pH	Reactivity with magnesium
A	high	blue turns red	2	none
B	none	red turns blue	10	none
C	high	red turns blue	6	none
D	high	blue turns red	8	bubbles form
E	high	red turns blue	2	bubbles form