

Name: _____

Date: _____

Chemistry
Acids & Bases WS 1 – Introduction

I. Complete the following table:

Characteristic	Acid	Base
ion formed with water		
litmus paper reaction		
type of anhydride		
pH range		
proton acceptor/donor		
taste		

II. Determine whether the following characteristics are true of an **acid**, a **base**, or **both**:

- tastes bitter _____
- dissociates in water _____
- turns litmus paper blue _____
- has a pH less than 7 _____
- reacts with metal _____
- $[H^+]$ is measured in mol/L _____
- feels slippery _____
- accepts protons _____
- forms hydronium in water _____
- tastes sour _____

III. Name each of the following acids, then write the conjugate base of each.

- HCl _____
- HNO₃ _____
- H₂SO₄ _____
- H₃PO₄ _____

IV. *Answer the following questions in complete sentences where appropriate:*

15. What is the difference between a strong acid and a weak acid?

16. What does a base do when it reacts with another chemical?

17. What does the term "aqueous" mean?

18. What base (name and formula) would be formed by mixing CaO and water?

19. Write the balanced reaction for the acid formed by combining sulfur trioxide and water.

20. What is the formula for hydrosulfuric acid? What is the formula for sulfurous acid? What is the formula for sulfuric acid?

21. What is an indicator?

22. In terms of protons, what is the major difference between acids and bases?