

Name : _____ Date : _____

INTRODUCTION TO ACIDS AND BASES

① Define the terms acid and base using the Arrhenius and Bronsted/Lowry definitions.

	Arrhenius	Bronsted/Lowry
Acid		
Base		

② Label the following properties of either acid (A) or base (B).

- i. Soap is an example ____
- ii. Turns litmus paper blue ____
- iii. Ammonia is an example ____
- iv. Has pH less than 7 ____
- v. Feels slippery ____
- vi. Turns litmus paper red ____
- vii. Taste sour ____
- viii. Has pH greater than 7 ____
- ix. Taste bitter ____
- x. Lemon is an example ____

③ What is the correct formula for hydrobromic acid?

④ What is the correct name for H_2SO_4 ?

⑤ What is the formula for aluminum hydroxide?

⑥ What is the correct name for $\text{Sr}(\text{OH})_2$?

⑦ What is the correct name for $\text{Cu}(\text{OH})_2$?

⑧ What is the formula for iron (III) hydroxide?

Name : _____ Date : _____

INTRODUCTION TO ACIDS AND BASES

Answers

① Define the terms acid and base using the Arrhenius and Bronsted/Lowry definitions.

	Arrhenius	Bronsted/Lowry
Acid	A compound that dissociates in water to yield a hydrogen ion (H^+)	A compound that can transfer a proton to another compound
Base	A compound that ionizes in water to yield hydroxide ions (OH^-)	A compound that accepts a proton from another compound

② Label the following properties of either acid (A) or base (B).

- i. Soap is an example B
- ii. Turns litmus paper blue B
- iii. Ammonia is an example B
- iv. Has pH less than 7 A
- v. Feels slippery B
- vi. Turns litmus paper red A
- vii. Taste sour A
- viii. Has pH greater than 7 B
- ix. Taste bitter B
- x. Lemon is an example A

③ What is the correct formula for hydrobromic acid?

HBr

④ What is the correct name for H_2SO_4 ?

Sulfuric acid

⑤ What is the formula for aluminum hydroxide?

$Al(OH)_3$

⑥ What is the correct name for $Sr(OH)_2$?

Strontium hydroxide

⑦ What is the correct name for $Cu(OH)_2$?

Copper (II) hydroxide

⑧ What is the formula for iron (III) hydroxide?

$Fe(OH)_3$