Practice: Acids and Bases Answer Key

- 1. For each of the following, state if it an acid or a base.
 - a) Pepsi Cola acid
 - b) Draino drain cleaner base
 - c) Baking powder **base**
 - d) Orange juice acid
 - e) Pepto Bismol stomach antacid base
 - f) Vinegar acid
- 2. For each of the following chemical formulas, give the name of the acid or base.
 - a) H₂SO₄ sulfuric acid
 - b) NH₄OH ammonium hydroxide
 - c) Ca(OH)₂ calcium hydroxide
 - d) HCl hydrochloric acid
 - e) HNO₃ nitric acid
 - f) NaOH sodium hydroxide
- 3. How do acids taste, and how do bases taste? Acids: sour, Bases: bitter
- 4. What colour does litmus paper have when it is dipped in an acid and in a base?

Litmus paper in acid turns red.

In a base it is blue.

5. What indicator is yellow in an acid, and blue in a base?

Bromothymol blue.

6. Write a balanced chemical equation for the neutralization of potassium hydroxide and nitric acid.

$$KOH + HNO_3 \rightarrow H_2O + KNO_3$$

7. Will an electrical current pass through a base and an acid?

Yes it will.

8. When zinc is dropped into hydrochloric acid, write a balanced chemical equation for the reaction.

$$Zn + 2HCl \rightarrow ZnCl_2 + H_2$$

9. 8. When sodium carbonate is dropped into hydrochloric acid, write a balanced chemical equation for the reaction.

$$Na_2CO_3 + 2HCl \rightarrow 2NaCl + CO_2 + H_2O$$

10. If you were to feel a base, how would it feel?

It would feel slippery.