

Name: _____

Period: _____

Neutralization Exam Review

The products of a neutralization reaction are _____ and _____.

Neutralization reactions are always _____, which means they release heat. The instrument used for measurement in a titration is a _____. Titrations are used for calculating the _____ of an acid or a base. A(n) _____ may be added to the titration to indicate the end point of the reaction, or the point where there is a color change. The indicator _____ would turn green in a neutral solution, blue in a _____ and yellow in an acid.

Buffers resist shifts in the _____ of a solution. The buffer systems in the blood are _____ and _____.

1. Complete and balance the following neutralization reactions:



2. How many milliliters of 0.600 M H_2SO_4 are required to neutralize 90.0 mL of 0.40 M NaOH?

3. Calculate the molarity of 16.0 mL of H_2SO_4 needed to neutralize 400.0 mL of 0.20 M Ba(OH)_2 .

4. If 30.0 mL of 0.250 M HCl are neutralized by titrating 35.0 mL of KOH, what is the concentration of the base?
5. A 50.0 mL sample of HBr is titrated to an endpoint with 20.0 mL of 1.50 M NaOH, what is the concentration of the acid?
6. Write reactions to show the effect of adding the indicated ion to the acetic acid/acetate ion buffer system.
- a. Addition of H^+ _____
- b. Addition of OH^- _____