

- A _____ reaction is the reaction between an _____ and a _____ to produce a _____ plus _____.
- A _____ is any compound containing the _____ from a base and the _____ from an acid.

Write the neutralization reaction when H_2SO_4 reacts with KOH. Label the acid, the base, and the salt.



Write the neutralization reaction when _____ acid reacts with _____ hydroxide.

- A _____ is a laboratory method used to determine the _____ of an acid or base in _____ by performing a _____ reaction with a _____ solution.
- In a _____ solution, the _____ of _____ ions must equal the _____ of _____ ions.

$$\text{moles } \underline{\quad} = \frac{\text{moles}}{1 \text{ mole}_A} = (M_A)(V_A)$$

$$\text{moles } \underline{\quad} = \frac{\text{moles}}{1 \text{ mole}_B} = (M_B)(V_B)$$

$$\frac{\text{moles}}{1 \text{ mole}_A} = (M_A)(V_A) = \frac{\text{moles}}{1 \text{ mole}_B} = (M_B)(V_B)$$

Example Titration Problem:

Find the molarity of this sample of hydrochloric acid (HCl) by neutralizing it with 0.5 M sodium hydroxide (NaOH).

Volume of HCl	Volume of NaOH

- The _____ of a titration is the point at which the indicator changes _____ indicating that _____ has been reached so the _____ of _____ ions and the _____ of _____ ions are _____.

$$\frac{\text{moles } H^+}{1 \text{ mole}_A} (M_A)(V_A) = \frac{\text{moles } OH^-}{1 \text{ mole}_B} (M_B)(V_B)$$

In a titration of _____ with _____,
_____ mL of the base were required to neutralize 10.0 mL of a
_____ M _____. What is the molarity of the KOH?

60.0 mL of _____ molar _____ were needed to
neutralize 30.0 mL of _____. What is the molarity of the acid?

The Chemistry Quiz

CR1. _____ CR2. _____

1. _____ 2. _____ 3. _____ 4. _____ 5. _____