

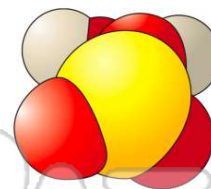


Name _____ Class _____ Date _____

- 1 How many milliliters of **0.20 M KOH** are needed to **completely neutralize** 90.0 milliliters of **0.10 M HCl**?
- A 25 mL
 - B 45 mL
 - C 90. mL
 - D 180 mL



- 2 Which **0.1-molar aqueous solution** is the best **conductor of electricity**?
- A H₂S
 - B HF
 - C H₂SO₄
 - D H₃PO₄



- 3 A solution has a **hydroxide ion** concentration of **1 x 10⁻⁵ M**. What is the **hydrogen ion concentration** of the solution?
- A 1 x 10⁻¹ M
 - B 1 x 10⁻⁵ M
 - C 1 x 10⁻⁹ M
 - D 1 x 10⁻¹⁴ M



- 4 How many **hydroxide ions** are needed to **completely neutralize** 1.0 liter of 0.50 M HCl?
- A 1.5 x 10²³ ions
 - B 3.0 x 10²³ ions
 - C 6.0 x 10²³ ions
 - D 1.2 x 10²⁴ ions



PREVIEW

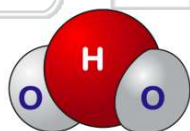
Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

- 7
- B NH₃ and NH₄⁺
 - C H₂S and NH₃
 - D H₂S and HS⁻

- B hydroxide ion
- C hydride ion
- D chloride ion



- 9 According to the **Brønsted-Lowry theory**, **H₂O** is considered to be a **base** when it
- A donates an electron
 - B accepts an electron
 - C donates a proton
 - D accepts a proton



- 10 Given the **neutralization reaction**:
- $$\text{H}_2\text{SO}_4 + 2\text{KOH} \rightarrow \text{K}_2\text{SO}_4 + 2\text{HOH}$$
- Which compound is a **salt**?

- A KOH
- B H₂SO₄
- C K₂SO₄
- D HOH





ANSWER KEY

How many milliliters of **0.20 M KOH** are needed to **completely neutralize** 90.0 milliliters of **0.10 M HCl**?

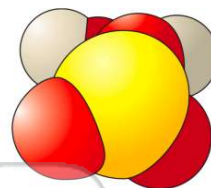
- A 25 mL
- B 45 mL
- C 90. mL
- D 180 mL



(b)

Which **0.1-molar aqueous solution** is the best **conductor of electricity**?

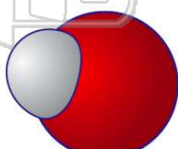
- A H₂S
- B HF
- C H₂SO₄
- D H₃PO₄



(c)

A solution has a **hydroxide ion** concentration of **1 x 10⁻⁵ M**. What is the **hydrogen ion concentration** of the solution?

- A 1 x 10⁻¹ M
- B 1 x 10⁻⁵ M
- C 1 x 10⁻⁹ M
- D 1 x 10⁻¹⁴ M



(c)

How many **hydroxide ions** are needed to **completely neutralize** 1.0 liter of 0.50 M HCl?

- A 1.5 x 10²³ ions
- B 3.0 x 10²³ ions
- C 6.0 x 10²³ ions
- D 12 x 10²³ ions



(b)



PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

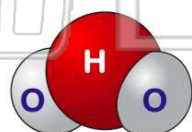
- C H₂O and H₃O⁺
- D H₂S and HS⁻

- D chloride ion



According to the **Brønsted-Lowry theory**, **H₂O** is considered to be a **base** when it

- A donates an electron
- B accepts an electron
- C donates a proton
- D accepts a proton



(d)

Given the **neutralization** reaction:



Which compound is a **salt**?

- A KOH
- B H₂SO₄
- C K₂SO₄
- D HOH



(c)