

1036

Complete the following table:

Salt	Parent Acid	Acid Strength	Parent Base	Base Strength	Type of Salt
Na <sub>2</sub> SO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>	S	NaOH	S	N
Pb(ClO <sub>3</sub> ) <sub>2</sub>	HClO <sub>3</sub>	S	Pb(OH) <sub>2</sub>	W	A
CuS	H <sub>2</sub> S	W	Cu(OH) <sub>2</sub>	W	N

Complete the following chart.

	[H <sup>+</sup> ]	[OH <sup>-</sup> ]
$1 \times 10^{-14} = [H^+][OH^-]$	$1 \times 10^{-4}$	$1 \times 10^{-10}$
$\frac{1 \times 10^{-14}}{7.6 \times 10^{-2}}$	$1.31 \times 10^{-13}$	$7.6 \times 10^{-2}$
	$7.9 \times 10^{-7}$	$1.3 \times 10^{-8}$
	$3.12 \times 10^{-11}$	$3.2 \times 10^{-4}$

State whether each chemical is an acid, a base, or a salt. If it is an acid or a base, state whether it is strong or weak:

- |                                   |          |          |
|-----------------------------------|----------|----------|
| 1. NH <sub>3</sub>                | <u>B</u> | <u>W</u> |
| 2. FeCl <sub>3</sub>              | <u>S</u> |          |
| 3. H <sub>2</sub> SO <sub>4</sub> | <u>A</u> | <u>S</u> |
| 4. Ba(OH) <sub>2</sub>            | <u>B</u> | <u>S</u> |

Complete the following.

[H <sup>+</sup> ]	pH	pOH
$1 \times 10^{-9}$	9	5
$3.2 \times 10^{-1}$	.49	13.51
<del>                    </del>	4.3	9.7
$1 \times 10^{-4}$	4	10
<del>                    </del>	11.7	2.3