

Formula Writing Review #7

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Write formulas for the following compounds

- 1) Sodium bicarbonate _____
- 2) Potassium chloride _____
- 3) Potassium chlorate _____
- 4) Potassium perchlorate _____
- 5) Calcium hydroxide _____
- 6) Aluminum sulfate _____
- 7) Sodium sulfite _____
- 8) Lithium carbonate _____
- 9) Ammonium carbonate _____
- 10) Cesium phosphate _____

EXAMPLE: Barium hydroxide is $\text{Ba}(\text{OH})_2$

We are given the chemical name “Barium hydroxide”. We know that Barium is represented by the symbol Ba, according to the Periodic Table. The ion table on page 160 of our text indicates that barium forms the Ba^{+2} ion. The polyatomic ion table on page 178 of our text lists hydroxide as OH^- . We write barium first, as it is the positive ion, and follow with the hydroxide as it is negative, giving us Ba OH to start our formula off. As Ba has a +2 charge, and OH has a -1 charge, this is not balanced – we need to have two OH⁻ groups for a total of -2 charge, which cancels the +2 charge of Ba^{+2} , giving a total charge of zero. All compounds must have a total charge of zero! To write a formula with one Barium and two hydroxide groups, the answer is $\text{Ba}(\text{OH})_2$.