

Curiosity: Why Do Some Metals Need Roman Numerals?

Curiosity Reading | CheAI Research Inc.

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Connection: materials and communication

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Iron can form more than one common ion charge. A name such as iron(II) chloride communicates which charge is present, avoiding ambiguity. The Roman numeral is not a subscript and does not count atoms. Names and formulas are complementary chemical language: the formula shows a charge-balanced ratio, while the name announces the selected ion identity.

Think like a chemist

1. Why is FeCl_2 not simply “iron chloride”?
2. What does the II in copper(II) sulfate mean?
3. Why do nitrate formulas sometimes need parentheses?

Word	Meaning	Packet
multivalent	can form more than one common charge	13–16, 18
polyatomic	ion with more than one atom	6–12, 17–19
Roman numeral	metal-ion charge in name	13–16, 20