

Same Compound, Same Composition

Understanding the Law of Definite Proportions in
Chemical Compounds

Late 18th Century

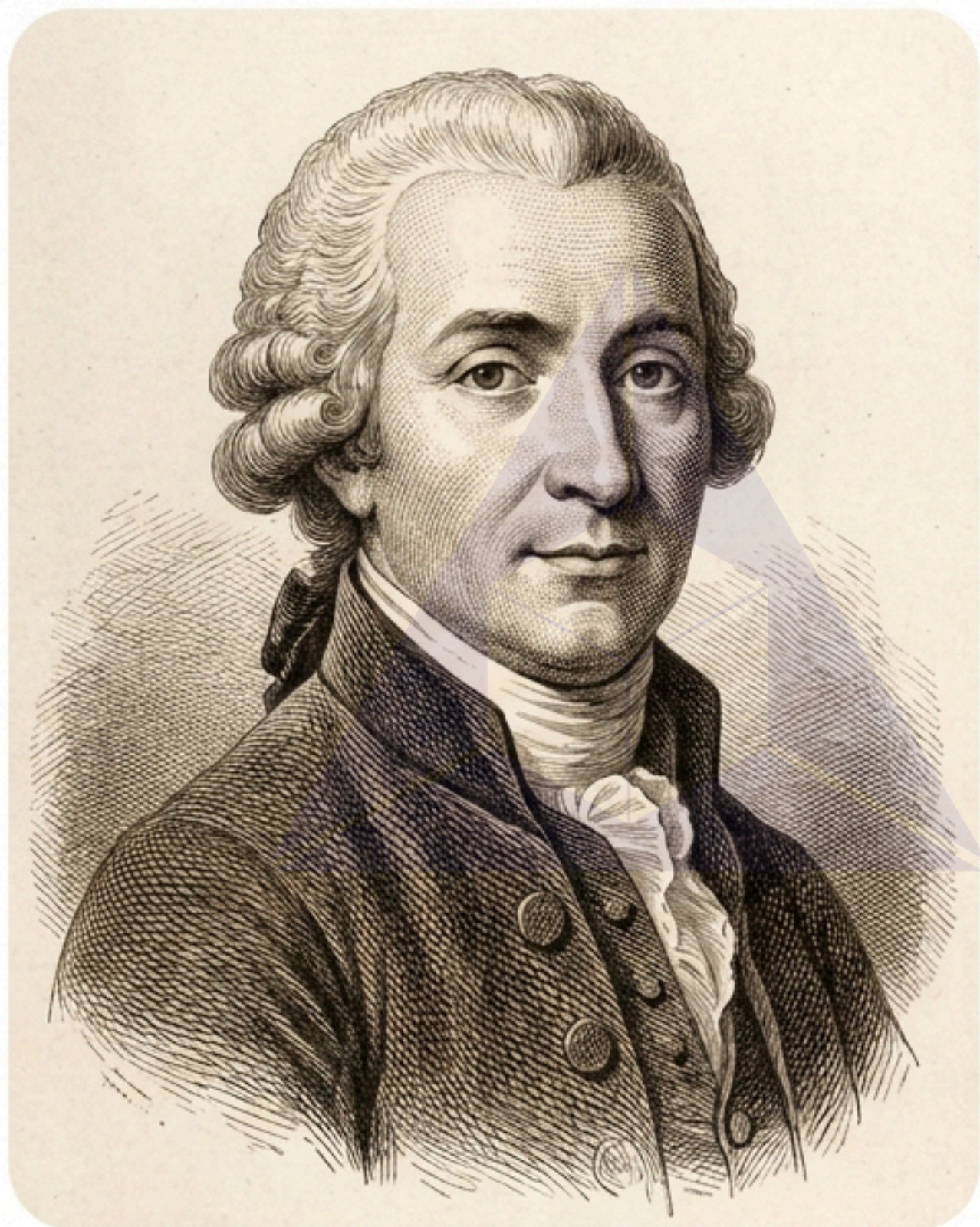
The Architect of Definite Proportions

French chemist Joseph Proust (1754–1826) fundamentally shifted how we understand chemical combinations.

Conducted rigorous experimental studies on chemical composition.

Analyzed compounds from diverse sources to test for chemical consistency.

His work laid the empirical groundwork for Dalton's Atomic Theory.



The Law of Definite Proportions

“ A given compound always contains exactly the same proportion of elements by weight. ”

[Mass of Element / Total Mass of Compound] = Constant Ratio



**You've Learned the Theory.
Let's Test Them Now.**

$$E=mc^2$$



Turn theory into marks with **unlimited MCQs, smart analysis, and focused revision.**

Practice Now



At prep.topall.app

Key Highlights

- » Free Study Material, Videos & Infographics
- » Push Your Limits with Level-Based Challenges
- » Climb the Leaderboard Among Fellow Aspirants
- » Practice Unlimited MCQs for NEET & JEE
- » Get Clear Explanations, Not Just Marks
- » Track Your Performance Smarter



Cupric Carbonate: Natural Origin

Data extracted from naturally occurring mineral samples.



Element: Copper (Cu)

51.35%

Element: Carbon (C)

09.74%

Element: Oxygen (O)

38.91%

Cupric Carbonate: Synthetic Origin

Data extracted from laboratory-synthesized samples.



Notice the exact match in mass percentages.

Element: Copper (Cu)

51.35%

Element: Carbon (C)

09.74%

Element: Oxygen (O)

38.91%

The Universal Conclusion

Proust's experiments proved that the origin or method of preparation of a compound does not alter its fundamental makeup. This is also referred to as the Law of Definite Composition.

KEY TAKEAWAY

Pure compounds have fixed mass ratios.

Irrespective of the source, a specific compound will always consist of the exact same elements combined together in the exact same proportion by mass.



You've Learned the Theory.

Now Let's Test It.

Reading notes gets you knowledge.

Practicing MCQs gets you marks.

That's exactly what TopAll Pro is built for.

Try TopAll Pro Now

What TopAll Pro Does Differently

-  **Stuck? Snap it. Solve it. — Doubts AI**
Photo → step-by-step solution in seconds, 24/7
-  **Your AI Coach finds your blind spots**
Concept-level weakness detection — not just chapter-level
-  **4.5 Lakh+ questions. Never run out.**
13× more content than any other prep app in India
-  **Build your own test in 60 seconds**
Pick a chapter, set difficulty — AI does the rest instantly.
-  **AI Recommendation that helps you improve**
AI Recommendation Analysis your Tests and tell you where you need to improve.



Practice the moment you finish studying
Jump in while the concept is still fresh in your head

4.5L+
MCQs

1.5L+
Students

AI Powered
In-Depth Analysis