

## Introduction

Cuba, officially known as the Republic of Cuba, is a Caribbean island nation situated in the western part of the United States. It covers an area of approximately 114,500 square kilometers. The island is the largest island in the Caribbean and comprises the main island of Cuba and about 1,600 smaller islands and cays. With a population of over 11 million people, Cuba is renowned for its rich history, vibrant culture, and significant geopolitical role in the Western Hemisphere.

Cuba's history is marked by its indigenous roots, colonialism, and revolutionary movements. The island was originally inhabited by the Taino people, an Arawakan-speaking group. In 1492, Christopher Columbus arrived in Cuba, claiming it for Spain. Over the next few centuries, Cuba became a Spanish colony, heavily involved in the transatlantic slave trade and the production of sugar, tobacco, and coffee.

In the late 19th century, Cuba sought independence, leading to the Cuban War of Independence (1895-1898). The war culminated in the Spanish-American War, resulting in Spain's defeat and Cuba's temporary occupation by the United States. Cuba gained formal independence in 1902 but remained under U.S. influence until the Cuban Revolution of 1959.

Led by Fidel Castro, the revolution overthrew the U.S.-backed dictator Fulgencio Batista. Castro established a socialist republic, aligning Cuba with the Soviet Union during the Cold War. This alignment led to significant events such as the Cuban Missile Crisis in

# Cuba A Country Study

**Mike Jess**



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spectate means watch the other ions react in an aqueous solution

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web these ions are called spectator ions because they do not participate in the actual reaction canceling the spectator ions gives the net ionic equation which shows only those species that participate in the chemical reaction  $2\text{ag aq} + \text{cr}_2\text{o}_7^{2-} \text{aq} \rightarrow 2\text{cr}_2\text{o}_7^{2-} \text{aq} + 2\text{s}^{2-}$

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web chemical equation in which all dissolved ionic reactants and products including spectator ions are explicitly represented by formulas for their dissociated ions molecular equation chemical equation in which all reactants and products are

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web jan 29 2020 the ionic form of this reaction is  $2\text{na aq} + 2\text{cl aq} + \text{cu}^{2+} \text{aq} + \text{so}_4^{2-} \text{aq} \rightarrow 2\text{na aq} + \text{so}_4^{2-} \text{aq} + \text{cucl}_2 \text{s}$  the sodium ions and sulfate ion are the spectator ions in this reaction they appear unchanged in both the product and reactant side of the equation

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web mar 11 2014 solution ionic equation  $\text{h aq} + \text{cl aq} + \text{na aq} + \text{hco}_3 \text{aq} + \text{na aq} + \text{cl aq} + \text{h}_2\text{o l} + \text{co}_2 \text{g}$  the spectator ions are cl and na net ionic equation  $\text{h aq} + \text{cl aq} + \text{na aq} + \text{hco}_3 \text{aq} + \text{na aq} + \text{cl aq} + \text{h}_2\text{o l} + \text{co}_2 \text{g} \rightarrow \text{h aq} + \text{hco}_3 \text{aq} + \text{h}_2\text{o l} + \text{co}_2 \text{g}$  here is a video on spectator ions [chapter 8 04 ionic equations chemistry libretexts](#) - Mar 06 2023

web the six  $\text{no}_3^-$  ions and the six  $\text{na}^+$  ions that appear on both sides of the equation are spectator ions that can be canceled to give the net ionic equation  $3\text{ba}^{2+} \text{aq} + 2\text{po}_4^{3-} \text{aq} \rightarrow \text{ba}_3\text{po}_4 \text{s}$

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web these spectator ions ions whose presence is required to maintain charge neutrality are neither chemically nor physically changed by the process and so they may be eliminated from the equation to yield a more succinct representation called a

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web net ionic equations an equation for a reaction in solution showing only those particles that are directly involved in the

chemical change spectator ions an ion that is not directly involved in a chemical reaction an ion that does not change oxidation number or composition during a reaction products

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web the equation below is the final net ionic equation after elimination of the spectator ions which yields water  $\text{h}^+ \text{aq} + \text{oh}^- \text{aq} \rightarrow \text{h}_2\text{o}$  the spectator ions in  $\text{koh} \text{aq}$  and  $\text{hno}_3 \text{aq}$  are  $\text{k}^+ \text{aq}$  and  $\text{no}_3^- \text{aq}$  how to identify and list the

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web the  $\text{ag}^+ \text{aq}$  and  $\text{cl}^- \text{aq}$  ions become  $\text{agcl}(\text{s})$  but the  $\text{na}^+ \text{aq}$  ions and the  $\text{no}_3^- \text{aq}$  ions stay as  $\text{na}^+ \text{aq}$  ions and  $\text{no}_3^- \text{aq}$  ions these two ions are examples of spectator ions ions that do nothing in the overall course of a chemical reaction

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web jun 2 2023 the spectator ions are cut out from a reaction hence the net ionic equation for the above reaction would be  $2\text{Cl}^- \text{aq} + \text{Cu}^{2+} \text{aq} \rightarrow \text{CuCl}_2 \text{s}$   $2\text{Cl}^- \text{aq} + \text{Cu}^{2+} \text{aq} \rightarrow \text{CuCl}_2 \text{s}$  these spectator ions are not actively involved in the reaction the existence of spectator ions affects the debye length