

A'LEVEL NEW CURRICULUM
CHEMISTRY 🧪
ASSESSMENT REVISION ITEMS 2025
TERM THREE

Turn over

Item 1

Scenario

A rural community near a sugar factory has reported increased cases of stomach illnesses. Tests reveal high levels of nitrates, suspended solids, and microbial contamination in their borehole water, which is located close to the factory's wastewater discharge point. The Ministry of Water sends a team of chemists to assess and propose a water purification strategy.



Task

As a student chemist, suggest a series of chemical and physical methods that could be used to purify the water for safe domestic use.

Item 2

Scenario

A new fertilizer plant is being set up in Uganda to support local agriculture. The plant will rely heavily on sulphuric acid for the manufacture of phosphate fertilizers. The company plans to use the contact process but needs to ensure environmental safety and cost-effectiveness.



Task

As an environmental chemist, identify and explain one modification that could be made to the contact process to minimize environmental impact without significantly increasing production cost.

END

Always live a simple life!