

<p>Which 3 elements are essential for plant growth?</p>	<p>Why do we use fertilisers?</p>
<p>Why do fertilisers need to be water soluble?</p>	<p>What is the colour change for phenolphthalein in a titration?</p>
<p>Why might activated charcoal be added to a fertiliser when it is made by titration?</p>	<p>What are the key features of a batch process?</p>
<p>What are the key features of a continuous process?</p>	<p>Question 8</p>

<p>To replace essential elements used in plant growth</p>	<p>N,P, K (Nitrogen, phosphorous and Potassium)</p>
<p>Pink (alkali) to colourless (acid)</p>	<p>So the plant can absorb them through the roots</p>
<p>Low rate, low cost, large numbers of workers, frequent shutdowns, low ease of automation</p>	<p>To remove the colour from the indicator</p>
<p>450 degrees, iron catalyst, 200 atmospheres pressure</p>	<p>High rate, high cost, small numbers of workers, rare shutdowns, high ease of automation</p>

<p>What conditions are used in the Contact process?</p>	<p>What are the advantages of fermentation as a method of making ethanol?</p>
<p>What are the disadvantages of fermentation as a method of making ethanol?</p>	<p>What is an ore?</p>
<p>How does the reactivity of a metal determine how it is extracted?</p>	<p>What is aluminium oxide dissolved in before it is electrolysed?</p>
<p>Why are bioleaching and phytoextraction used?</p>	<p>What is a composite material?</p>

<p>Cheap raw materials, lower temperature and pressure, low en- ergy requirements</p>	<p>450 degrees, vanadi- um oxide catalyst (V_2O_5), 2 atmospheres</p>
<p>A rock that contains enough metal to make extracting it economically worthwhile</p>	<p>Low rate of reaction, low percentage yield and low purity</p>
<p>Cryolite</p>	<p>If it is less reactive than carbon then displacement is used, otherwise electrolysis is used</p>
<p>A material made from two or more materials with different properties</p>	<p>To extract metals from low grade ores</p>