** A level Year 2** Eduqas Component 1

**Importance of ATP**

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|  |  | R | A | G |
| 1 | the synthesis of ATP involving a flow of protons through the enzyme ATPsynthetase, the process of chemiosmosis and the electrochemical gradient |  |  |  |
| 2 | the similarity between mitochondrial and chloroplast membrane function in providing a proton gradient for ATP synthesis |  |  |  |
| 3 | the proton gradient; maintained by proton pumps driven by potential energy associated with excited electrons |  |  |  |
| 4 | the electron transport chain is formed from an alternate arrangement of pumps and electron carriers (names of proton pumps and electron carriers in the electron transport system are not required) |  |  |  |

**SPECIFIED PRACTICAL WORK**

Investigation of dehydrogenase activity using artificial hydrogen acceptors, as

illustrated by methylene blue, DCPIP or tetrazolium compounds