

Question 24 (4 marks)

Assess the impact of atomic absorption spectroscopy (AAS) on the scientific understanding of the effects of trace elements. 4

AAS has led to the discovery of trace elements, that is elements that are found in very small amounts (so many parts per million). This discovery has been crucial for the development of agriculture, as soil deficient in trace elements can severely limit plant growth, but this can now be detected and remedied. AAS can also be used to detect heavy metal pollution in soil and waterways, as these can cause many problems, for example lead caused retarding in children. Understanding of the impact of trace elements could not have been possible without AAS.