

Question 24 (4 marks)

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

4

Atomic absorption spectroscopy has advanced the field of chemistry throughout the 20th Century. Atomic absorption has helped chemists determine exactly what trace elements are in a sample and how much. This is achieved by burning the sample and recording the colour of the flame. This information is programmed into a computer. The results are formed by measuring the colours in the flame and examining the whole spectrum released by the flame, every element has a different spot on the spectrum. The computer can tell what elements are there by recording the colours on a film. The elements not present leave a dark patch on the film.