AQA, OCR, Edexcel

GCSE Science

GCSE Chemistry

Nanoparticles
Answers

Total Marks: /10

Q1: Define the following:

Nanoscience

A= Structures that are 1-100nm in size (1 mark). Of the order of a few hundred atoms (1 mark).

(2 marks)

Nanoparticles

A= Nanoparticles are smaller than fine particles (1 mark), which have diameters between 100 and 2500nm (1 mark).

(2 marks)

Coarse particles

A= diameters between 1 x 10-5 and 2.5 x 10-6m (1 mark). Coarse particles are often reffered to as dust (1 mark).

(2 marks)

Q2: Explain why nanoparticles may have properties that are different from the properties in bulk.

A= Nanoparticles have a high surface to volume ratio (1 mark). Smaller quantities are therefore are needed for them to more effective than materials with normal particles sizes (1 mark).

(2 marks)

Q3: List some examples of uses of nanoparticles.

A= Nanoparticles can be used in medicine, electronics, cosmetics, sun creams, deodrants and catalysts (2 marks for any two).

(2 marks)