

GCSE
PHYSICS

Physics Test 3: Particle model of matter and Atom Structure (Higher)

Total number of marks: 37

$$\text{Total count rate} = \frac{819}{60} = 13.65$$

$$\text{Total - background} \\ 13.65 - 0.30$$

$$13.35$$

$$1250 \times 180$$

$$225000$$

$$\begin{aligned} \text{Radiation dose} &= 0.003 \times 365 \\ \text{For a year} &= 1.095 \text{ (UK average (2))} \end{aligned}$$

$$\rho = \frac{m}{V}$$

$$\rho = \frac{m}{V}$$

$$998 = \frac{m}{6.5 \times 10^6}$$

$$m = 6487 \times 10^6$$

$$6.487 \times 10^9$$

