

count rate for
background radiation.

$$= \frac{707}{300} = 2.357 \frac{\text{Count}}{\text{s}}$$

$$\gamma = 118.16 - 2.357$$

$$= 115.803 \frac{\text{Count}}{\text{s}}$$

time

$$R = \frac{\gamma}{1 - \gamma t}$$

$$= \frac{115.803}{1 - (115.803)(2.357)}$$

$$= 119.82 \frac{\text{Count}}{\text{s}}$$

$$R = 119.82 \frac{\text{Count}}{\text{s}}$$

$$\text{Corrected Count} = R \times t$$

$$= 119.82 \times 30$$

$$= 3595 \text{ Count}$$

$$\frac{\text{Count}}{\text{s}}$$

118.16

5.59 Count

707

300

P. 2.3

Preview from Notesale.co.uk
Page 4 of 5