



**Mark scheme for Extension Worksheet – Topic 1,  
Worksheet 2**

- 1 We would expect a straight line through the origin. A good straight line can be fitted through the error bars and the error bars are small compared to the values of the current. This indicates very small random errors. However the line does not pass through the origin indicating the presence of a systematic error, so **B**. [1]
  
- 2 The **straight** line that best fits the data is **C**. Of course the line of best fit does not have to be straight so **D** is also possible. However, the line in **D** consists of two straight line parts joined with a sharp angle that is most likely unphysical, so the best answer is **C**. [1]