Schoolworkout Maths

GCSE Mathematics – Data Collection: Assessment A and B

Your Name:	**Tutor Group**:
End of GCSE target grade:	**Grade achieved**:

Grade D objectives	☺	😐	☹
• I can collect data using a variety of different techniques.			
• I understand that bias can occur in poorly designed surveys.			
• I can classify different types of data.			

1. Holly is doing a survey on computer ownership in the town where she lives.
    (a) Give one reason why she should not do the survey outside a computer shop on a Saturday morning.

    …………………………………………………………………………………………………

    ………………………………………………………………………………………………… [1]

    (b) One of the questions she asks is
        "Do you use a computer to play games or to work on?"
        Explain why this is a poorly worded question.

    …………………………………………………………………………………………………..

    ………………………………………………………………………………………………….. [1]

    (c) There are 2000 people in the town where Holly lives.
        She interviews 15 people for her survey.
        Explain why her survey may not be representative of the people in the town.

    …………………………………………………………………………………………………..

    ………………………………………………………………………………………………….. [1]

2. Here are some examples of different types of data.
    A Favourite flavour of ice cream.
    B The time it takes to get to school.
    C Number of goals scored in a match.

    (i)   Which of these is continuous data?   …………………………………………… [1]

    (ii) Which one of these is qualitative data?   …………………………………………… [1]

Grade C objectives	☺	😐	☹
• I can design suitable questions for use in a questionnaire.			

3.   Nina wants to find out what sort of music people in her class like.
     Design a suitable question she could use in a questionnaire.

[2]

Grade A objectives	☺	😐	☹
• I can use stratified sampling methods			

4.   The table below shows the employees of a hospital.

Type of employment	Number of employees
Nurses	195
Doctors	90
Cleaning/ clerical	115
Managerial	20

The hospital wishes to choose a stratified sample of 50 employees.

Calculate the number of nurses that should be in the stratified sample.

……………………… [3]

Teacher feedback:

In order to get to the next grade (or in order to improve the quality of your work) you should…

The following aspect of your work was particularly good …