The Panda Math Tutor

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Collection, Classification and Organisation of Data

Student Worksheet

Questions & Working Space

IGCSE Mathematics — Statistics

Name: _____

Date: _____

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Note

How to use this worksheet. These questions are built *strictly* on the *Collection, Classification and Organisation of Data* notes: qualitative and quantitative data, discrete and continuous data, primary and secondary sources, designing surveys and spotting bias, the four sampling methods, tally charts and frequency tables, grouped frequency tables with class boundaries and midpoints, two-way tables, and choosing the right way to organise a data set.
Writing your answers. Many questions ask you to *explain* or *justify*. A one-word answer will not score full marks: say *why*. For example, "discrete, because you count whole shirts and 4.7 shirts is meaningless" earns the mark, whereas "discrete" alone often does not.
Always check your totals. Every frequency table, grouped table and two-way table in this worksheet can be checked by adding up. The frequencies must sum to the number of data values, and in a two-way table the row totals, the column totals and the grand total must all agree.
Checking your answers. Full step-by-step solutions, a marking scheme for the exam paper, and a quick answer key are in the separate booklet *"Collection, Classification and Organisation of Data — Solutions & Answer Key."* Try each question honestly before you look.

1 Part I — Topic-by-Topic Exercises

1.1 Qualitative and Quantitative Data

Exercise QQ1 *[Basic]*

State whether each of the following is qualitative or quantitative data.

(a) The colour of the cars in a car park

(b) The mass of each letter posted at a post office

(c) The number of text messages a person sends in a day

(d) The favourite school subject of each student in a class

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Exercise QQ2 *[Basic]*

State whether each of the following is qualitative or quantitative data.

(a) The brand of trainers worn by shoppers

(b) The time taken to complete a jigsaw puzzle

(c) The blood group of hospital patients

(d) The width of the leaves on a tree

Exercise QQ3 *[Standard]*

A café records the following for every order: the type of drink ordered, the price paid, the temperature of the drink, and the first name of the server. Classify each as qualitative or quantitative, giving a brief reason each time.

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Exercise QQ4 *[Intermediate]*

Explain why a telephone number is treated as **qualitative** data even though it is written using digits.

Hint

Ask yourself whether it makes any sense to add two telephone numbers together, or to find their mean.

Preview ends here

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