Types of data variables

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

1. Classify favourite fruit as categorical or numerical. [1 mark]

The answers are group names such as apple and banana.

Answer: Categorical.

2. Classify the number of pencils in a case. [1 mark]

It is a count of separate pencils.

Answer: Discrete numerical.

3. Classify the mass of a schoolbag in kilograms. [1 mark]

Mass is measured and may be recorded with decimal places.

Answer: Continuous numerical.

4. A school records postcodes. Explain why postcode is not a measurement. [2 marks]

Adding or doubling postcodes does not describe a meaningful amount.

The digits name areas rather than measure them.

Answer: It is a categorical location label.

5. Write one categorical and one numerical question about lunchboxes. [2 marks]

Colour gives categories.

The number of pieces is a count. Other correct pairs are acceptable.

Answer: For example: What colour is the lunchbox? How many pieces of fruit are inside?

6. A timer shows 12.4 seconds. Is the variable discrete or continuous? Explain. [2 marks]

Elapsed time is measured.

A more precise timer could record a value between 12.4 and 12.5 seconds.

Answer: Continuous.