

Quantitative & Qualitative



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1. Quantitative & Qualitative data

Reminder

Qualitative - Descriptive, normally using words rather than numbers

Quantitative - Measures of values or counts and expressed as numbers

Section 1.1

1) For each example state whether it is qualitative or quantitative

Data	Data Type
Number of website visitors	
Eye colour of a class	
Photos of different cake types	
Speed of cars	
Birth rates in a country by year	
Average world temperatures by year	
Feedback on survey (Agree/Disagree)	

2) Are these examples of data 'quantitative'?

	Yes/No
Number of movies watched	
Name of the movie	
Number of leaves on a tree	
Colour of leaves on a tree	
Average age of class	
Number of pupils in a class	
Song lyrics	
Name of artist	

1. Quantitative & Qualitative data

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Section 1.2

- 3) Describe the difference between qualitative and quantitative data.

Section 1.3

- 4) A bakery is reviewing the data it holds, give 2 examples of quantitative and 2 examples of qualitative data it might hold?

Quantitative examples	Qualitative examples

- 5) Give 2 examples of quantitative and 2 examples of qualitative data that you might find in a weather forecast.

Quantitative examples	Qualitative examples

1. Quantitative & Qualitative data

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Quantitative - Measures of values or counts and expressed as numbers

Section 1.4

6) Here is a paragraph about a new cinema,

" On Sunday, 1,000 people come to the opening of the new cinema. There were 5 new films shown. Customers loved the new building, but complained about the price of the popcorn (£10.50 per box)"

Here are all the quantitative data items from that paragraph.

Number of people	1000
Number of films	5
Price of popcorn	£10.50

Create a paragraph on a subject you are interested in (e.g. football, music, cooking) that contains at least 3 quantitative data items, then list all the quantitative data items from it.

2. Discrete vs. Continuous

Reminder

Discrete - Whole numbered data, obtained by counting

Continuous - All possible values, obtaining by measuring

Section 2.1

1) Are these quantitative data examples continuous or discrete data?

Data	Type
Number of fans at a football match	
Journey time between Edinburgh and Inverness	
Votes cast in election	
Number of windows on a building	
Average rainfall on Ben Nevis	
Average UK house prices by month	

2) Select all the discrete data-types below,

	Yes/No
Number of books in a library	
Number of singers in a choir	
Number of people in a house	
Height of a building	
Length of song (in seconds)	
Time to run 100m	

Section 2.2

3) Explain why the 'speed' of a car is a continuous data- type

4) Explain why the number of cakes in a shop is a discrete data-type.

2. Discrete vs. Continuous

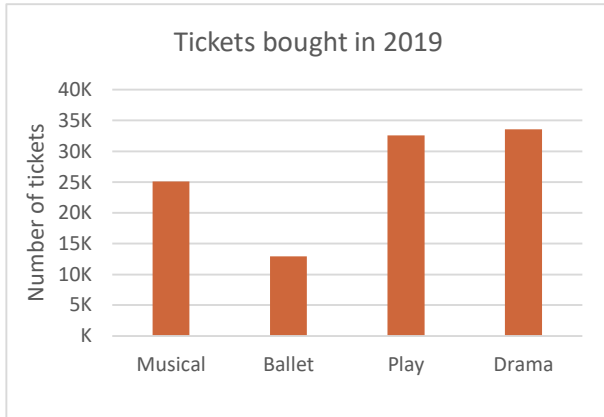
Reminder

Discrete - Whole numbered data, obtained by counting

Continuous - All possible values, obtaining by measuring

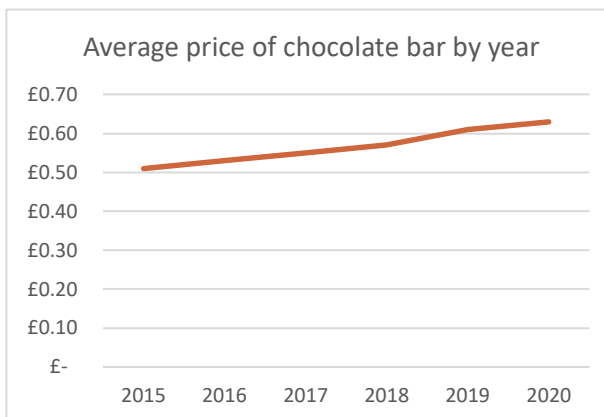
Section 2.3

5) Look at these graphs: are the data types shown in them continuous or discrete?



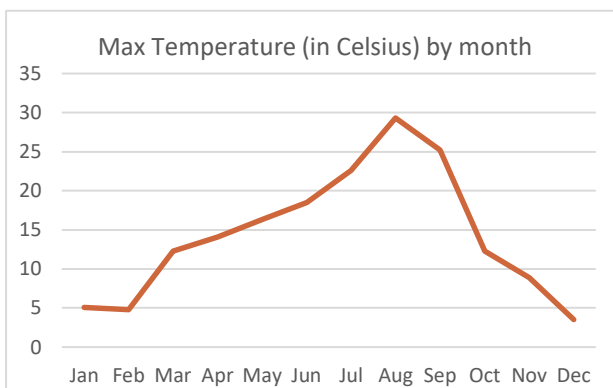
Data Type

Reason



Data Type

Reason



Data Type

Reason

2. Discrete vs. Continuous

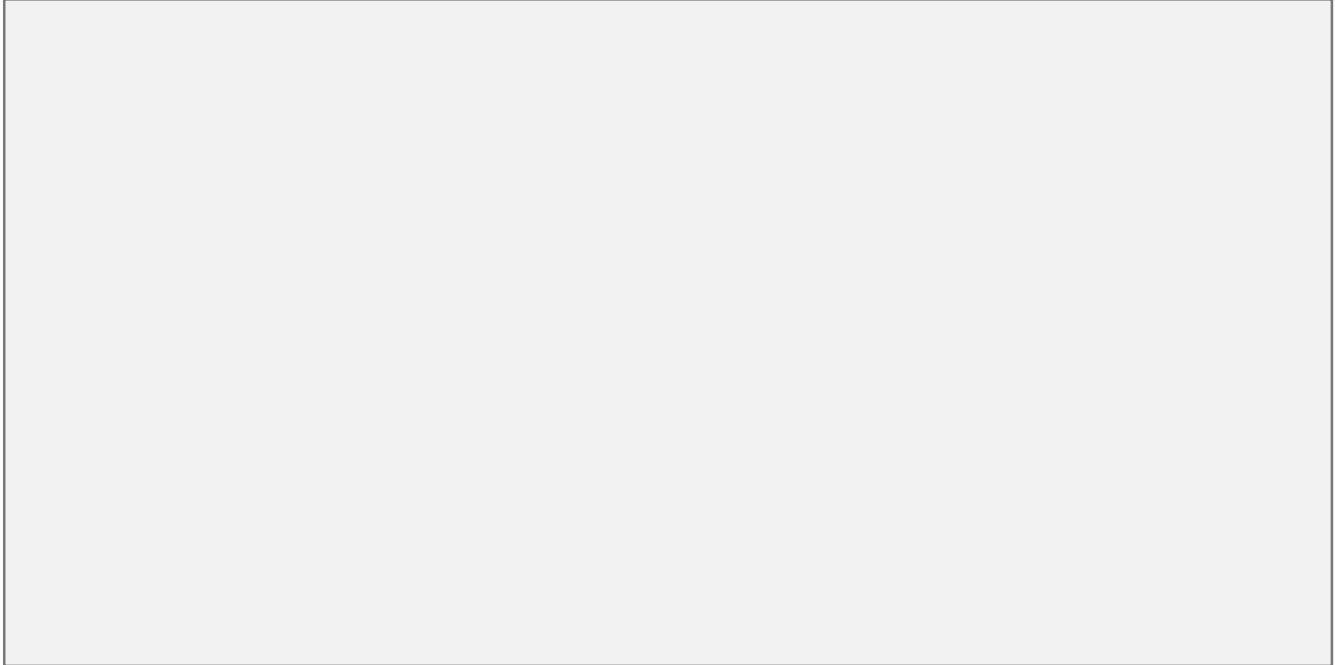
Reminder

Discrete - Whole numbered data, obtained by counting

Continuous - All possible values, obtaining by measuring

Section 2.4

6) Can you find an example of a graph that contains discrete data, copy the image into the space below.



7) Can you find an example of a graph that contains continuous data, copy the image into the space below.

