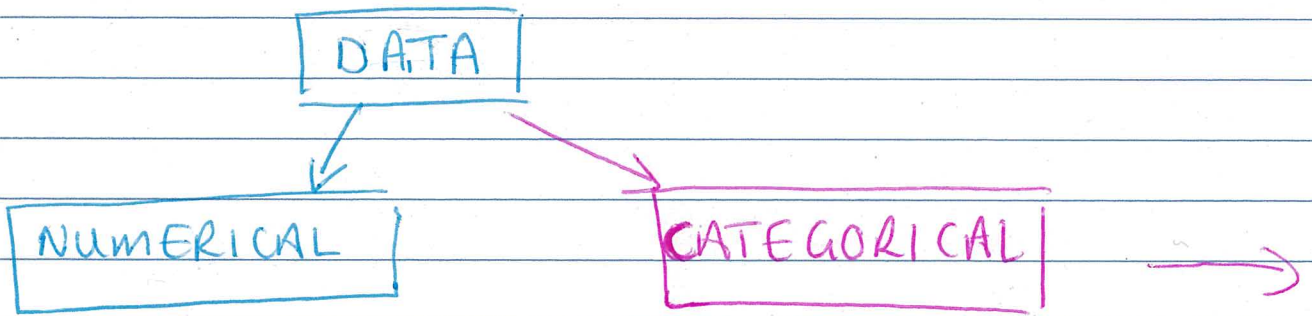


# Summary Notes for Chapter 1

## Types of Data

## THE BASICS



- Discrete - can only have fixed values
- use frequency tables (and percent frequency)
  - then plot using histograms
  - also can plot using box, stem & leaf, dot
  - ungrouped data

- e.g.
- number of children
  - passengers on a bus

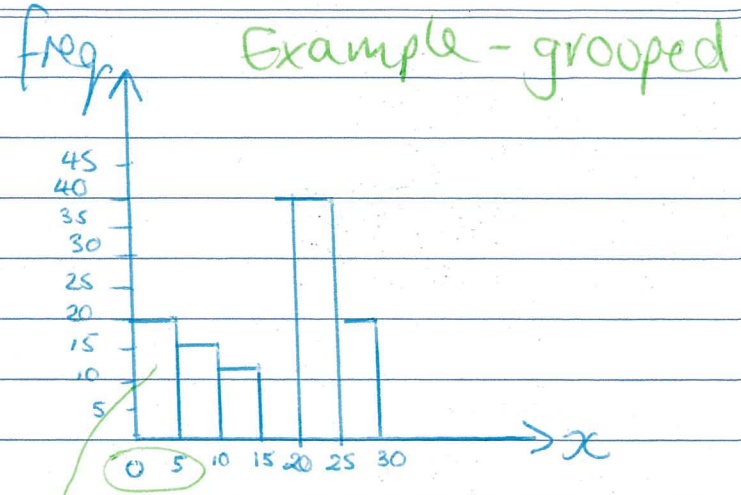
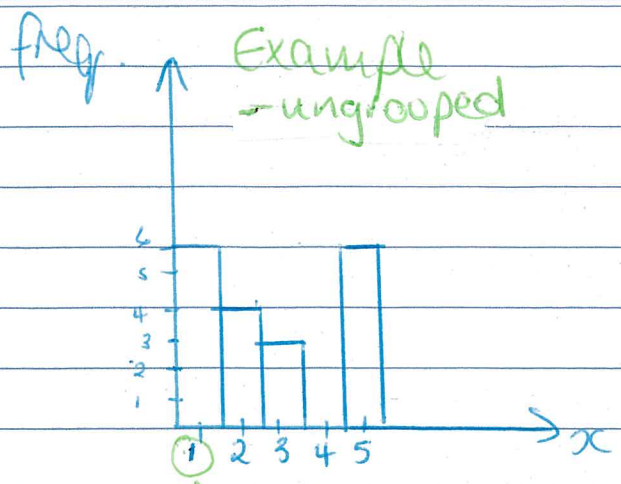
- e.g. Continuous - no gaps in the possible values
- Be careful as some times it is hard to tell the difference

- again use frequency tables and histograms
- grouped data now - otherwise representing simply would be IMPOSSIBLE!!

$$\frac{f}{\sum f} \times 100 = \%$$

oc	f	%

$\sum f$  means add up all numbers  
 ↳ with equal total number of results  
 must add upto 100%



- possible value goes in centre of column

- lower limit of group goes on left hand side of column

- no gaps
- always label axes
- give a title
- use appropriate scale

- so there are 20 results between 0 and 5
- and no values between 15 and 20
- same

### Key points for Categorical

- how many levels and what are they? (these are the possible choices/results)
- use frequency / percent freq table then bar chart (most used way to present data)
- bar chart has gaps between the columns
- mode is the only "average" that is meaningful.

- e.g
- gender
  - eye colour
  - postcode
  - rego number