

9.2 Statistical Tables and Diagrams

Diagrams may include:

1. Bar Graphs
2. Pie charts/circle graphs
3. Broken line graphs
4. Histogram
5. Box and whiskers plots

Tables may include:

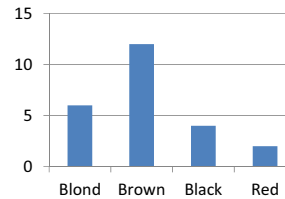
1. Condensed frequency tables
2. Relative frequency tables
3. Grouped data tables

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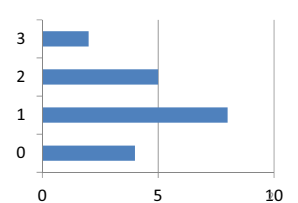
1. Bar graphs – studied in grade 6/7

For representing qualitative data or discrete quantitative data

color of hair	frequency
Blond	6
Brown	12
Black	4
Red	2



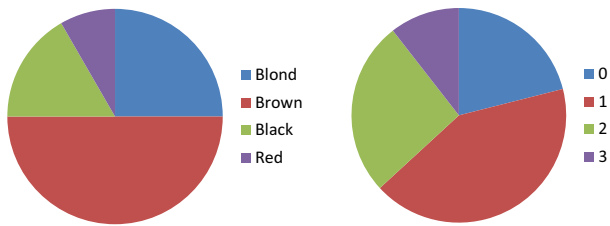
# of pets	frequency
0	4
1	8
2	5
3	2



2. Pie/circle Charts – studied in grade 7/8

For representing qualitative data or discrete quantitative data

We represent the percentage of each category as a percentage relative to the total. (part of the whole)

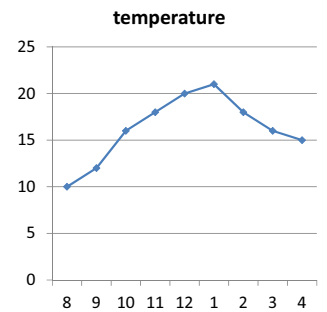


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3. Broken line graph - studied in grade 6

For representing data that continually changes over time.

hour	temperature
8	10
9	12
10	16
11	18
12	20
1	21
2	18
3	16
4	15



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4. Histograms

For representing quantitative data grouped in classes

But first we need to look at different types of tables

- Sometimes we will want to group raw data into classes. We will do this when there is a large amount of raw data and if the numbers are distinct (very few repeating data values).
- Each class will be defined by an interval such as: [0 , 10 [then [10,20[... etc.
- This is called a grouped data table.

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4. Histograms

Ex: Consider the marks that 15 students got on a quiz

Raw data: 63, 72, 58, 80, 67, 63, 58, 92, 80, 80, 72, 76, 63, 63, 92

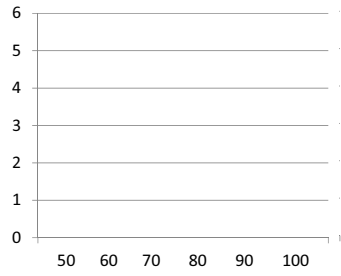
Marks	Tally	Frequency	Relative frequency
[50,60[
[60,70[
[70,80[
[80,90[
[90,100]			
Total	15	15	100

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Now we can draw the histogram for the marks of the 15 students

It looks almost like the bar graph, but the intervals are connected

Marks	Frequency
[50,60[2
[60,70[5
[70,80[3
[80,90[3
[90,100]	2
Total	15



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