








Key Vocabulary

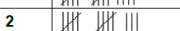
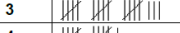
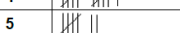

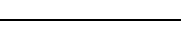

Data	Information that we can analyse.
Categorical Data	Data that is sorted in to categories or groups. E.g. "What's your favourite colour?", "How old are you?".
Discrete data	Numerical data that can be counted.
Pictogram	A way of showing data using images to represent numbers.
Frequency	How often something happened or how many items there are.
Bar Chart	A graph with equal width bars that shows the frequencies of items or groups.
Pie Chart	A method for showing data as parts of a circle.
Time series	A set of data that shows how something is changing over time. E.g. how the temperature changes during the day.
Tally	A method for keeping track of frequencies whilst counting items. 
Key	A part of a graph that explains how the data is being represented. E.g. "☒ = 2 emails sent."

Key facts / Diagrams

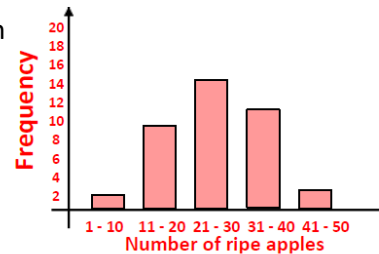
Pictogram

Donut sales in a bakery		
Day	Key:  represents 12 donuts	Amount
Monday		36
Tuesday		24
Wednesday		21
Thursday		42
Friday		51

A frequency table with tallying

Score on a dice		
Score	Tally	Frequency
1		14
2		13
3		18
4		11
5		7
6		12

A bar chart with grouped data



Common misconceptions

- You must make sure that axes are labelled correctly with numbers on the lines not in the spaces and equal gaps between numbers.
- You must remember that a pie chart is based on a circle having 360° and not 100%.
- There must be equal gaps between bars in a bar chart and bars must be of equal width.

Worked examples

24 children were asked what they wanted to be in the future.

Future job	Frequency
Doctor	8
Nurse	2
Lawyer	6
Police officer	2
Teacher	6

Start by working out the angle needed for each section. E.g. 8/24 wanted to be a doctor. This is 1/3. 1/3 of 360 = 120°. Nurse 2/24 x 360 = 30°.

Measure around 120° for the section for doctor. Label this section.

Turn the protractor around and measure on 30° for nurse.

Keep going for all the sections, making sure you get back to where you started.

