

# Y7 Maths Knowledge Organiser Topic 17: Handling Data

What must I be able to do?	Key vocabulary	
<ul style="list-style-type: none"> <li>Understand the difference between types of data</li> <li>Construct and interpret:                             <ul style="list-style-type: none"> <li>Tables (including tally and two way)                                     <ul style="list-style-type: none"> <li>Sparx M945, M597, M899</li> </ul> </li> <li>Bar charts (including dual and compound)                                     <ul style="list-style-type: none"> <li>Sparx M738, M460</li> </ul> </li> <li>Pictograms                                     <ul style="list-style-type: none"> <li>Sparx M644</li> </ul> </li> <li>Line graphs</li> <li>Pie charts                                     <ul style="list-style-type: none"> <li>Sparx M165</li> </ul> </li> <li>Explore misleading graphical representations</li> </ul> </li> </ul>	<b>Interpret</b>	Explain the meaning.
	<b>Quantitative</b>	Numerical data (numbers).
	<b>Qualitative</b>	Data that uses words rather than numbers.
	<b>Primary data</b>	Data collected by you.
	<b>Secondary data</b>	Data collected by someone else.
	<b>Misleading</b>	Displaying data in such a way that may give the wrong idea.

### Types of bar charts

**Y7 Favourite Core Subjects**

Dual bar chart  
Bars are side by side – good for comparing differences

**Y7 Favourite Core Subjects**

Compound bar chart (also called a composite bar chart)  
Bars are on top of each other – good for comparing totals

### Line graphs

**Takings (in 000s)**

Usually used to represent changes over a period of time

### Pie Charts

Favourite Subject	Number of students	Angle calculation	Angle to draw
Maths	30	$30 \div 60 \times 360 =$	$180^\circ$
English	20	$20 \div 60 \times 360 =$	$120^\circ$
Science	10	$10 \div 60 \times 360 =$	$60^\circ$

Total = 60

Step 1: Work out the total number of students by adding the frequency up

Step 2: For each frequency divide it by the total and multiply by 360 (as the total angles in a circle = 360°)

Step 3: Now draw your pie chart, measuring these angles and labelling each sector

### Pictogram

Don't forget a key!

● = 2 children

What we would like for our school lunches!	
Vegetable lasagne	●●●●●
Chicken pie	●●●●●●●
Cheese salad	●●●●●●
Cottage pie	●●
Casserole	●●●●●●●●
Roast dinner	●●●●●●●●