## 47 Maths Knowledge Organiser Topic 16: Handling Data

| What must I be able to do? | Key vocabulary |  |
| :---: | :---: | :---: |
| $\square$ understand the difference between types of data | Interpret | Explain the meaning. |
| construct and interpret: |  |  |
| $\square$ Tables (including tally and two way) > Sparx m945, m597, m899 | Quantitative | Numerical data (numbers). |
| $\square$ Bar charts (including comparative and composite) <br> > Sparx M738, m460 | Qualitative | Data that uses words rather than numbers. |
| $\square$ Pictograms <br> > Sparx M644 | Primary data | Data collected by you. |
| $\square \quad$ Line graphs | Secondary data | Data collected by someone else. |
| $\square$ Pie charts |  |  |
| > SparxM165 <br> Explore misleading graphical representations | Misleading | Displaying data in such a way that may give the wrong idea. |

## Types of bar charts


comparative bar chart
Bars are side by side - good for comparing differences

composite bar chart
Bars are on top of each other - good for comparing totals

## Line graphs



Usually used to represent changes over a period of time

Pictogram Don't forget a key!

| $\mathrm{O}=\mathbf{2}$ children |  |
| :--- | :--- |
| What we would like for our school lunches! |  |
| Vegetable lasagne | 000 |
| Chicken pie | 000000 |
| Cheese salad | 00000 |
| Cottage pie | 0 |
| Casserole | 0000000 |
| Roast dinner | 00000000 |

## 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 | $10 \div 60 \times 360=$ | $60^{\circ}$ |
| Step 1: Wor out the total number of students by adding the frequency up | $\text { Total }=60$ <br> FAVOURI <br> Science | Step 2: For each divide it by the multiply by 360 angles in a circle <br> SUBJECT Step <br> your <br> meas <br> angle <br> each <br> math | frequency tal and as the total $360^{\circ}$ ) <br> Now draw chart, ing these and labelling ctor |

