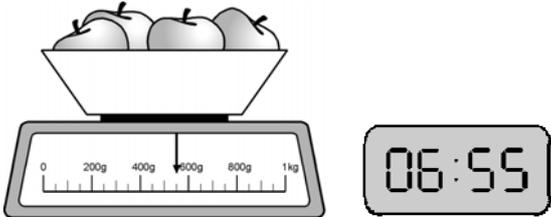
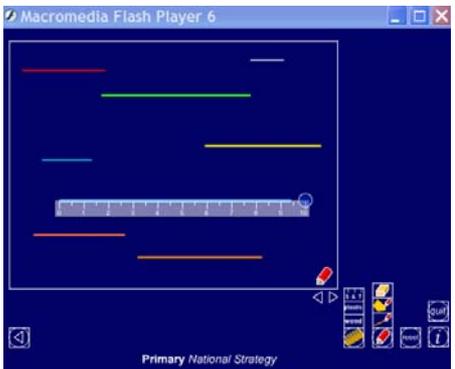
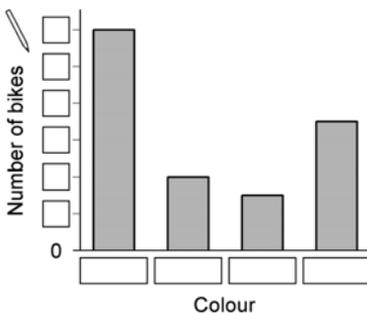
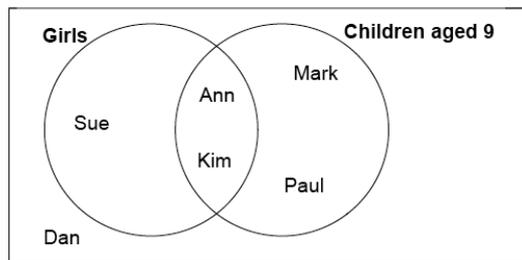


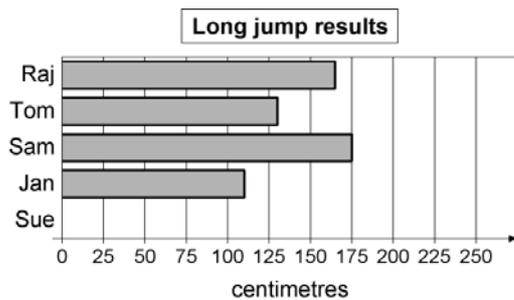
### Year 4 Block C

The models, images and practical resources detailed below will support the teaching of this Block. The text in italics relates directly to the learning overview of each Unit in the Block – this is accessed using the Planning tab in the Framework. Select: Planning–Year group–Block, then click on the Unit tabs.

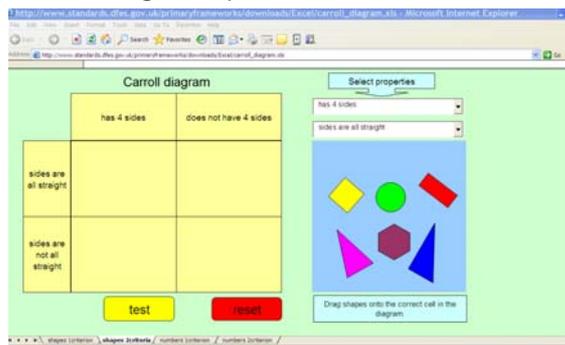
 <p>Ruler ITP</p> 	<p>Children <b>choose and use appropriate instruments and units</b> to measure and record lengths to the nearest half centimetre, weights in grams and kilograms to the nearest half division on the scales, and timings in seconds.</p> <p>Ruler ITP can be found in the library section of the Primary Framework.</p>										
<table border="1" data-bbox="236 1243 502 1422"> <thead> <tr> <th>Colour</th> <th>Number of bikes</th> </tr> </thead> <tbody> <tr> <td>green</td> <td>4</td> </tr> <tr> <td>red</td> <td>7</td> </tr> <tr> <td>blue</td> <td>12</td> </tr> <tr> <td>pink</td> <td>3</td> </tr> </tbody> </table> 	Colour	Number of bikes	green	4	red	7	blue	12	pink	3	<p>Children consider what data to collect and how to collect it. They <b>collect their data and organise it in a table</b>.</p> <p>They consider how to <b>represent the data in a bar chart</b>.</p> <p>In groups, children <b>collect data</b>, measuring where necessary. They work with a range of data, such as shoe size and width of shoe across the widest part of the foot, the number of letters in children's names, the width of their hand spans, the distance around their neck and wrist, data from nutrition panels on cereal packets, and so on.</p>
Colour	Number of bikes										
green	4										
red	7										
blue	12										
pink	3										



Boys		Girls	
Name	Age	Name	Age
Mark	9		9
	8	Ann	
	9		8



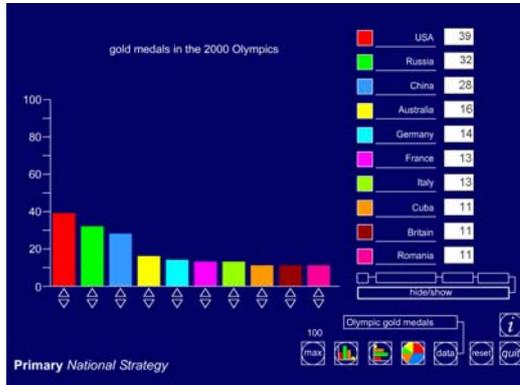
Carroll diagram spreadsheet



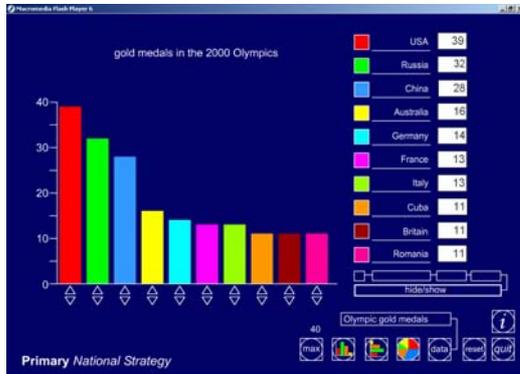
They choose a **Venn or Carroll diagram**, or a horizontal or vertical **pictogram or bar chart** to represent the data. Where appropriate, they use the support of an ICT package.

Carroll diagram spreadsheet can be found in the library section of the Primary Framework.

Data handling ITP



Data handling ITP



Children explore **the effect of changing the step size** on the scale of graphical representations, considering step sizes of 1, 2, 5, 10 and 20 as appropriate.

For example, these graphs were produced by the ITP Data handling. Children consider how the differences appear to be greater on the bar chart with the scale numbered in 10s than on the bar chart with the scale numbered in 20s.

Data handling ITP can be found in the library section of the Primary Framework.

Ways of coming to school today

	number of children
car	4 stick figures
bus	8 stick figures
walk	10 stick figures
taxi	1 stick figure
bicycle	3 stick figures

1 stick figure represents 1 child

Favourite ways of coming to school

	number of children
car	7 stick figures
bus	3 stick figures
walk	5 stick figures
taxi	1 stick figure
bicycle	8 stick figures

1 stick figure represents 1 child

They **decide on a suitable question or hypothesis** to explore for each data set they work on. Children **interpret** their diagrams and graphs against their hypothesis or question and **draw a conclusion**.

Children present their data in a different way; for example, they change the step size of scales using steps of 2, 5, 10 and 20, as appropriate. They **evaluate the effect of different scales** on interpretation of the data. Children look at the ways in which others have represented their data and decide as a class which graphs, charts and tables are the most meaningful.