

## GRAPHS AND CHARTS

Name: \_\_\_\_\_

**Assessment Criteria:** Select, construct and modify, on paper and using ICT: pie charts for categorical data; bar charts and frequency diagrams for discrete and continuous data; simple time graphs for time series; scatter graphs. Identify which are most useful in the context of the problem.

*You will need 2 mm graph paper and access to a computer with a spreadsheet facility for this task. Attach the graph paper, and printouts of your computer work, to this sheet.*

1. Use 2 mm graph paper to construct a frequency diagram for the data in the table on the right.

Height	Frequency
$0 \leq h < 20$	2
$20 \leq h < 40$	11
$40 \leq h < 60$	15
$60 \leq h < 80$	32
$80 \leq h < 100$	20

Flavour	No. of tubs
Vanilla	8
Chocolate	5
Strawberry	6
Mint	5
Raspberry Ripple	6

2. Show how to work out the angle needed for the vanilla ice-cream sector of a pie chart for this data.

3. Transfer the ice-cream data to a spreadsheet and produce a pie chart of the results.
4. The daily temperatures at midday in London are recorded for a particular week. The results are shown in the table below. Transfer the results to a computer and choose an appropriate graph to represent this.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Temperature	18	20	24	25	26	24	21

5. The table shows the number of tubs of ice-cream sold in a particular week, and also the midday temperature on that day. On 2 mm graph paper, construct an appropriate graph to show this information.

Day	No. of tubs	Temperature
Monday	3	13
Tuesday	6	15
Wednesday	7	18
Thursday	12	21
Friday	11	22
Saturday	15	21
Sunday	16	20

Overall, I think my success level is:

Low      High

Q	GRAPHS AND CHARTS	☺	☹
	I can construct a frequency diagram for grouped continuous data		
	I can construct a pie chart by hand		
	I can construct a pie chart using a computer		
	I can construct a line graph		
	I can construct a scatter diagram		
	I can choose the correct type of graph for a given set of data		
	<i>I can present a concise, reasoned argument, using symbols, diagrams, graphs and related explanatory texts</i>		
I need to practise ...			