UNIT 11 *Data Collection and Presentation*

Overhead Slides

Overhead Slides

OS 11.1   *Tennis Player Data*

Pete Sampras		Goran Ivanisevic
26	**Age (years)**	26
Washington DC	**Birthplace**	Split, Croatia
Orlando, Florida	**Residence**	Monte Carlo
6 ft 1 in	**Height**	6 ft 4 in
170 lb	**Weight**	180 lb
$ 32 422 649	**Career Winnings**	$ 16 536 936
1	**World Ranking**	25
10	**Grand Slam Titles**	0
10	**Head to Head**	6

Wimbledon 1998

Pete Sampras		Goran Ivanisevic
6	**Matches**	6
105	**Aces**	161
41	**Double Faults**	78
55%	**First Serve Percentage**	55%
89%	**First Serve Points Won**	87%
60%	**Second Serve Points Won**	52%
136 mph	**First Serve Max Speed**	128 mph
123 mph	**First Serve Average**	118 mph
126 mph	**Second Serve Max Speed**	116 mph
109 mph	**Second Serve Average**	104 mph

Lifestyle

Car: black Porsche Turbo S

Love life: girlfriend is Kimberley Williams, a 26 year old actress who starred in the film *Father of the Bride*.

Likes: Italian food, playing golf and flying his private jet.

Coach: former player Paul Annacone.

Car: does not drive in Monte Carlo

Love life: on the rocks. Has split up with girlfriend of five years.

Likes: Italian food, playing golf and competitive football.

Coach: has split with his long-term coach Bob Brett and now travels with his good friend Vedran Martic.

OS 11.2   *Database*

Niraj collects information about some friends and puts it in the database below:

Name	Age	Shoe Size	Gender	Height	Place of Birth
Rachel	10	4	F	142 cm	Plymouth
Simon	11	6	M	153 cm	Plymouth
Hannah	12	7	F	186 cm	Plymouth
Jai	14	8	M	172 cm	Derby
Vikram	11	5	M	149 cm	Bristol
Fatima	12	4	F	162 cm	Plymouth
Fatoumata	12	5	F	157 cm	Exeter
Nigel	10	6	M	148 cm	London
Emma	7	3	F	121 cm	Plymouth

1.   Which columns contain:

   (a)   *qualitative* data,

   (b)   *discrete quantitative* data,

   (c)   *continuous quantitative* data?

2.   Who is the *tallest* person born in Plymouth?

3.   Where was the *shortest female* born?

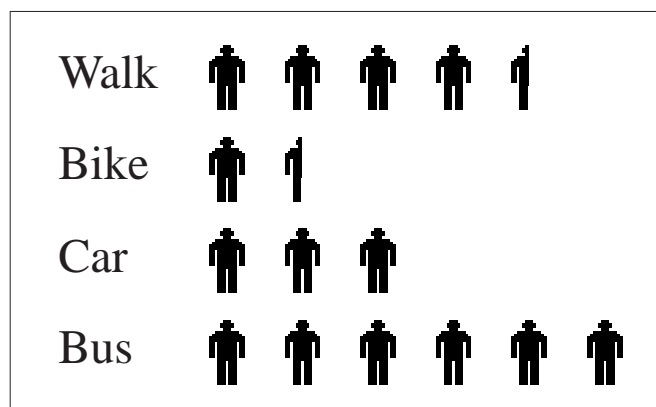4.   Who is the *tallest* person who wears *size 6* shoes?

OS 11.3

Collecting Data

The pupils in a class collected data on how they travelled to school.

Complete this table:

Method of Travel	Tally	Frequency
Walk	‖‖‖ ‖‖	
Bike	‖‖	
Car	‖‖‖ ‖	
Bus	‖‖‖ ‖‖‖ ‖‖	
	TOTAL	

A. How many pupils are there in the class?

This pictogram illustrates the data:

Walk	👤 👤 👤 👤 👤
Bike	👤 👤
Car	👤 👤 👤
Bus	👤 👤 👤 👤 👤 👤

B. What does each person in the pictogram represent?

C. What other ways can be used to illustrate the data?

OS 11.4

Data Collection Sheet

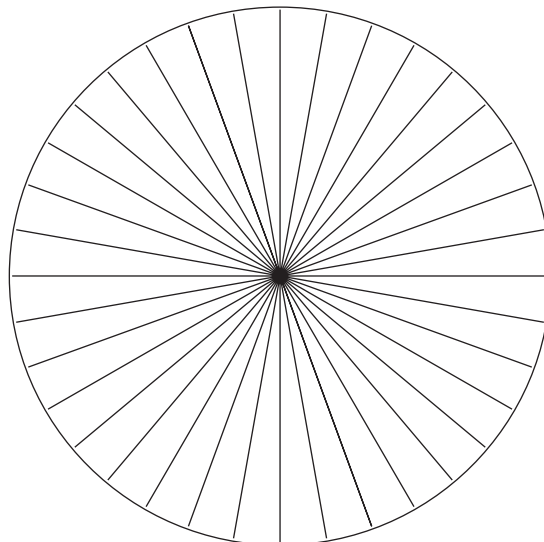|	*Tally*	*Frequency*
	TOTAL	

OS 11.5

Pie Charts

This table shows the time spent by a pupil on each homework subject one evening:

Subject	Maths	English	Science	Technology	French	Geography
Time (mins)	50	20	30	20	30	30

Represent the data with a pie chart.

Subject	Time (mins)	Fraction of total time	Angle
Maths	50	$\dfrac{50}{180}$	$\dfrac{50}{180} \times 360\,° = 100\,°$
English	20		
Science	30		
Technology	20		
French	30		
Geography	30		
Total	180		

OS 11.6

Birthdays

Tally Chart

		Total
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug		
Sep		
Oct		
Nov		
Dec		

Bar Chart

8												8
7												7
6												6
5												5
4												4
3												3
2												2
1												1
0	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	0