

UNIT 11 *Data Collection and Presentation*

Overhead Slides

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- 11.1 Tennis Player Data
- 11.2 Database
- 11.3 Collecting Data
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- 11.5 Pie Charts
- 11.6 Birthdays

OS 11.1

Tennis Player Data

Pete Sampras

26	Age (years)
Washington DC	Birthplace
Orlando, Florida	Residence
6 ft 1 in	Height
170 lb	Weight
\$ 32 422 649	Career Winnings
1	World Ranking
10	Grand Slam Titles
10	Head to Head

Goran Ivanisevic

26	Age (years)
Split, Croatia	Birthplace
Monte Carlo	Residence
6 ft 4 in	Height
180 lb	Weight
\$ 16 536 936	Career Winnings
25	World Ranking
0	Grand Slam Titles
6	Head to Head

Wimbledon 1998

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:

<i>Name</i>	<i>Age</i>	<i>Shoe Size</i>	<i>Gender</i>	<i>Height</i>	<i>Place of Birth</i>
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

- Which columns contain:
 - qualitative* data,
 - discrete quantitative* data,
 - continuous quantitative* data?
- Who is the *tallest* person born in Plymouth?
- Where was the *shortest female* born?
- Who is the *tallest* person who wears *size 6* shoes?

OS 11.3

Collecting Data

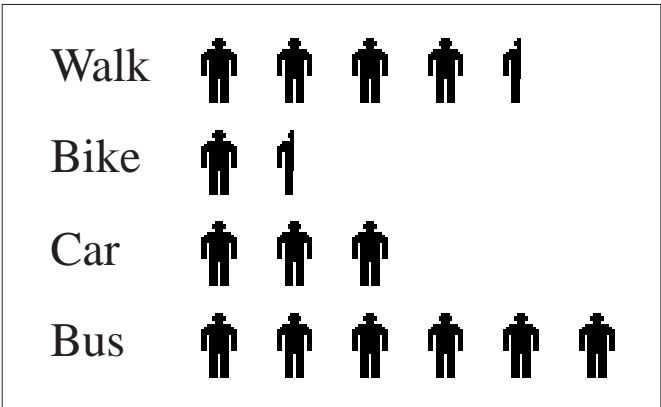
The pupils in a class collected data on how they travelled to school.

Complete this table:

<i>Method of Travel</i>	<i>Tally</i>	<i>Frequency</i>
Walk		
Bike		
Car		
Bus		
TOTAL		

A. How many pupils are there in the class?

This pictogram illustrates the data:



B. What does each person in the pictogram represent?

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

Data Collection Sheet

TOTAL

OS 11.5

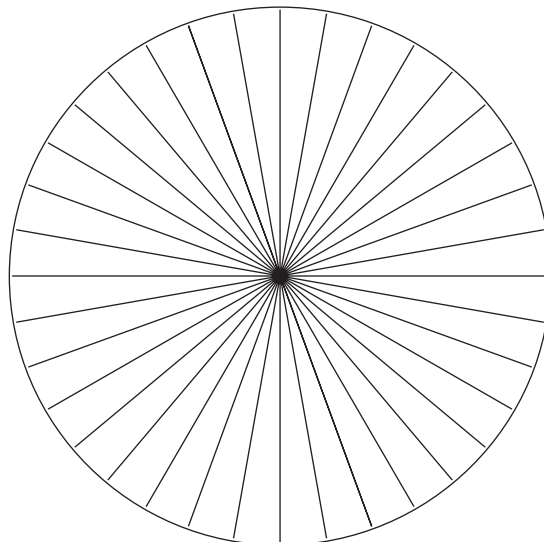
Pie Charts

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

<i>Subject</i>	<i>Maths</i>	<i>English</i>	<i>Science</i>	<i>Technology</i>	<i>French</i>	<i>Geography</i>
<i>Time (mins)</i>	50	20	30	20	30	30

Represent the data with a pie chart.

<i>Subject</i>	<i>Time (mins)</i>	<i>Fraction of total time</i>	<i>Angle</i>
Maths	50	$\frac{50}{180}$	$\frac{50}{180} \times 360^\circ = 100^\circ$
English	20		
Science	30		
Technology	20		
French	30		
Geography	30		
<i>Total</i>	180		



OS 11.6

Birthdays

Tally Chart

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

Bar Chart

