-	stionnaire is about sport played			
1. Sex _	F	5. On average how much time do you play sport each week?	1. Sex M	5. On average how much time do you play sport each week?
2. Age:	Under 16	less than 1 hour	2. Age: Under 16	less than 1 hour
2. / igo.	16-24	1-2 hours	16-24	
	16-24 25-65 over 65Y	2-3 hours	16-24Y	2-3 hours
	over 65	3-4 hours	over 65	3-4 hours
		more than 4 hours		more than 4 hours
3. Did yo	u play sport?NO		3. Did you play sport? NO	
		Compared to last year, I now play		Compared to last year, I now play
4 Which	sports did you participate in?	less sport	4. Which sports did you participate in	less sport
1	oporto dia you participato in:	more sport		more sport
		same amount		same amount
		7. Why do you play sport?		7. Why do you play sport?
This que	stionnaire is about sport played	by you in the last month Ref 3	This questionnaire is about sport play	ed by you in the last month Ref 4
-	stionnaire is about sport played	by you in the last month Ref 3 5. On average how much time do you	This questionnaire is about sport play 1. SexF	5. On average how much time do you
1. Sex	F	5. On average how much time do you play sport each week?	1. SexF	5. On average how much time do you play sport each week?
1. Sex	Under 16	5. On average how much time do you play sport each week? less than 1 hour	1. SexF 2. Age: Under 16 Y	5. On average how much time do you play sport each week? less than 1 hour
-	F	5. On average how much time do you play sport each week? less than 1 hour 1-2 hours	1. SexF 2. Age: Under 16 Y	5. On average how much time do you play sport each week? less than 1 hour
1. Sex	F Under 16Y 16-24 25-65	5. On average how much time do you play sport each week? less than 1 hour 1-2 hoursY	1. Sex F 2. Age: Under 16 Y 16-24 25-65	5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours
1. Sex	F	5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hoursY 3-4 hours	1. SexF 2. Age: Under 16 Y	5. On average how much time do you play sport each week? less than 1 hour
1. Sex 2. Age:	F Under 16Y 16-24 25-65	 5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hoursY 3-4 hours more than 4 hours 6. Compared to last year, I now play 	1. Sex F 2. Age: Under 16 Y 16-24 25-65	 5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours 3-4 hoursY more than 4 hours 6. Compared to last year, I now play
 1. Sex 2. Age: 3. Did yo 4. Which 	F Under 16Y 16-24Y 25-65 over 65 u play sport?YES sports did you participate in?	 5. On average how much time do you play sport each week? less than 1 hour	1. SexF 2. Age: Under 16Y 16-242 25-65 over 65 3. Did you play sport?YES 4. Which sports did you participate in	5. On average how much time do you play sport each week? less than 1 hour
 1. Sex 2. Age: 3. Did yo 4. Which 	F Under 16Y 16-24 25-65 over 65 u play sport?YES sports did you participate in? gym	 5. On average how much time do you play sport each week? less than 1 hour	1. SexF 2. Age: Under 16Y 16-242 25-65 over 65 3. Did you play sport?YES 4. Which sports did you participate ingym	5. On average how much time do you play sport each week? less than 1 hour
 1. Sex 2. Age: 3. Did yo 4. Which 	F Under 16Y 16-24Y 25-65 over 65 u play sport?YES sports did you participate in?	 5. On average how much time do you play sport each week? less than 1 hour	1. SexF 2. Age: Under 16Y 16-242 25-65 over 65 3. Did you play sport?YES 4. Which sports did you participate in	5. On average how much time do you play sport each week? less than 1 hour
 1. Sex 2. Age: 3. Did yo 4. Which 	F Under 16Y 16-24 25-65 over 65 u play sport?YES sports did you participate in? gym	 5. On average how much time do you play sport each week? less than 1 hour	1. SexF 2. Age: Under 16Y 16-242 25-65 over 65 3. Did you play sport?YES 4. Which sports did you participate ingym	5. On average how much time do you play sport each week? less than 1 hour
 1. Sex 2. Age: 3. Did yo 4. Which 	F Under 16Y 16-24 25-65 over 65 u play sport?YES sports did you participate in? gym	 5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours 2-3 hours 3-4 hours 3-4 hours 6. Compared to last year, I now play less sport 6. Compared to last year, I now play less sport same amountY 	1. Sex F 2. Age: Under 16 Y 16-24 Y 25-65 Y over 65 Y 3. Did you play sport? YES 4. Which sports did you participate in gym	5. On average how much time do you play sport each week? less than 1 hour

1



1. SexM	5. On average how much time do you play sport each week?	1. SexF	On average how much time do you play sport each week?
2. Age: Under 16 16-24 Y 25-65 over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	2. Age: Under 16 16-24 25-65 Y over 65	less than 1 hour
3. Did you play sport? Yes4. Which sports did you participate in?	6. Compared to last year, I now play less sport	3. Did you play sport? No4. Which sports did you participate in?	6. Compared to last year, I now play less sport
football swimming	more sport same amount Y		more sport same amount
	7. Why do you play sport? because friends do		7. Why do you play sport?

This questionnaire is about sport played by you in the last month Ref 5

This questionnaire is about sport played by you in the last month Ref 7

This questionnaire is about sport played by you in the last month Ref 8

This questionnaire is about sport played by you in the last month Ref 6

1. Sex F	5. On average how much time do you play sport each week?	1. SexM	5. On average how much time do you play sport each week?
2. Age: Under 16 16-24 25-65 over 65Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	2. Age: Under 16 Y 16-24 25-65 over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours
3. Did you play sport? No	6. Compared to last year, I now play	3. Did you play sport?Yes	6. Compared to last year, I now play
4. Which sports did you participate in?	less sport more sport same amount	4. Which sports did you participate in? football cricket	less sport more sport Y same amount
	7. Why do you play sport?	athletics swimming	7. Why do you play sport? to improve because friends do to win

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6. Compared to	last year, I now play
less sport	· · · · · · · · · · · · · · · · · · ·
more sport	Y
same amount _	

Why do you play sport?
to improve
because friends do
to win



1. Sex _	M	5. On average how much time do you play sport each week?	1. Sex M	5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours Y 2-3 hours Y 3-4 hours Y more than 4 hours Y	2. Age: Under 16 Y 16-24 25-65 over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours
	u play sport? Yes sports did you participate in? squash	6. Compared to last year, I now play less sportY more sport same amount	 Did you play sport? No Which sports did you participate in? 	6. Compared to last year, I now play less sport more sport same amount
		7. Why do you play sport? to win because friends do		7. Why do you play sport?

This questionnaire is about sport played by you in the last month Ref 9

This questionnaire is about sport played by you in the last month Ref 11

This questionnaire is about sport played by you in the last month	Ref 12
This questionnalle is about sport played by you in the last month	Rei 12

This questionnaire is about sport played by you in the last month Ref 10

1. Sex F 2. Age: Under 16 16-24 Y 25-65 Y over 65 Y	 5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours 	1. SexF 2. Age: Under 16 16-24Y 25-65 over 65	 5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours 3-4 hoursY more than 4 hours
 Did you play sport? No Which sports did you participate in? 	6. Compared to last year, I now play less sport more sport same amount	 Did you play sport?Yes Which sports did you participate in?keep fitbadminton 	6. Compared to last year, I now play less sportY more sport same amount
	7. Why do you play sport?		7. Why do you play sport? to keep fit because friends do

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3



This que	stionnaire is about sport played	d by you in the last month Ref 13	This que	stionnaire is about sport playe	d by you in the last month Ref 14
1. Sex _	F	5. On average how much time do you play sport each week?	1. Sex_	M	5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24 25-65 over 65Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	U	Under 16 16-24 25-65 Y over 65	less than 1 hour
3. Did yo	ou play sport? No	6. Compared to last year, I now play	3. Did yo	ou play sport?Yes	6. Compared to last year, I now play
4. Which	sports did you participate in?	less sport more sport same amount		sports did you participate in? football squash	less sportY more sport same amount
		7. Why do you play sport?		swimming	7. Why do you play sport? to improve to win because friends do

This questionnaire is about sport played by you in the last month Ref 15

1. Sex _	M	5. On average
		play sport eacl
2. Age:	Under 16 Y	less than 1 ho
-	16-24	1-2 hours
	25-65	2-3 hours
	over 65	3-4 hours
		more than 4 ho
3. Did vo	u play sport? Yes	
,		Compared t
4 Which	sports did you participate in?	less sport
1	fishing	more sport
	football	same amount
	swimming	
		Why do you

how much time do you h week? our_____ _____ ours _____ Y to last vear. I now play

ess sport	Y
nore sport	
ame amount	

play sport?

This questionnaire is about sport played by you in the last month Ref 16

1. Sex		F
2. Age:	Under 16 16-24 25-65 over 65	Y
3. Did yo	u play sport?	Yes
4. Which		ipate in? keep fit mming

badminton

5. On average how much time do yo play sport each week?	u
ess than 1 hour	
1-2 hours	
2-3 hours	
3-4 hours	
more than 4 hoursY	
6. Compared to last year, I now play less sport	
more sportY	1
same amount	

7. Why do you play sport?
something to do, to win,
because friends do,
sports centre nearby

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This (questionnaire is	s about spo	rt played l	ov vou in	the last month	Ref 17
11110		s about spo	n playea i	<i>y</i> you iii		INCI II

This questionnaire is about sport played by you in the last month Ref 18

This questionnaire is about sport played by you in the last month Ref 20

1. Sex F	5. On average how much time do you play sport each week?	1. Sex M	5. On average how much time do you play sport each week?
2. Age: Under 16	less than 1 hour		less than 1 hour
16-24 25-65 Y	1-2 hours 2-3 hours	16-24 25-65 Y	1-2 hours 2-3 hours
over 65	3-4 hours	over 65	3-4 hours
	more than 4 hours		more than 4 hours Y
3. Did you play sport? No		3. Did you play sport?Yes	
	6. Compared to last year, I now play		6. Compared to last year, I now play
4. Which sports did you participate in?	less sport	4. Which sports did you participate in?	less sport
	more sport same amount	fishing	more sport same amountY
		darts	
	7. Why do you play sport?	snooker	7. Why do you play sport? something to do because friends do

This questionnaire is about sport played by you in the last month Ref 19

1. Sex _	F	5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours Y
2	bu play sport? Yes	6. Compared to last year, I now play less sport Y more sport
	darts snooker badminton	same amount 7. Why do you play sport? something to do because friends do

1. Sex		F
2. Age:	Under 16 16-24 25-65 over 65	
3. Did yo	u play sport?	Yes
4. Which	sports did you pa	athletics
	-	ymnastics swimming

5. On average how much time do you play sport each week?
less than 1 hour
1-2 hours
2-3 hours
3-4 hours
more than 4 hours Y
6. Compared to last year, I now play less sportY more sportY same amount
7. Why do you play sport?

<u> </u>	,	something to do
		because friends do
		sports centre nearby

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	This /	questionnaire	e is about	sport pla	ved by vo	ou in the l	ast month	Ref 21
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This questionnaire is about sport played by you in the last month Ref 22

This questionnaire is about sport played by you in the last month Ref 24

1. Sex F	5. On average how much time do you play sport each week?	1. Sex M	5. On average how much time do you play sport each week?
2. Age: Under 16 16-24 25-65 over 65Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	2. Age: Under 16 16-24 25-65 over 65 Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hoursY
3. Did you play sport? No	6. Compared to last year, I now play	3. Did you play sport?Yes	6. Compared to last year, I now play
4. Which sports did you participate in?	less sport more sport same amount	4. Which sports did you participate in? badminton bouls	less sport more sport same amountY
	7. Why do you play sport?	walking	7. Why do you play sport? to keep fit something to do because friends do

This questionnaire is about sport played by you in the last month Ref 23

1. Sex _	F	5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24Y	less than 1 hour 1-2 hours
	25-65 over 65	2-3 hours Y 3-4 hours more than 4 hours
	ou play sport? Yes	6. Compared to last year, I now play less sport
	sports did you participate in? keep fit swimming	more sportY same amountY
		7. Why do you play sport? to keep fit because friends do

keep fit

5. On average how much time do you play sport each week?
less than 1 hour
1-2 hours
2-3 hours
3-4 hours
more than 4 hours Y
6. Compared to last year, I now play less sportY more sport
same amount

7. Why do you play sport?

_____to keep fit

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This que	stionnaire is about sport played	by you in the last month Ref 25	This questionnaire is about sport played	by you in the last month Ref 26
1. Sex _	F	5. On average how much time do you play sport each week?	1. SexF	5. On average how much time do you play sport each week?
2. Age:	Under 16	less than 1 hour	2. Age: Under 16	less than 1 hour
2. Ago.	16-24	1-2 hours Y	16-24	1-2 hours
	16-24 25-65Y	2-3 hours	25-65	2-3 hours
	over 65	3-4 hours	over 65Y	3-4 hours
		more than 4 hours		more than 4 hours
3. Did yo	ou play sport? Yes		3. Did you play sport? No	
		Compared to last year, I now play		6. Compared to last year, I now play
4. Which	sports did you participate in?	less sport	4. Which sports did you participate in?	less sport
	tennis	more sport		more sport
	keep fit	same amountY		same amount
		7. Why do you play sport? to keep fit		7. Why do you play sport?
This que	stionnaire is about sport played	by you in the last month Ref 27	This questionnaire is about sport played	by you in the last month Ref 28
1 Sex	м	5. On average how much time do you	1. SexF	5. On average how much time do you
1.000		play sport each week?	1. 602	play sport each week?
2 4 9 9 1	Lindor 16	less than 1 hour	2 Age: Under 16	less than 1 hour
2. Age:	Under 16	1-2 hours	2. Age: Under 16 16-24 Y	1-2 hours
	16-24 25-65 Y	2-3 hours	25.65	2-3 hours
		3-4 hours	25-65	3-4 hours
	over 65	more than 4 hours	over 65	more than 4 hoursY
3. Did yo	ou play sport? No	······	3. Did you play sport?Yes	

1. SexM		5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours
3. Did yo	ou play sport? No	
4. Which	sports did you participate in?	6. Compared to last year, I now play less sport more sport same amount
		7. Why do you play sport?

11 OOX		play sport each week?
2. Age:	Under 16 Y 16-24 Y 25-65 over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours
3. Did yo	u play sport?Yes	
4. Which sports did you participate in? athletics squash		6. Compared to last year, less sport more sport same amount
	swimming	7. Why do you play sport?

on avoiago non maon amo ao you
lay sport each week?
ess than 1 hour
-2 hours
-3 hours
-4 hours
nore than 4 hoursY
5. Compared to last year, I now play ess sportY
nore sport
ame amount

	 -	 to	keep	fit
		 	_to v	vin

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This quest	ionnaire is about sport played	by you in the last month Ref 29	This que	stionnaire is about sport pla	yed by you in the last month Ref 30
1. Sex	F	5. On average how much time do you play sport each week?	1. Sex_	I	5. On average how much time do you play sport each week?
2. Age:	Under 16	less than 1 hour	2. Age:	Under 16	less than 1 hourY
Ū.	Under 16 Y	1-2 hours	Ū.	16-24 25-65	1-2 hours
	25-65	2-3 hours		25-65	2-3 hours
	over 65	3-4 hours		over 65	3-4 hours
		more than 4 hours			more than 4 hours
3. Did you	play sport? No	6. Compared to last year, I now play	3. Did yo	ou play sport?Ye	6. Compared to last year, I now play
4. Which sports did you participate in?		less sport more sport	4. Which sports did you participate in? keep fit		t more sport
		same amount			same amount
		7. Why do you play sport?			7. Why do you play sport? to keep fit
This quest	ionnaire is about sport played	by you in the last month Ref 31	This que	stionnaire is about sport pla	yed by you in the last month Ref 32

This questionnaire is about sport played by you in the last month Ref 31

1. Sex _	M	5. On average how much time do you play sport each week?	
2. Age:	Under 16 Y 16-24 Y 25-65 over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hoursY more than 4 hours	
4. Which	ou play sport? Yes sports did you participate in? badminton walking	6. Compared to last year, I now play less sport more sportY same amount	
		7. Why do you play sport? to keep fit	

1. Sex_____F 5 2. Age: Under 16 _____ 16-24 _____ Y over 65 3. Did you play sport?_____ No 4. Which sports did you participate in?

> _____ _____

5. On average how much time do you
play sport each week?
less than 1 hour
1-2 hours
2-3 hours
3-4 hours
more than 4 hours
6. Compared to last year, I now play less sport more sport same amount

7. Why do you play sport?

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because friends do





This questionnaire is about sport playe	ed by you in the last month Ref 33	This questionnaire is about sport played	d by you in the last month Ref 34
1. SexM	5. On average how much time do you play sport each week?	1. SexF	5. On average how much time do you play sport each week?
2. Age: Under 16 Y 16-24 Y 25-65 over 65	less than 1 hour Y 1-2 hours	2. Age: Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours
 Did you play sport? Yes Which sports did you participate in? badminton 	6. Compared to last year, I now play less sport more sportY same amount	 Did you play sport? No Which sports did you participate in? 	6. Compared to last year, I now play less sport more sport same amount
	7. Why do you play sport? to win		7. Why do you play sport?

This questionnaire is about sport played by you in the last month Ref 35

This questionnaire is about sport played by you in the last month Ref 36

1. Sex _	M	5. On average how much play sport each week?	
2. Age:	Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	
 3. Did you play sport? Yes 4. Which sports did you participate in?sailing 		more sport	
	badminton	same amount 7. Why do you play sport	

ge how much time do you ach week?	1. Sex_
nour	2. Age:
hours Y	
d to last year, I now play	3. Did yo
	4. Which
nt ¥	

t? because friends do

ex		M	5. pla
ge:	Under 16 16-24 25-65 over 65	Y	le: 1- 2- 3-
id yo		(es	m 6.
/hich	sports did you participate		le: m

5. On average how much time do	you
play sport each week?	
less than 1 hour	Y
1-2 hours	
2-3 hours	
3-4 hours	
more than 4 hours	
6. Compared to last year, I now pla	ay
less sport	
more sport	_ Y
same amount	

7. Why do you play sport?

_to keep fit

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Sports Responses

	about sport played by you in the last month	Ref 37
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This questionnaire is about sport played by you in the last month Ref 38

This questionnaire is about sport played by you in the last month Ref 40

1. Sex F	5. On average how much time do you play sport each week?	1. Sex M	5. On average how much time do you play sport each week?
2. Age: Under 16 16-24 25-65 over 65 Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	2. Age: Under 16 16-24 Y 25-65 over 65	less than 1 hour
 3. Did you play sport? No 4. Which sports did you participate in? 	6. Compared to last year, I now play less sport more sport same amount	 Did you play sport? Yes Which sports did you participate in? football 	6. Compared to last year, I now play less sport more sportY same amount
	7. Why do you play sport?	cricket billiards	7. Why do you play sport? to improve to win dad runs team

This questionnaire is about sport played by you in the last month Ref 39

1. Sex _	M	5. On average how much time do you play sport each week?
2. Age:	Under 16 16-24 25-65Y over 65	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours Y
-	bu play sport? Yes	6. Compared to last year, I now play less sport
	darts billiards	more sport same amount Y
		7. Why do you play sport? something to do because friends do

1. Sex_____F 2. Age: Under 16 _____ 16-24 _____ Y 25-65_____ over 65 _____ 3. Did you play sport?_____ No 4. Which sports did you participate in? _____

5. On average how much time do you play sport each week?
less than 1 hour
1-2 hours
2-3 hours
3-4 hours
more than 4 hours
6. Compared to last year, I now play less sport
more sport
same amount

7. Why do you play sport?

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This questionnaire is about sport played	by you in the last month Ref 41	This questionnaire is about sport played	by you in the last month Ref 42
1. Sex F 2. Age: Under 16	5. On average how much time do you play sport each week? less than 1 hour	J	5. On average how much time do you play sport each week? less than 1 hour
16-24Y 25-65 over 65	1-2 hours 2-3 hours 3-4 hours more than 4 hours	16-24 25-65 over 65 Y	1-2 hours 2-3 hours 3-4 hours more than 4 hours Y
3. Did you play sport? No	6 Compared to last year. I now play	3. Did you play sport?Yes	6. Compared to last year, I now play
4. Which sports did you participate in?	6. Compared to last year, I now play less sport more sport same amount	4. Which sports did you participate in? fishing walking	b. Compared to last year, thow play less sport more sport same amountY
	7. Why do you play sport?		7. Why do you play sport? always have

This questionnaire is about sport played by you in the last month Ref 43

This questionnaire is about sport played by you in the last month Ref 44

2. Age:	Under 16	Y less
0	16-24	1-2 h
	25-65	2-3 h
	over 65	3-4 h
		more
3. Did vo	u play sport? Ye	s
,		6. Co
4. Which	sports did you participate in	n? less :
	fishin	
	dart	•
	snooke	er
		7. W

1. Sex _	M	5. On average how much time do you 1 play sport each week?
2. Age:	Under 16 Y 16-24 25-65 over 65	less than 1 hour 2 1-2 hours 2 2-3 hours 3 3-4 hours Y
3. Did yo	ou play sport? Yes	3
4. Which	sports did you participate in? fishing darts	6. Compared to last year, I now play less sport 4 more sport Y same amount
	snooker	7. Why do you play sport?

1. Sex_		F
2. Age:	Under 16 16-24 25-65	Y
	over 65	·
3. Did yc	ou play sport?	No
4. Which	sports did you particip	bate in?

5. On average how much time do you play sport each week?
less than 1 hour
1-2 hours
2-3 hours
3-4 hours
more than 4 hours
6. Compared to last year, I now play
less sport
more sport
same amount

7. Why do you play sport?

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Sports Responses

This questionnaire is about sport played	by you in the last month Ref 45	This questionnaire is about sport played	by you in the last month Ref 46
1. Sex F	5. On average how much time do you play sport each week?	1. SexM	5. On average how much time do you play sport each week?
2. Age: Under 16 16-24 25-65 over 65Y	less than 1 hour 1-2 hours 2-3 hours 3-4 hours more than 4 hours	2. Age: Under 16 16-24 25-65 Y over 65	1-2 hours
 Did you play sport? No Which sports did you participate in?	 6. Compared to last year, I now play less sport more sport same amount 7. Why do you play sport? 	 Did you play sport? No Which sports did you participate in?	 6. Compared to last year, I now play less sportmore sportsame amount 7. Why do you play sport?

This questionnaire is about sport played by you in the last month Ref 47

This questionnaire is about sport played by you in the last month Ref 48

1. Sex	M	On average how much time do you play sport each week?
2. Age:	Under 16 Y 16-24 Y 25-65 over 65	less than 1 hour 1-2 hours Y 2-3 hours Y 3-4 hours Y more than 4 hours Y
3. Did yo	u play sport? Yes	
	sports did you participate in? football	6. Compared to last year, I now play less sport more sport same amount Y
		7. Why do you play sport? because friends do

M
Y
Yes
articipate in? football

5. On average how much time do y blay sport each week?	′ou
ess than 1 hour	
I-2 hours	Y
2-3 hours	
3-4 hours	
more than 4 hours	
6. Compared to last year, I now pla ess sport	ıy
nore sport	
same amount	Υ

7. Why do you play sport? _____because friends do

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This questionnaire is about sport played by you in the last month Ref

This questionnaire is about sport played by you in the last month **Ref 50**

1. Sex M 2. Age: Under 16 16-24 Y 25-65 over 65	5. On average how much time do you play sport each week? less than 1 hour 1-2 hours Y 2-3 hours 3-4 hours	1. Sex F 2. Age: Under 16 Y 16-24 25-65 over 65	5. On average how much time do you play sport each week? less than 1 hour 1-2 hours 2-3 hours 3-4 hoursY
3. Did you play sport? Yes 4. Which sports did you participate in?football	more than 4 hours 6. Compared to last year, I now play less sport more sport	3. Did you play sport?Yes 4. Which sports did you participate in? gymnastics	more than 4 hours 6. Compared to last year, I now play less sport more sport
	same amount Y 7. Why do you play sport? because friends do	swimming	same amountY 7. Why do you play sport? because friends do to improve something to do



Sports questionnaire responses – teacher notes

We have provided a set of 50 responses to a simple questionnaire, to use in introducing and practising basic statistical techniques. They are available:

- (a) in questionnaire form in the Sports Responses Word or pdf file: they can be printed out and photocopied, then cut up to use in paper or (better) laminated form;
- (b) as an Excel spreadsheet, Sports Responses.xls.

We highly recommend doing some or all of the introductory work (including the 'summarise' exercises) using the 'raw' questionnaire data. It gives students a feel for what the techniques mean; is quite manageable (especially if done in pairs); but also helps them appreciate the point of using a spreadsheet.

Some short exercises give practice in particular techniques.

I. Summarise	count responses
	display in tables draw bar charts
II. Generalise	look at the spread of responses
	do percentages draw component bar charts draw pie charts do averages
III. Compare	contrast the responses of subgroups, e.g. men and women
	comparison bar charts (raw figures, percentages) cross tables (raw figures, percentages)

We recommend working through most or all of these using the raw data from the questionnaires.

The spreadsheet is only partially completed: it contains the reference numbers and responses to the questions about sex, age and whether they play sport.

This is so students can decide (for themselves or through guided class discussion) how to code and enter different variables which do not come in simple numerical form.

It is helpful to ask students to duplicate some exercises, using the raw data and the spreadsheet, and see if they get the same answers.



I. Summarise

The first thing to do with your results is to *summarise* them.

Count how many people give a particular response to each question.

When you report the answer, always say how many people you asked.

Fill in the following table:

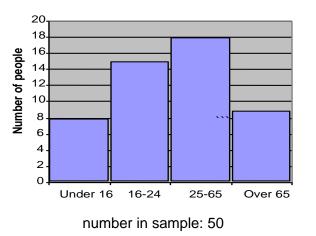
Compared to last year I now play				
	response	frequency		
less				
more				
same				
do not play sport				
number in sample				

Other frequency tables can show, for example,

how many play a given sport

how long people play sport on average.

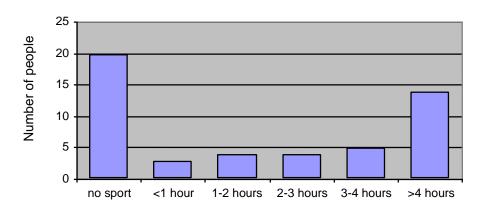
You can draw a simple bar chart to illustrate your results. The example below shows the ages of respondents in your data set.



How old are you?







How much sport do you play?

II. Generalise

You need to be able to describe the spread of different answers among the people you asked. You can use this to predict how a larger number of people might answer, so that you can make a decision.

Example 98 out of 100 10 year olds said they liked ice cream

suggests that

almost all 10 year olds like ice cream.

Discussion point:

What would make you more or less confident about generalising from this information about '98 out of 100' 10 year olds?

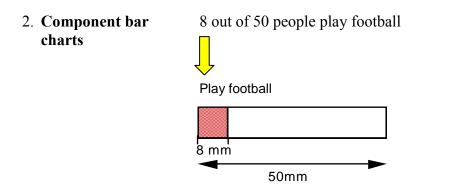
Ways of showing the distribution of answers include:

1. Percentages

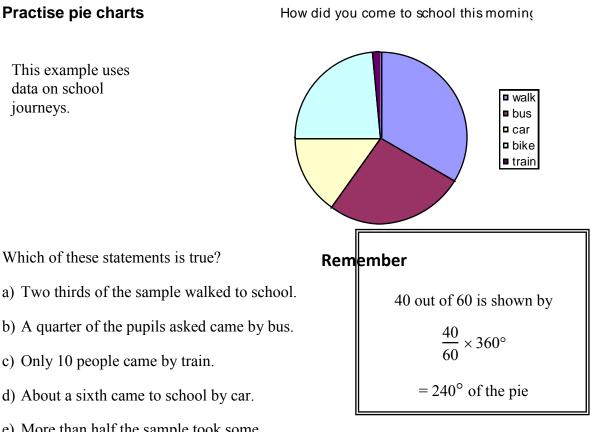
30 out of 50 people said they played sport

60% of people asked said they played sport





3. **Pie charts** These show the whole sample (all the people you asked) split up into categories.



e) More than half the sample took some exercise on the way to school.

Using the 50 sports responses:

Q.3:	Did you play sport last month? Ye		
Q.5:	If yes, on average how much time do you spen each week?	d on spor	t
	Under 2 hour	s 8	
	2-4 hou	rs 8	
	over 4 hou	rs 14	

Draw two pie charts from this data.

The first should show the thirty responses to question 5.

The second chart should include those people who didn't play sport last month; i.e. it will have 4 categories.

Which chart best answers the question: how much time each week do people spend playing sport?

Which other parts of the sports questionnaire might you want to use to make a pie chart?

Danger points in pie charts

You need to be very clear exactly what a pie chart is showing. For example, if you show 'sports played' in a pie chart, how would you label it?

Make a pie chart for the first ten responses. How could you use and generalise from it?

Can you use it to see how 'sporting' people are?

4. Average Where each response is a number, you can work out an average. This may be the most popular answer (mode), the middle value (median), or the mean.

Practise averages

Remember

Mean: Add up all the values and divide by the number of responses. Check: is there an extreme value? Is the mean meaningful — i.e. 2.8 people?

Median: Put all the values in size order; choose middle one. Check: is it a better representative than the mean, or not?

Mode: the most common value. Check: is there an obvious mode? Does it represent the results?

Important: A response of 0 is still a response, and must be 'counted' for medians and means.

Question: What is the 'average' number of sports people play?

The more people you ask, the more you can generalise your results. *But be careful:* who does your sample represent? All people? All 15 year olds? All those kind enough to answer your questionnaire?

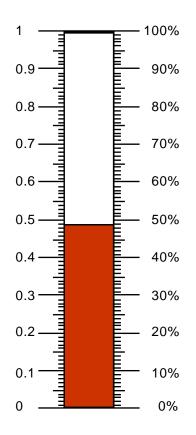
Practise percentages

Use the 50 sports responses to answer these questions. Give your answers as decimals first and then as percentages.

- 1. How many people played sports last month? What proportion of the sample was this?
- 2. What proportion of sports players were males?
- 3. What percentage of those swimming are female?
- 4. How many people playing sport are playing to win? What proportion of
 - (a) the sample

(b) sports players

play to win?



Remember

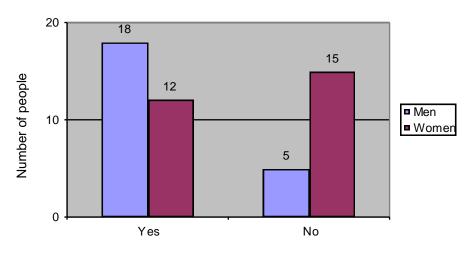
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22 out of 45 is $22 \div 45$ which is 0.488, almost 0.49 which is the decimal equivalent of 49%

III. Compare charts

Often it is interesting to compare the answers of different groups of people, for example men and women.

Comparison bar charts

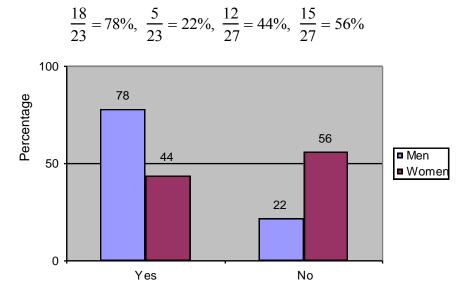


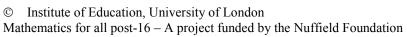
Do you play sport?

This chart shows that more men than women play sport.

But these are 'raw' figures: 23 men and 27 women were asked this question.

So that you can make a fair comparison, you must compare the **percentage of men** playing sport with the **percentage of women** playing sport.







You can use bar charts to illustrate more complicated analyses.

Task: Using the 50 sports responses, compare the age profile of people playing sport with those not playing sport.

	under 16	16-24	25-64	65+
Played sport	7	11	10	2
Did not play sport	1	4	9	6

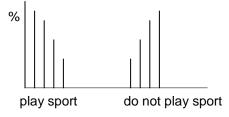
You are asked to compare age groups, but you have different numbers of people in each group. To make a fair comparison, you will have to rewrite the table using percentages. This has been started for you:

	under 16	16-24	25-64	65+	
Played sport	88				
Did not play sport	12				
	total 100				

The groups you are comparing must have 100% each in total. Your chart will show that 88% of under-16s played sport, while only 25% of 65+ year olds did.

Finish the table and draw the chart. It should look something like this.

Write a sentence or two explaining what it shows.

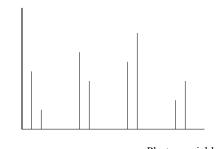


You might have been tempted in the last example to calculate the percentages out of people playing sport, and people not playing sport:

	under 16	16-24	25-64	65+	
Played sport	23	37	33	7	total 100
Did not play sport	5	20	45	30	total 100

Then your graph would have looked like this:

There is nothing wrong with this, as long as your description matches. In this case 23% of the people playing sport were under 16. But this analysis does not take account of the very different sizes of the age groups.





Be very careful when calculating your percentages. In cross tables, you are comparing two variables, and either of them can be made to add up to 100%. Some cases are obvious, such as 'compare men with women'. Some are not so easy to decide:

For example

	plays musica	al instrument
	yes	no
right handed	45	65
left handed	15	12

e.g. 75% of people playing a musical instrument were right handed, while 25% were left handed,

or 41% of right handed people played a musical instrument, but 56% of left handed people did.

Both statements are correct!

Try this one:

	wears	glasses
	yes	no
has freckles	22	35
no freckles	10	30

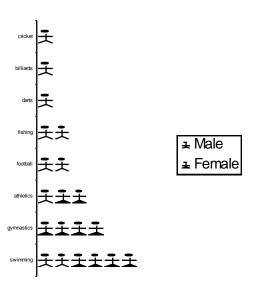
What percentage of people wearing glasses also have freckles?

What percentage of people with freckles also wear glasses?

- Whichever way you calculate your percentages, make sure your explanation matches.
- Always give the raw data in a table, before you calculate percentages (but label clearly). As well as avoiding misunderstandings, this shows how big your sample size is. If you only have small numbers, your conclusions cannot be very reliable.



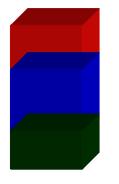
Examples: Sports Questionnaire (for teachers' use)



Sports played by the under-16s

Are all these sports equally healthy?

Of those playing sport, compared to last year...

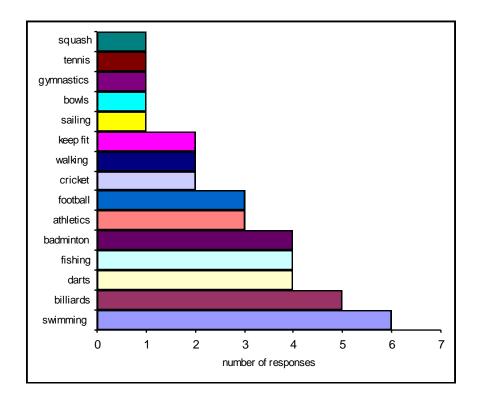


30% play more sport

43% play the same amount

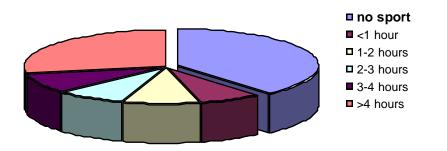
27% play less sport





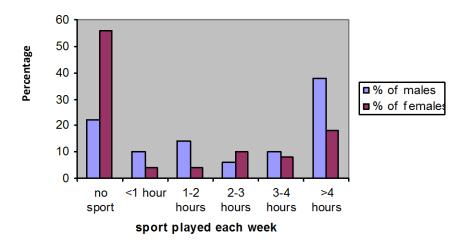
Sports played by those answering "more than 4 hours a week"

Amount of sport played each week

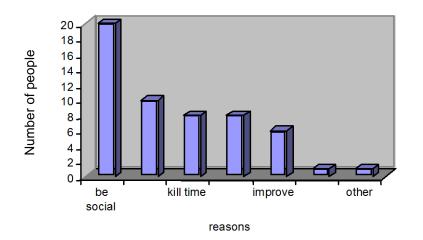




Amount of sport played each week



Why people play sport



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