

Types of data and sampling worksheet

Q1.

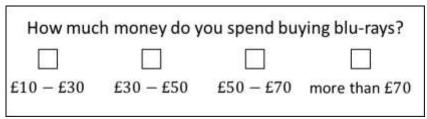
Sally measures the height of each of the members of her netball team. Circle the words which accurately describe the data she collects.

	Qualitative	Primary	Quantitative
	Secondary	Categorical	Discrete
		Continuous	
			[2]
Q2.			
	nch of the variables decide wheth nuous, discrete or categorical?	ner the data collected can b	e categorised as
(a)	The times taken for athletes to	complete a marathon.	
(b) The number of seats on a train	ı .	[1]
			[1]
(c)	The shoe sizes of a men's footb	oall team.	
			[1]
(d) The favourite subjects of a gro	up of students.	
			[1]
Q3.	AO2		
Give c	ne advantage and one disadvan	tage to using Secondary dat	ca.
			[2]



Q4. A02

Liam wants to find out how much money people spend buying blu-rays. He uses this question on a questionnaire.



Write down two things wrong with this question.
[2]
Q5. AO2
Andrea wants to find out how often people go to the gym. She decides to ask the first five people that come out of her local sports centre. Write down two things wrong with Andrea's method of collecting the data.
[2]

Q6. AO2

The head teacher of the school decides to carry out a survey on how long students spend on their homework. The head teacher decides to use a stratified sample of 200 students based on their gender and year group.

		S				
Gender	Year 7	Year 8	Year 9	Year 10	Year 11	Total
Boys	225	239	217	251		1,266
Girls	220	278	215	310	298	
Total	445		432	561	632	

What is the approximate number of boys from year 11 that are used in this sample?



Answers

Q1.

Primary, quantitative and continuous

Q2.

Continuous, discrete, discrete, categorical

Q3.

Advantage — Quick to collect

Disadvantage – not reliable, might not be right type of information.

Q4.

Overlapping boxes, no option for less than £10, no time scale for purchases. Vague for £70 or more.

Q5.

Biased location, sample size too small, not a random sample asking first five.

Should be in a neutral location asking more people using a random sampling method

Q6.

Missing values = 517 (total year 8), 334 (y11 boys), 1321 (Total girls), 2587 (total) 25 year 11 boys should be included in the survey