



Bishops Online Tutoring



Education Consultancy

Edexcel GCSE Mathematics QUESTIONNAIRE

Materials Required:

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

Information:

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

Instructions:

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

Advice:

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before

NO CALCULATOR ALLOWED

NAME:

Notes:

1. Make sure that your questions include a TIME FRAME; e.g. Day, Week, Month...
2. Always have an option for ZERO or NONE
3. DO NOT have OVERLAPPING INTERVALS
4. Include at least 4 tick boxes
5. Your last Interval should be: More than

1. Sam wants to find out the types of film people like best.

He is going to ask whether they like comedy films or action films or science fiction films or musicals best.

(a) Design a suitable table for a data collection sheet he could use to collect this information.

Type of film	Tally	Frequency
Comedy		
Action		
Science fiction		
Musicals		
Others		

(2)

Sam collects his data by asking 10 students in his class at school.

This might **not** be a good way to find out the types of film people like best.

(b) Give **one** reason why.

- ① Small sample - 100 would be better.
- ② Only asked people in the same class - Same age/opinions.

(1)

(3 marks)

2. Alison wants to find out how much time people spend reading books. She is going to use a questionnaire.

Design a suitable question for Alison to use in her questionnaire.

How much time do you spend reading books per week?

- None
 1-60mins
 61-120mins
 more than 120mins

(2 marks)

3. Pradeep wants to find out how much time people spend playing sport. He uses this question on a questionnaire.

How much time do you spend playing sport?

0 - 1 hours 1 - 2 hours 3 - 4 hours

- (a) Write down **two** things wrong with this question.

1. No time frame in question (per day/week)
.....
2. Boxes are not exhaustive (2-3 and more than 4)
.....

(2)

- (b) Design a better question for Pradeep's questionnaire to find out how much time people spend playing sport.

How much time do you spend playing sports each week?

- None 61-120mins
 1min-60min more

(2)

(4 marks)

4. Guy wants to find out how much time people spend watching television. He will design a questionnaire.

Design a suitable question for Guy's questionnaire.

How much TV do you watch per day?

- None
- 1min - 60min
- 61min - 120min
- more

(2 marks)

5. Paula wants to find out how much money people spend buying CDs.

She uses this question on a questionnaire.

How much money do you spend buying CDs?

- £10 – £30 £30 – £50 £50 – £70 more than £70

- (a) Write down **two** things wrong with this question.

1. No time frame in question.
2. No box for no spending.

(2)

Paula asks 100 people in a CD store to do her questionnaire.

- (b) Her sample is biased.
Explain why.

- People in a CD store more likely to spend/biased.
- Would be a fairer sample away from CD store.

(1)

(3 marks)

6. The manager of a department store has made some changes.

She wants to find out what people think of these changes.

She uses this question on a questionnaire.

“What do you think of the changes in the store?”

Excellent	Very good	Good

(a) Write down what is wrong about this question.

- No negative box.
- Boxes imply opinions.

(1)

This is another question on the questionnaire.

“How much money do you normally spend in the store?”

A lot	Not much

(b) Write down one thing that is wrong with this question.

- People will have different opinions to these.
- No time frame in question.

(1)

(Total 2 marks)

7. The local council is planning to build a new swimming pool.

The councillors want to get the views of the local people.

Councillor Smith suggests taking a sample from the people who attend the local sports centre.

(a) Explain why this would not be a good sample.

- People at sports centers already use it.
- Sample should be from other places.

(1)

Councillor Singh suggests taking a simple random sample of 100 people.

(b) Describe how the council could take a simple random sample.

- Take one person from each page of phone book.
- ASK people in town centre.

(1)

The council decided to use a questionnaire to find out how often people would use the swimming pool.

(c) Design a question the council could use on their questionnaire.

How often would you use the pool each week?

None

Once

Twice

More

(1)

(Total 4 marks)

8. Gordon is going to open a restaurant.
 He wants to know how often people eat out at a restaurant.
 He designs a questionnaire.
 He uses this question on a questionnaire.

"How often do you go to a restaurant?"

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Never	Sometimes	Often

(a) Write down two things that are wrong about this question.

1. No time frame in question.
2. Answer boxes reflect on people's opinions of sometimes/often.

(2)

(b) Design a more suitable question Gordon could use to find out how often people eat out at a restaurant.

How often do you eat at a restaurant each month?

<input type="checkbox"/> None	<input type="checkbox"/> Twice
<input type="checkbox"/> Once	<input type="checkbox"/> More

(2)

Gordon asks his family "Do you agree that pizza is better than pasta?"

This is not a good way to find out what people who might use his restaurant like to eat.

(c) Write down two reasons why this is not a good way to find out what people who might use his restaurant like to eat.

- 1st reason Only two food options
- 2nd reason Leading questions

(2)

(Total 6 marks)

9. Gary wants to find out how much time teenagers spend listening to music. He uses this question on a questionnaire.

How many hours do you spend listening to music?			
1 to 5	5 to 10	10 to 20	over 20

- (a) Write down **two** things wrong with this question.

1. NO time frame in question.

2. Boxes overlap.

(2)

- (b) Design a better question for Gary's questionnaire to find out how much time teenagers spend listening to music.

How many hours of music do you listen to each day?

None 2hrs 1min - 4hrs

1min - 2hrs More

(Total 4 marks)

10. Sophie wants to find out the amount of time people exercise. She will use a questionnaire.

- (a) Design a suitable question for Sophie to use in her questionnaire. You must include some response boxes.

How much exercise do you do each day?

None 6min - 12min

1min - 60min More

(2)

Sophie asks the people at her swimming pool to complete her questionnaire. This may **not** be a suitable sample.

- (b) Give a reason why.

These people definitely do exercise.
Sample would be biased.

(1)

(Total 3 marks)