

Write your name here

Surname

Other names

Achildsguideto.com
GCSE Practice

Centre Number

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Candidate Number

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Mathematics

Two-Way Tables

Foundation Tier

Time: 55 minutes

Paper Reference

1MA1/1F

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.
Tracing paper may be used.

Total Marks



Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may not be used.**

Information

- The total mark for this paper is 58
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

Q1 There are 150 pupils attending St Paul's Infant School.

92 of the pupils are girls.

In Reception, there are 41 pupils of which 19 are boys.

In Year 1, there are 53 students.

There are 40 girls in Year 2.

a Fill in the two-way table below.

	Reception	Year 1	Year 2	Total
Boys	19			
Girls			40	92
Total	41	53		150

(3)

b A pupil is chosen at random.

What is the probability that the pupil is a girl from Year 2?

.....

(2)

Q2 There are 233 pupils attending St Paul's Junior School.

133 of the pupils are boys.

In Year 3, there are 59 pupils of which 31 are boys.

In Year 5, there are 63 students of which 21 are girls.

There are 34 boys and 28 girls in Year 6.

a Fill in the two-way table below.

	Year 3	Year 4	Year 5	Year 6	Total
Boys					
Girls					
Total					

(4)

b What is the modal average number of girls in each class?

.....

(1)

Q3 In a secondary school, Key Stage 3 consists of Year 7, Year 8 and Year 9.

Billingsbrook Secondary School has 761 students in Key Stage 3, of which 367 are boys.

261 students are in Year 7 and of these, 124 are boys.

There are 117 girls and 112 boys in Year 9.

a Draw a two-way table to show this information.

(4)

b Using a calculator, what percentage of the school are girls in Year 8?

Write down the calculation you perform and give your answer to two decimal places.

.....

(3)

c Write down the number of girls in Key Stage 3, giving your answer to two significant figures.

.....

(1)

d What is the median average of girls in each year group?

.....

(1)

Q4 At Whitecliffe School, 752 Key Stage 4 children could take one of three modern language options: French, German or Spanish.

Of the 380 Year 10 students, 137 took French and 92 took German.

The most popular subject was Spanish with a total of 299 students taking it.

Ninety of the Year 11 students studied German.

a Draw a two-way table to show this information.

(4)

b What fraction of Year 11 students studied Spanish?

.....

(2)

c What percentage of the total number of students studying French and German were in Year 11?

.....

(2)

Q5 In a secondary school, children entering Year 10 had to choose whether they were going to study history or geography.

At the end of the two year course, the Headteacher looked at who had studied each of these subjects and looked at the number of GCSEs they had passed.

Forty-eight people had taken history and of these, 23 secured 5 GCSE passes.

Of the 97 students in the year group, 35 gained 4 GCSE passes. Eighteen of these students had taken geography.

Twelve of the geography students gained three GCSEs at passing grades.

a In total, how many students gained five GCSE passes?

.....

(4)

b What percentage of the children gained either 4 or 5 GCSE passes?

.....

(3)

Q6 At an after-school revision club, 34 students were offered pizza to entice them to attend. The students were offered Hawaiian, Meat Feast or Margaritta pizzas. Of the 17 that chose Meat Feast, 6 of them were female. The total number of students choosing Hawaiian was the same as the male students who chose Meat Feast.

a Draw a two-way table showing this information.

(3)

The cost of each of these pizzas is shown in the table below.

The school ordered a whole pizza for each person attending the revision club.

Pizza	Cost
Hawaiian Pizza	£11.45
Margaritta	£9.80
Meat Feast	£12.65

b How much was the total bill for the pizzas?

.....

(3)

Q7 A large company employed 287 workers.

Ninety-two male workers drove to work in their cars.

Nineteen female workers travelled to work on a bus.

Of the 23 workers that cycled to work, 7 of them were female.

Only 21 people were able to travel to work by railway train, of which 9 were male.

a Draw a two-way table of this information.

(4)

b What percentage of all workers travelled to work by car?

.....

(2)

The company had made arrangements for their workers to park in a car park for £7.50 per day. Each worker worked for 300 days per year.

c How much money would the car park get from the people using their cars in total for the year?

.....

(4)

Q8 A local library has three sections of books: Fiction, Non-fiction and Reference.

They looked at the different number of books used by borrowers each week for a month and totalled the numbers up.

Male borrowers used or borrowed 735 books. Of these, 35 were reference books which could only be used in the library.

Overall, 73 reference books which were read could only be used in the library whereas the 877 fiction and 454 non-fiction books could be taken home by borrowers for up to 4 weeks.

Female borrowers borrowed 497 fiction books.

a Draw a two-way table of this information in the space below.

(4)

b Which type of books had the greatest proportion of male readers. Give the percentage of books borrowed by male readers for each type of book.

(4)