Name: _____

ASM Tuition Academy

TWO WAY TABLE

Instructions:

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
  - there may be more space than you need.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all you're working out.**

Information:

- 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 time.
- Try to answer every question.
- Check your answers if you have time at the end.

Q1. The two-way table gives information about how 120 students travelled to school.

(a) Copy and complete the two-way table.

One of the students is picked at random.

(b) Write down the probability they walk to school.

	Walk	Car	Other	Total
Boys	18	30	?	63
Girls	25	10	22	?
Total	43	40	?	120

(Total for question 1 is 4 marks)

Q2. The two-way table gives information about the favourite sport of 180 students.

Copy and complete the two-way table.

	Football	Cricket	Other	Total
Boys	21	10	?	88
Girls	69	14	?	?
Total	90	24	66	180

(Total for question 2 is 3 marks)

Q3. The two-way table gives information about the favourite subject of 220 students.

(a) Copy and complete the two-way table.
(b) One of the students is picked at random. Write down the probability they are a Year 10 student whose favourite subject is Science.

	Science	English	Other	Total
Year 10	30	30	?	110
Year 11	64	16	?	?
Total	94	46	80	220

(Total for question 3 is 4 marks)

Q4. There are 190 students in year 8 at a school.
All of these students either walk, get the bus, or cycle to school.
90 of the students are boys.
40 of the students get the bus.
21 of the 47 students that walk to school are boys.
60 girls cycle to school.

Copy and complete the two-way table.

	Walk	Bus	Cycle	Total
Boys	?	?	?	?
Girls	?	?	?	?
Total	?	?	?	190

(Total for question 4 is 3 marks)

Q5. A basketball team played 42 games in a season.
20 games were played at home and the rest were away.
The team won a total of 24 games.
They drew 5 games away.
3 of the 13 games they lost were at home.

Copy and complete the two-way table.

	Won	**Drawn**	**Lost**	**Total**
Home	?	?	?	?
Away	?	?	?	?
Total	?	?	?	42

(Total for question 5 is 3 marks)

Q6. 110 students attended a weekend study camp.
Each student went to Maths, English, or Physics.
60 of these students attended on Saturday.
Over the weekend, a total of 44 students went to Maths.
15 of the 30 students that went to Physics went on Sunday.
12 students went to English on Saturday.

How many students went to the Maths study session on Saturday?

(Total for question 6 is 4 marks)

Q7. 140 students are asked whether they like Biology, Chemistry, or Physics best.

60 of the students are in Year 11, the rest are in Year 10.

55 students like Physics best.

22 of the Year 11 students like Biology best.

18 of the 35 students who like Chemistry best are in Year 10.

Work out how many Year 10 students like Physics best.

Q8. 110 students in year 8 either study French, German, or Italian.

50 of the students are boys and the rest are girls.

12 boys study German.

18 boys and 20 girls study French.

A total of 35 students study Italian.

Work out how many girls study Italian.

Q9. Two different schools, School X and School Y, attended a science fair.
15% of the attendees were teachers, the rest were students.
50% of the attendees were from School X.
45% of the attendees were students from School Y.

One of the attendees is selected at random.
Find the probability that they are a teacher from School X.

(Total for question 9 is 4 marks)

Q10. 320 students are asked how they get to school.
All either walk or get the bus.
60% of the students walk to school.
48% of the students are boys.
23% of the students are boys who get the bus.

Work out how many girls walk to school.

(Total for question 10 is 4 marks)