GROUP ROUND

- Time allowed is 40 minutes.

- There are 15 questions to try to answer in the time allowed.

- Each question is worth *four* marks. A question is marked either correct or incorrect – no partial marks are awarded.

- Some questions are easier than others!

- You will have to decide your team's strategy for this group competition. Do you split up so that individuals work on a few questions each, or do you work in pairs on a greater number of questions? Working all together on all the questions may well take too long. You decide!

- There is only one answer sheet per team. Five minutes before the end of the time you will be told to finalise your answers and write them on to the answer sheet. This answer sheet is the only thing that will be marked. Working out is not required.

- Answers should be in their simplest form where appropriate.

Answer Sheet (Ignore Units)

School Name _____   **School Number** _____

Question 1	Question 2
Question 3	**Question 4**
Question 5	**Question 6**
Question 7	**Question 8**
Question 9	**Question 10**
Question 11	**Question 12**
Question 13	**Question 14**
Question 15	**Award six points for each correct answer.** **Total:**

Question 1

In a local primary school, three sevenths of the pupils are boys. There are 132 girls.

How many pupils are there in the school altogether?

Question 2

The local football team won promotion on the last but one match of the season. They had scored 84 goals.

How many goals do they need to score in their last match, their 20th, to have a season average of 4.5 goals per match?

Question 3

In a training session, Sally takes three strides to cover 10m while Harry takes four strides to cover 12 m.

How far apart are Sally and Harry after they have both taken 300 strides?

Question 4

A square field has 48 posts every 5m around it.

What is the area of the field?

Question 5

Martha and Sally each have the same amount of money.

If Martha spends £10 and Sally £20 then Martha has three times as much as Sally.

If Martha spends £15 and Sally £20 then Martha has twice as much as Sally.

How much money do they have altogether?

Question 6

Mrs Straw bought buns for her class.
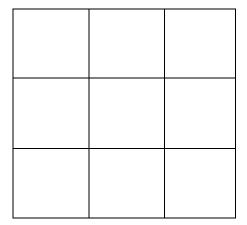
If everyone in the class had 2 buns each there would be 10 left over.

If everyone had 3 buns each there would be 15 buns short.

How many pupils are there in Mrs Straw's class?

Question 7

In basketball you score either 1, 2 or 3 points with each shot. At a recent tournament in the new basketball arena a team scored 108 points.

Two thirds of the scoring shots were worth 2 points each and the rest of the team's points were equally divided between 1 and 3 point scoring shots.

How many scoring shots were there?

Question 8

Each of the three digit numbers in the above square are square numbers and exactly 4 different digits are used.

Complete the square and then write down the 4 digits you have used on the answer grid.

Question 9

David and Rebecca share 60 sweets.

Rebecca has two thirds of the sweets and they are all red. All of David's sweets are yellow.

David gives 10 sweets to Rebecca at the same time as Rebecca gives David 15 sweets.

What fraction of Rebecca's sweets are now yellow?

Question 10

For a school play the seating arrangement in the school hall starts with 20 seats in the front row and 40 seats in the last row. Each row has 2 more seats than the row in front of it.

How many, at most, can the school hall seat for the play?

Question 11

On a day trip to the coast I travel the first 30 km in one hour.

What must my average speed be for the remainder of the journey if my average speed for the whole journey of 90 km is 40km per hour?

Question 12

On holiday we bartered for our fruit.

We realised we could get 9 apples for 6 pears and 7 oranges for 5 apples.

We already had 40 apples and 20 pears and by bartering we gained the most number of oranges that it was possible for us to get.

How many of each fruit did we finish up with once we had the most number of oranges possible?

Question 13

If

$$M + A + T = 19$$

$$I + C + E + S = 16$$

$$T + H + E = 11 \text{ and } H = 2$$

where each letter represents a different digit then what is the value of:

$$M + A + T + H + E + M + A + T + I + C + S?$$

Question 14

If the following pattern were continued, what would be the sum of the numbers at the start and end of the 10th row?

1

2   3

4   5   6

7   8   9   10

....

Question 15

Complete the table below if every letter A, B, C, D appears only once in each row and column.

A			
			C
	B		
D			A