SPEED TEST

- Time allowed is 20 minutes.

- There are 20 questions to try to answer in the time allowed.

- *Three* marks are awarded for every correct answer written on the answer grid. An answer is marked either correct or incorrect so no partial marks are given.

- Marks are not awarded for correct answers that have not been written on the answer grid, so make sure you write your answers on this. Units can be ignored.

- You will have to decide your team's strategy for this speed test and can organise yourselves to answer the questions however you want as quickly as possible.

Speed Test

Question 1

I am sure you know the square of 11, but what is the square of 111?

Question 2

I have 60 sweets. I give $\frac{1}{3}$ to my brother Ed and $\frac{1}{4}$ of those left to my sister Martha. How many sweets does Martha have?

Question 3

We leave for our camping holiday at 06:45 and arrive at 23:30. We spent seven and a half hours on the car ferry so how long did we spend driving to our camp site?

Question 4

I eat $\frac{1}{8}$ of my 40 birthday chocolate bars. My friends ate $\frac{3}{5}$ of them. How many were left over?

Question 5

What is the value of: $10 - 1 + 8 - 3 + 6 - 5 + 4 - 7 + 2 - 9$?

Question 6

In each space put any one of the four arithmetic signs to make this sum correct:

3 _____ 5 _____ 4 _____ 8 = 15

Question 7

What is $\frac{1}{2}$ of $\frac{1}{3}$ of $\frac{1}{4}$ of 72?

Question 8

The sum of three consecutive whole numbers is 108. What is the largest number?

Question 9

I leave Peterborough at 10:37, 8 minutes late, and arrive at King's Cross 3 minutes early at 11:43. What would the journey time have been if the train had left and arrived on time?

Question 10

Which 2-digit number is both a square and a cube?

Question 11

A quadrilateral has two right angles. Of the other two angles, one is five times the other. How many degrees are there in the largest angle of the quadrilateral?

Question 12

An isosceles triangle has at least one 50^0 angle. What are the possible number of degrees in the other angles of the two possible isosceles triangles?

Question 13

A family of 4 each use 150 litres of water on average every day. How many cubic metres of water would the family use in the month of April?

(There are 1000 litres of water in a cubic metre of water.)

Question 14

What is the sum of all the digits in a complete Sudoku grid?

Question 15

How many diagonals are there in a regular octagon?

Question 16

The mean height of the 8 boys who played at least one match in the mixed football team is 1.45m. The mean height of the 12 girls who played at least one match is 1.40m. What is the mean height of the whole team?

Question 17

The difference between two square numbers is 28. What is the largest of these two square numbers?

Question 18

What is the smallest 5-digit number at least two of whose digits are different prime numbers, and at least one is a square number, and which is a palindrome (the same left to right as right to left)?

Question 19

You bought a computer game with a £20 note and you noticed that your change contained exactly one of every coin that is in common use in this country. What was the cost of the game?

Question 20

If you write down a sequence of numbers by doubling the previous number, starting with the number 1, what would be the final digit of the 2012th number in this sequence?

(Please do not try to work out the actual number, it is big!!!!!!!)

Speed Test Answer Sheet

School Name: _____   **School Number** _____

Question1	**Question11**
Question2	**Question12**
Question3	**Question13**
Question4	**Question14**
Question5	**Question15**
Question6	**Question16**
Question7	**Question17**
Question8	**Question18**
Question9	**Question19**
Question10	**Question20**

Three marks are awarded per correct answer.

Total marks: [   ]