SPEED TEST

- Time allowed: 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

John has £4 to spend at the newsagent. He spends 30% of his money on sweets and 60% of the remainder on comics. How much does John have left?

Question 2

You have an endless supply of 1p, 2p, 5p, 10p coins. How many ways can you make 10p?

Question 3

If $x = -2$ and $y = 3$, what is $2x^2(y + 2)$?

Question 4

Evaluate $6 - 5(4 + 3(2 - 1))$.

Question 5

What is $\dfrac{1+2+3+4+5}{6+7+8+9+10}$ as a fraction in its simplest form?

Question 6

Animation DVDs run for 45 minutes and comedy DVDs run for 1 hour. I rent some animation DVDs and some comedy DVDs and they last for exactly 6 hours in total. How many DVDs did I rent altogether?

Question 7

17.5% of a number is 35. What is the number?

Question 8

What is $\frac{4}{7}$ of 49 plus $\frac{5}{8}$ of 64 plus $\frac{6}{9}$ of 81?

Question 9

1 is the 1st square number. What is the sum of the 11th, 12th and 13th square numbers?

Question 10

0.35 x 2160 = 756. What is 0.035 x 216000?

Question 11

What is 20% of 40% of 80?

Question 12

How many ways can you order the numbers 1, 2, 3? (123 is one such ordering)

Question 13

What is the sum of all the prime numbers between 100 and 110?

Question 14

1, 3, 6, 10, 15, 21 are the first six triangle numbers. What is the square root of the sum of the 7th and 8th triangle numbers?

Question 15

15% of a 20 hour period is spent doing homework. 5% is spent playing computer games. 50% of the remainder is spent in school. How much time is left?

Question 16

The train from Manchester to Leeds takes 1 hour. The train back takes 1.5 hours. Trains leave on the hour every hour from both stations. How many times do the trains pass each other between 1pm and 4pm?

Question 17

What is $\frac{3}{4} \times \frac{6}{5} \times \frac{7}{8} \times \frac{10}{9}$?

Question 18

2 klaks make a klek, 5 kleks make a klik, and 6 kliks make a klok. How many klaks in 4 kleks, 7 kliks and a klok?

Question 19

I start with a prime number, I add two and get another prime number. Adding the two prime numbers together and multiplying by a cube number gives 288. What is the prime number that I started with?

Question 20

a, b, c and *d* are consecutive whole numbers. They add to make 26. What is *b*?

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: [   ]