

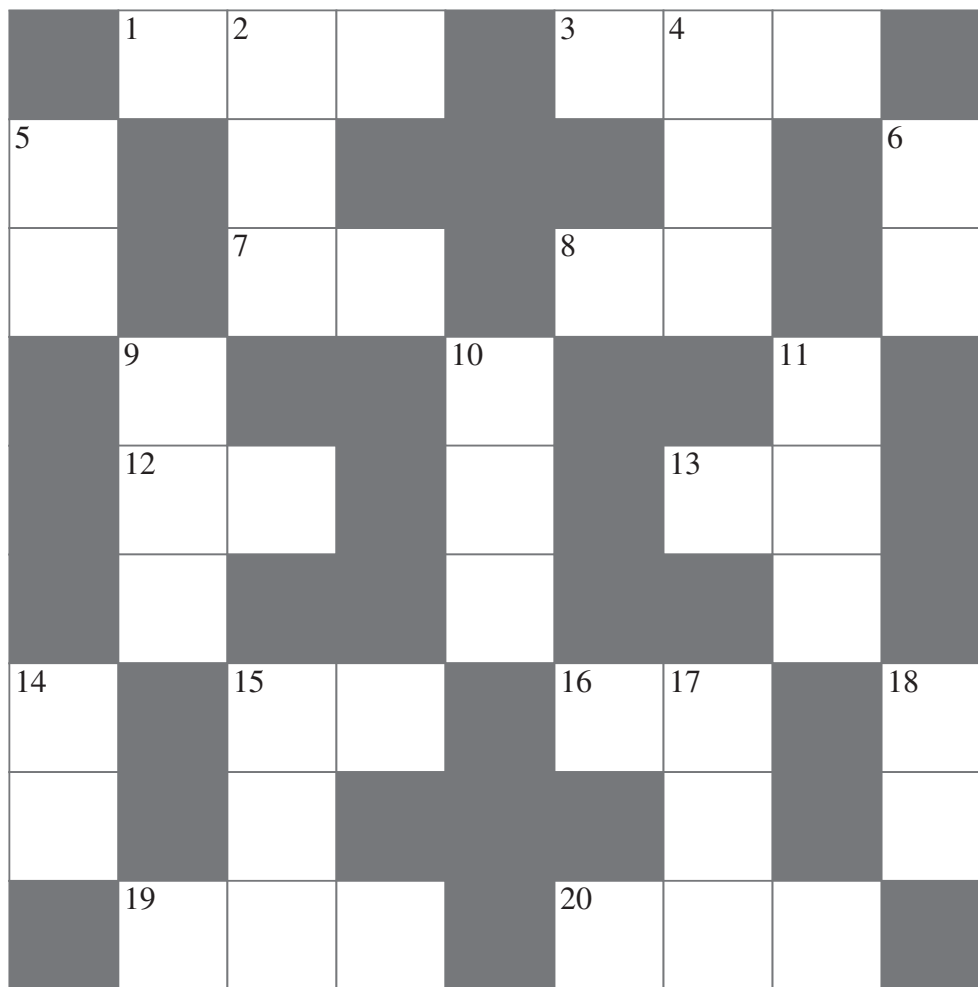
**United Kingdom  
Mathematics Trust**

PRIMARY TEAM MATHS RESOURCES  
2018

## SUPERVISOR'S BOOKLET

Please ensure that students do not have access to this booklet, and take care to hold it so that answers cannot be seen.

# CROSSNUMBER



## ACROSS

1. Lowest common multiple (LCM) of 15 and 33 (3)
3. The square of one seventh of 6 DOWN (3)
7. 14 DOWN + the square root of 14 DOWN (2)
8. A multiple of 3 and 4 (2)
12. The number of hours in 840 minutes (2)
13. A number less than 6 DOWN and greater than 14 DOWN (2)
15. Half of 8 ACROSS (2)
16. The nearest prime number to 15 ACROSS (2)
19. The average of 1 ACROSS and 17 DOWN (3)
20. 10 DOWN – 4 times 1 ACROSS (3)

## DOWN

2. 10 DOWN – 20 ACROSS + 9 (3)
4. 3 times 17 DOWN – 14 DOWN (3)
5. Highest common factor (HCF) of 8 ACROSS and 4 DOWN (2)
6. 7 times 14 (2)
9. 6 DOWN + 12 ACROSS (3)
10. The sum of the digits is 27 (3)
11. 1 ACROSS + 15 DOWN (3)
14. (19 ACROSS – 15 DOWN) squared (2)
15. The difference between 17 DOWN and 6 DOWN (3)
17. A cube number whose digits add to 10 (3)
18. Sum of the digits in the bottom row (2)

# CROSSNUMBER

	<sup>1</sup> 1	<sup>2</sup> 6	5		<sup>3</sup> 1	<sup>4</sup> 9	6	
<sup>5</sup> 1		6				4		<sup>6</sup> 9
2		<sup>7</sup> 9	0		<sup>8</sup> 4	8		8
	<sup>9</sup> 1			<sup>10</sup> 9			<sup>11</sup> 4	
	<sup>12</sup> 1	4		9		<sup>13</sup> 9	1	
	2			9			0	
<sup>14</sup> 8		<sup>15</sup> 2	4		<sup>16</sup> 2	<sup>17</sup> 3		<sup>18</sup> 2
1		4				4		6
	<sup>19</sup> 2	5	4		<sup>20</sup> 3	3	9	

1.  
24

6.  
7

11.  
8

2.  
9

7.  
144

12.  
11

3.  
8

8.  
142

13.  
2028

4.  
36

9.  
48

14.  
12500

5.  
2

10.  
12

15.  
37

On the RESPONSE SHEET:

Award 4 marks for a correct answer.

Circle the mark awarded for each question and cross out the other .

TEAM NUMBER  SCHOOL NAME

<b>A1</b> 8 and 28 <input type="radio"/> 0 <input type="radio"/> 2	<b>A6</b> 86 cm <sup>2</sup> <input type="radio"/> 0 <input type="radio"/> 2	<b>A11</b> 140 ° <input type="radio"/> 0 <input type="radio"/> 2
<b>B1</b> 22 <input type="radio"/> 0 <input type="radio"/> 2	<b>B6</b> 0.86 <input type="radio"/> 0 <input type="radio"/> 2	<b>B11</b> £34.90 <input type="radio"/> 0 <input type="radio"/> 2
<b>A2</b> 110 <input type="radio"/> 0 <input type="radio"/> 2	<b>A7</b> 8102 <input type="radio"/> 0 <input type="radio"/> 2	<b>A12</b> £74.52 <input type="radio"/> 0 <input type="radio"/> 2
<b>B2</b> £1.08 <input type="radio"/> 0 <input type="radio"/> 2	<b>B7</b> 8 <input type="radio"/> 0 <input type="radio"/> 2	<b>B12</b> 1, 7 and 10 <input type="radio"/> 0 <input type="radio"/> 2
<b>A3</b> 23 units <input type="radio"/> 0 <input type="radio"/> 2	<b>A8</b> 140 g <input type="radio"/> 0 <input type="radio"/> 2	<b>A13</b> 6½ <input type="radio"/> 0 <input type="radio"/> 2
<b>B3</b> 101 ° <input type="radio"/> 0 <input type="radio"/> 2	<b>B8</b> 15 <input type="radio"/> 0 <input type="radio"/> 2	<b>B13</b> 70 square units <input type="radio"/> 0 <input type="radio"/> 2
<b>A4</b> 1 and 0 <input type="radio"/> 0 <input type="radio"/> 2	<b>A9</b> 6 °C <input type="radio"/> 0 <input type="radio"/> 2	<b>A14</b> 4/7 <input type="radio"/> 0 <input type="radio"/> 2
<b>B4</b> 2018 <input type="radio"/> 0 <input type="radio"/> 2	<b>B9</b> 150 ° <input type="radio"/> 0 <input type="radio"/> 2	<b>B14</b> £117.80 <input type="radio"/> 0 <input type="radio"/> 2
<b>A5</b> 95 million <input type="radio"/> 0 <input type="radio"/> 2	<b>A10</b> £79.20 <input type="radio"/> 0 <input type="radio"/> 2	<b>A15</b> 8 <input type="radio"/> 0 <input type="radio"/> 2
<b>B5</b> 9 and 27 <input type="radio"/> 0 <input type="radio"/> 2	<b>B10</b> 8 <input type="radio"/> 0 <input type="radio"/> 2	<b>B15</b> 7 days <input type="radio"/> 0 <input type="radio"/> 2

Correct answers score 2 points: circle 2 or 0 for each question and cross out the other number. At the end of the round, draw a line under the last question attempted.

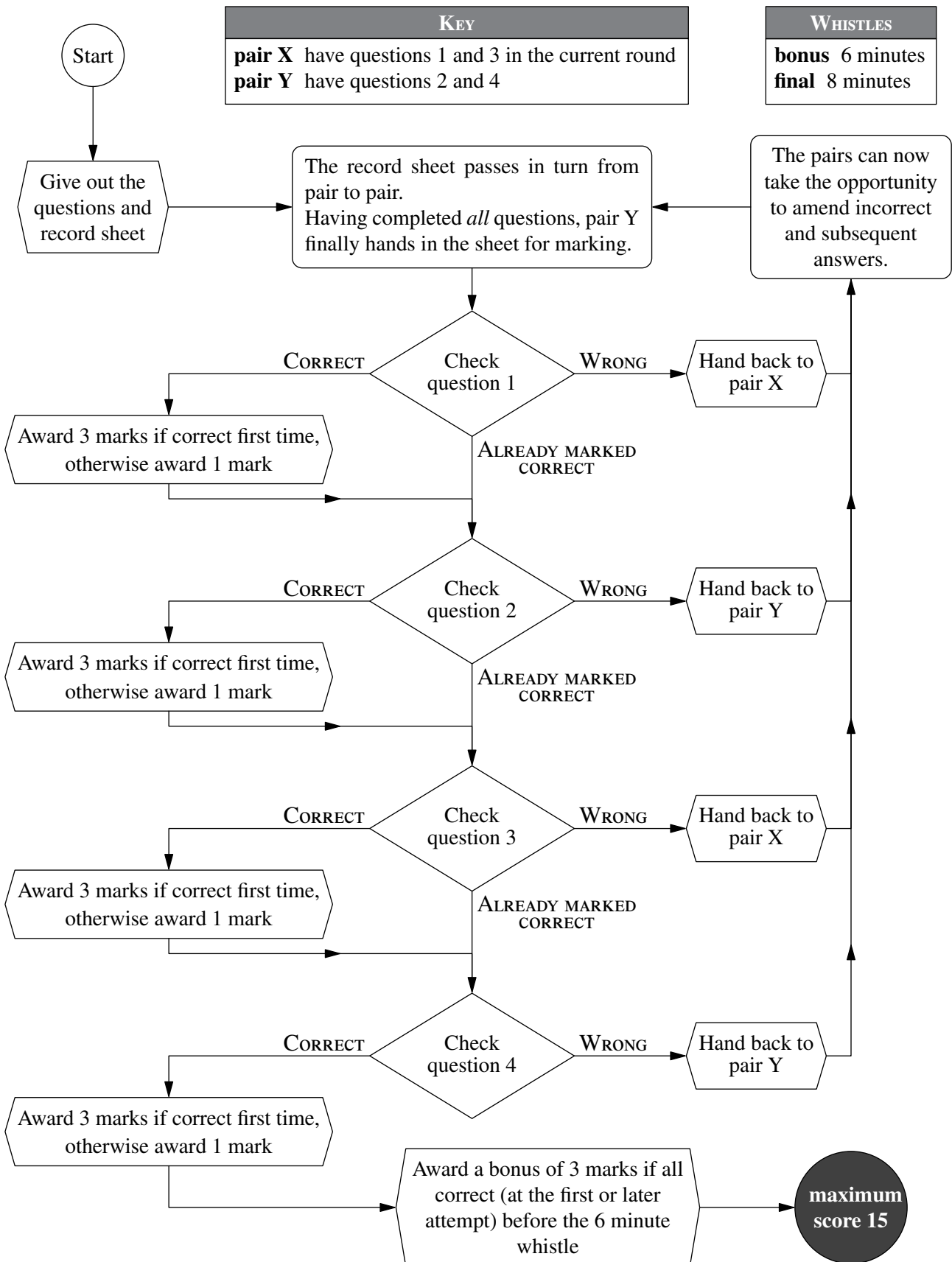
FINAL SCORE /60

<b>A1</b>  1	<b>B1</b>  84	<b>C1</b>  5	<b>D1</b>  4
<b>A2</b>  8	<b>B2</b>  36	<b>C2</b>  17	<b>D2</b>  48
<b>A3</b>  12	<b>B3</b>  111	<b>C3</b>  99	<b>D3</b>  48
<b>A4</b>  2	<b>B4</b>  40	<b>C4</b>  18	<b>D4</b>  8

On the RESPONSE SHEET:

Circle the mark awarded for each question and cross out the others.  
At the end of the round, either circle the bonus mark or cross it out.

The flowchart explains the order in which questions should be marked.



No	No	No	No	Yes
No	No	Yes	No	Yes
Yes	Yes	Yes	Yes	Yes
No	No	No	No	Yes
No	Yes	No	No	Yes

On the RESPONSE SHEET:

Circle the mark awarded for each question and cross out the other.



TEAM NUMBER

SCHOOL NAME

There may be a variety of ways of solving these problems so please check answers carefully. A possible solution for each question is given below.

<p>1</p> $(1 + 2 + 7) \times (1 + 1)$ <p style="text-align: right;">0 3 4</p>	<p>6</p> $4 \times (75 - 3) - 9$ <p style="text-align: right;">0 3 4</p>
<p>2</p> $75 \times (6 + 4) + 8 - 1$ <p style="text-align: right;">0 3 4</p>	<p>7</p> $9 \times ((4 \times 25) + 5) - 3$ <p style="text-align: right;">0 3 4</p>
<p>3</p> $8 \times (75 + 7 + 8)$ <p style="text-align: right;">0 3 4</p>	<p>8</p> $(9 \times 25) + ((3 + 4) \times 6) - 1$ <p style="text-align: right;">0 3 4</p>
<p>4</p> $9 \times (25 + 3)$ <p style="text-align: right;">0 3 4</p>	<p>9</p> $(7 - 1) \times (100 + 9) + (8 - 3)$ <p style="text-align: right;">0 3 4</p>
<p>5</p> $9 \times (100 + 7) + 5 - 1$ <p style="text-align: right;">0 3 4</p>	<p>10</p> $9 \times (50 + 5 \times (4 + 1)) + 1$ <p style="text-align: right;">0 3 4</p>

Award 4 marks for a correct answer.  
Circle the mark awarded and cross out the others.

FINAL SCORE /40

1	6	11	16
7	20	7	2331
2	7	12	17
PLAINTEXT	31 degrees	120km	23
3	8	13	18
4	£2	$\frac{1}{5}$	4 hours
4	9	14	19
4	105 degrees	19	1332
5	10	15	20
760 m	31	10 hours	59

On the RESPONSE SHEET:

Award 3 marks for a correct answer.

Circle the mark awarded for each question and cross out the other.



BACK

PAGE