

# KES Year 4 Maths Challenge - Crossnumber Instructions

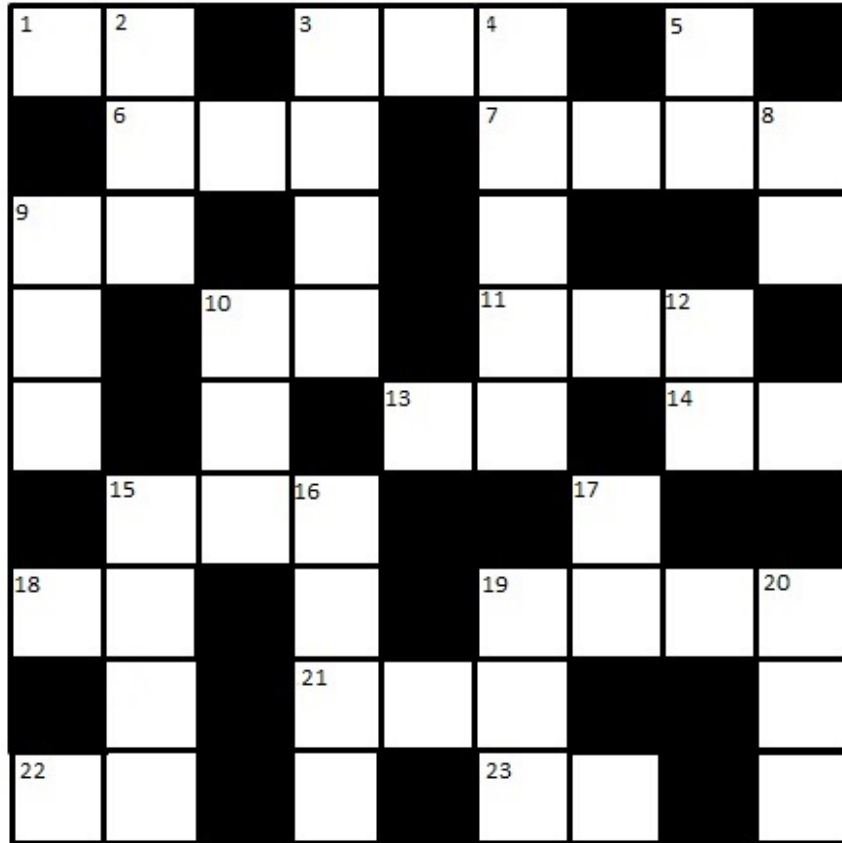
## Rules

- Pupils should attempt questions in pairs. Each pair will have a copy of the clues and an answer grid. There will also be a 'mastercopy' which is in front of the teacher.
- When a pair think they have an answer they write it on the mastercopy. It is immediately checked by the teacher. The teacher (who will have a sheet with the solutions on) ticks every correct digit and crosses every incorrect digit. The teacher will also correct every incorrect digit, writing the right answer in its place.
- The correct answer is then shown to the other pair and both pairs can enter it onto their copy..
- The team's score is the number of ticks that they have achieved between them at the end of the round.

## Hints

- Only answer questions which you have narrowed down to one possible answer.
- It should be possible to complete the grid without making any guesses. However, if you get completely stuck this might be a worthwhile strategy to get you going again.
- Sometimes it might be possible to get a bit of an answer without working out the whole number. You may enter parts of answers into the mastercopy and have them marked by the teacher.

## KES Year 4 Maths Challenge - Example Crossnumber



### Across

1. The number of minutes between 9:52am and 11:11am
3. 3 children have [10 across] cards each. How many cards in total?
6. [11 across] + [15 across] + [18 across]
7. If I start with 64 and I keep doubling it I will get to this number
9. A multiple of 11
10. [17 down] + 5
11. The largest number that is smaller than 700
13. If I divide this by [18 across] I get a whole number (with no remainder)
14. Five businessmen shake hands with each other. How many handshakes in total?
15. [23 across] multiplied by itself
18. If I multiply this number by four and subtract seven I get 41.
19. This number is the same forwards and backwards
21.  $3 \times$  [9 across]
22. If I have 6 different shirts and 3 different trousers, how many possible outfits can I make?
23. The sum of the digits is 2 and both digits are the same

### Down

2. The sum of the digits is 26
3. Halfway between [15 down] and 1300
4. [15 down]  $\times$  20
5. The difference between [14 across] and [9 across]
8. The number of squares with 2cm sides that could fit into a square with 16cm sides without any overlapping
9. [15 down] - [21 across]
10. A number between 370 and 380
12. A multiple of 13
15. Each digit is double the one before it
16. The number of laps of a 400m track in a 10000m race + 1000
17. [20 down]  $\div$  6
19. A multiple of 19
20. A multiple of 87

# KES Year 4 Maths Challenge - Example Crossnumber Solutions

<sup>1</sup> 7	<sup>2</sup> 9		<sup>3</sup> 1	0	<sup>4</sup> 2		<sup>5</sup> 8	
	<sup>6</sup> 8	3	2		<sup>7</sup> 4	0	9	<sup>8</sup> 6
<sup>9</sup> 9	9		7		9			4
5		<sup>10</sup> 3	4		<sup>11</sup> 6	9	<sup>12</sup> 9	
1		7		<sup>13</sup> 6	0		<sup>14</sup> 1	0
	<sup>15</sup> 1	2	<sup>16</sup> 1			<sup>17</sup> 2		
<sup>18</sup> 1	2		0		<sup>19</sup> 1	9	9	<sup>20</sup> 1
	4		<sup>21</sup> 2	9	7			7
<sup>22</sup> 1	8		5		<sup>23</sup> 1	1		4