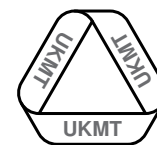


|    |   |    |    |    |   |    |    |    |
|----|---|----|----|----|---|----|----|----|
| 1  |   | 2  |    | 3  |   | 4  |    | 5  |
|    |   | 6  |    |    |   |    |    |    |
| 7  | 8 |    |    |    | 9 |    | 10 |    |
|    |   |    | 11 |    |   |    |    |    |
| 12 |   |    |    |    |   |    | 13 |    |
|    |   |    | 14 |    |   |    |    |    |
| 15 |   | 16 |    |    |   | 17 |    | 18 |
|    |   |    |    | 19 |   |    |    |    |
| 20 |   |    |    |    |   | 21 |    |    |

**ACROSS**

- |  |   |
|--|---|
| 1. Nine less than 4 DOWN (3)                                   | 13. 18 DOWN minus seventeen (2)   |
| 3. 15 ACROSS plus 20 ACROSS plus 2 DOWN (5)                    | 14. The sum of the cubes of its digits (3)  |
| 6. A Fibonacci number (3)                                      | 15. 88 squared (4)  |
| 7. A multiple of seven (3)                                     | 17. 19 ACROSS minus 13 ACROSS (3)   |
| 9. 1 ACROSS multiplied by ten plus a square number (4)         | 19. The product $ab$ where $a$ and $b$ are integer solutions of $5a + 7b = 223$ (3) |
| 11. The product of 19 DOWN and the square root of 6 ACROSS (3) | 20. $(3^3 + 4^4 + 3^3 + 5^5) \times 10$ (5)   |
| 12. The sum of the digits in the first column (2)              | 21. 6 ACROSS plus the square of 19 DOWN (3)   |



|    |   |    |    |    |   |    |    |    |
|----|---|----|----|----|---|----|----|----|
| 1  |   | 2  |    | 3  |   | 4  |    | 5  |
|    |   | 6  |    |    |   |    |    |    |
| 7  | 8 |    |    |    | 9 |    | 10 |    |
|    |   |    | 11 |    |   |    |    |    |
| 12 |   |    |    |    |   |    | 13 |    |
|    |   |    | 14 |    |   |    |    |    |
| 15 |   | 16 |    |    |   | 17 |    | 18 |
|    |   |    |    | 19 |   |    |    |    |
| 20 |   |    |    |    |   | 21 |    |    |

**DOWN**

- |  |   |
|--|---|
| <p>1. The mean of 4 DOWN and 11 ACROSS (3)</p> <p>2. A multiple of nine (3)</p> <p>3. A multiple of eleven (2)</p> <p>4. The product of the first four prime numbers (3)</p> <p>5. 6 ACROSS minus twice 19 DOWN (3)</p> <p>8. <math>2^{2^4} + 1</math> (<i>the 5th Fermat number</i>) (5)</p> <p>9. The product of three primes (not all different) that have the same units digit (4)</p> | <p>10. Multiply this number by nine and you will have reversed it! (5)</p> <p>11. The mean of 9 ACROSS and 11 DOWN (4)</p> <p>15. 840 minus 13 ACROSS (3)</p> <p>16. 17 DOWN plus 19 ACROSS (3)</p> <p>17. The product of its digits is 40 (3)</p> <p>18. Seventeen more than a prime (3)</p> <p>19. Five more than the square root of 1 DOWN (2)</p> |
|--|---|

TEAM NUMBER

SCHOOL NAME

Row  
TOTALS

|                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                          |                      |                      |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------|----------------------|
| 1                        | <input type="checkbox"/> | <input type="checkbox"/> | 2                        | <input type="checkbox"/> |                          | 3                        | <input type="checkbox"/> | <input type="checkbox"/> | 4                        | <input type="checkbox"/> | <input type="checkbox"/> | 5                        | <input type="checkbox"/> | /8                   | <input type="text"/> |
| <input type="checkbox"/> |                          | 6                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | <input type="checkbox"/> |                          | <input type="checkbox"/> |                          | <input type="checkbox"/> | <input type="checkbox"/> | /6                       | <input type="text"/> |                      |
| 7                        | <input type="checkbox"/> | 8                        | <input type="checkbox"/> | <input type="checkbox"/> |                          |                          | 9                        | <input type="checkbox"/> | <input type="checkbox"/> | 10                       | <input type="checkbox"/> | <input type="checkbox"/> | /7                       | <input type="text"/> |                      |
|                          | <input type="checkbox"/> |                          | 11                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | <input type="checkbox"/> |                          | <input type="checkbox"/> |                          | /5                       | <input type="text"/>     |                      |                      |
| 12                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | <input type="checkbox"/> | <input type="checkbox"/> | 13                       | <input type="checkbox"/> | <input type="checkbox"/> | /6                       | <input type="text"/>     |                          |                          |                      |                      |
|                          | <input type="checkbox"/> | 14                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | /5                       | <input type="text"/>     |                          |                          |                      |                      |
| 15                       | <input type="checkbox"/> | 16                       | <input type="checkbox"/> | <input type="checkbox"/> |                          |                          | 17                       | <input type="checkbox"/> | <input type="checkbox"/> | 18                       | <input type="checkbox"/> | /7                       | <input type="text"/>     |                      |                      |
| <input type="checkbox"/> |                          | <input type="checkbox"/> |                          | 19                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | <input type="checkbox"/> | /6                       | <input type="text"/>     |                          |                      |                      |
| 20                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | 21                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | /8                       | <input type="text"/>     |                          |                      |                      |

**Correct digit:** place a tick in the dotted circle.  
**Incorrect digit:** cross out the answer, write in the correct digit, and place a cross in the dotted circle.  
**Row totals:** enter the number of ticks in each row.

FINAL SCORE /58