

**Maths Key Skills**

Name: ..... Date: .....

**Stage 7: Skill Check 14 - Answers**

Class/Group: .....

| A: Number & Algebra   |                                       | B: Proportion, Geometry & Measure                    |   | C: Statistics & Probability  |  |       |           |   |   |   |   |   |   |
|---|---------------------------------------|--|---|--|--|-------|-----------|---|---|---|---|---|---|
| 1. Insert one of these symbols in the box: = < > ≤ ≥          | 7:1<br>3.4 > $\frac{3}{4}$            | 11. Reduce to its lowest form:<br>1½ hour : 2½ hours | 7:15<br><b>3:5</b>                        | 21. The probability of rain is 0.3<br>Indicate this on the scale.                      | 7:27<br>   |       |           |   |   |   |   |   |   |
| 2. Which is bigger? $\frac{1}{5}$ or 15%                      | 7:2<br>$\frac{1}{5}$                  | 12. Share £88 in a ratio of 6:5.                     | 7:16<br><b>£48/£40</b>                    | 22. List the elements in set X   | 7:28<br><b>{2,3,5,7}</b>   |       |           |   |   |   |   |   |   |
| 3. Give the HCF of 40 and 50.                                 | 7:3<br><b>10</b>                      | 13. Express £30 as a fraction of £50.                | 7:17<br>$\frac{3}{5}$                     | 23. 180 students were asked for their favourite leisure activity.<br>How many said TV? | 7:29<br><br>360 ÷ 150 = 2 <sup>0</sup><br>60 ÷ 2 = <b>30</b><br>or 1/6 of 180 = <b>30</b>  |       |           |   |   |   |   |   |   |
| 4. Insert one of these symbols in the box: = < > ≤ ≥          | 7:4<br>$\sqrt{196} < 5^2 - 2^3$       | 14. Describe the transformation A to B.              | 7:19<br><b>Reflection in y = -x</b>       | 24. Work out the <b>range</b> of the scores:<br>1, 3, 6, 8, 11, 13                     | 7:30<br><b>13-1 = 12</b>   |       |           |   |   |   |   |   |   |
| 5. Work out & simplify:<br>$1\frac{4}{5} \times \frac{2}{3}$  | 7:6<br>$\frac{18}{15} = 1\frac{1}{5}$ | 15. Mark a right angle and a pair of parallel lines. | 7:20<br>                                  | 25. Work out the <b>range</b> of these scores.   | 7:30<br><table border="1"><thead><tr><th>Score</th><th>Frequency</th></tr></thead><tbody><tr><td>1</td><td>7</td></tr><tr><td>2</td><td>8</td></tr><tr><td>3</td><td>5</td></tr></tbody></table><br><b>3-1=2</b> | Score | Frequency | 1 | 7 | 2 | 8 | 3 | 5 |
| Score   | Frequency                             |  |   |  |  |       |           |   |   |   |   |   |   |
| 1   | 7                                     |  |   |  |  |       |           |   |   |   |   |   |   |
| 2   | 8                                     |  |   |  |  |       |           |   |   |   |   |   |   |
| 3   | 5                                     |  |   |  |  |       |           |   |   |   |   |   |   |
| 6. Add a bracket to make this sum correct: <b>5+2x(3-1)=9</b> | 7:7                                   | 16. Sketch the front elevation                       | 7:21<br>                                  | 17. What is the area of this trapezium?  | 7:22<br>$\frac{1}{2}(7+15) \cdot 6$<br><b>66cm<sup>2</sup></b>   |       |           |   |   |   |   |   |   |
| 7. Expand & simplify:<br>(x - 3) + 2(2x + 3)                  | 7:10<br>x-3+4x+6<br><b>=5x + 3</b>    | 18. Name this solid.                                 | 7:23<br><b>Square based pyramid</b>       | 19. Work out the surface area of this cuboid.  | 7:24<br><b>2(40+25+10)</b><br><b>150cm<sup>2</sup></b>   |       |           |   |   |   |   |   |   |
| 8. Evaluate: 3p + 4q<br>when p = -5, q = -2                   | 7:11<br>-15-8<br><b>=-23</b>          | 20. x=132°. Give the reason.                         | 7:25<br><b>Alternate angles are equal</b> |  |  |       |           |   |   |   |   |   |   |
| 9. Give the equation of this graph.                           | 7:12<br><b>x = 5</b>                  |  |   |  |  |       |           |   |   |   |   |   |   |
| 10. Solve: 2y + 5 = 2   | 7:13<br>2y = -3<br><b>y = -1.5</b>    |  |   |  |  |       |           |   |   |   |   |   |   |
| <b>Total (A)</b>  |                                       | <b>Total (B)</b>                                     |   | <b>Total (C)</b>   |  |       |           |   |   |   |   |   |   |

|                    |  |         |           |           |
|--------------------|--|---------|-----------|-----------|
| Test Total (A+B+C) |  | R (0-9) | Y (10-19) | G (20-25) |
|--------------------|--|---------|-----------|-----------|