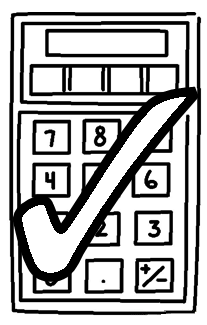
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| --- | --- | --- |
| **Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Form \_\_\_\_\_\_\_\_** | | **Overall**  **\_\_\_\_\_\_%** |
| **Section A: Skills and Multiple Choice**  **Marks\_\_\_\_\_\_\_/28 \_\_\_\_\_\_\_%** | **Section B: Problem Solving**  **Marks\_\_\_\_\_\_\_/ 14 \_\_\_\_\_\_\_%** |



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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Skills Covered** | | | | | | | | | | |
| **Skill** | | **Topic** | | | **Skill** | | | **Topic** | | |
| 1 | | Area of triangle | | | 7 | | | Prime Factorisation | | |
| 2 | | Area of trapezium | | | 8 | | | Percentage Calculations | | |
| 3 | | Area of a circle | | | 9 | | | Percentage Calculations | | |
| 4 | | Circumference of a circle | | | 10 | | | Ratio | | |
| 5 | | Volume of Prism | | | 11 | | | Fraction Calculations | | |
| 6 | | Recognising Multiples/Factors/Primes | | | 12 | | | Mean of data | | |
|  | | | | | | | | | | |
| **Section A: Multiple choice** | | | | | | | | | | |
| A. Circle the number of vertices of a triangular prism.   |  |  |  |  | | --- | --- | --- | --- | | 4 | 5 | 6 | 9 | | | | | | | | | | | |
| 1 mark | | | | | | | | | | |
| B. Circle the most sensible measurement for the quantity shown.  The length of a human finger.   |  |  |  |  | | --- | --- | --- | --- | | 7 cm | 70 cm | 170 cm | 1700 cm | | | | | | | | | | | |
| 1 mark | | | | | | | | | | |
| C. Circle the expression that describes 20 more than .   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | | | | | | | | | | |
| 1 mark | | | | | | | | | | |
| **Section A: Skills** | | | | | | | | | | |
| 1. Calculate the area of the triangle. | | | | | | 2. Calculate the area of the trapezium. | | | | |
| R A G | | | 2 marks | | | R A G | | | 2 marks | |
| 3. Find the area of the circle. Give your answer to 3 significant figures. | | | | | | 4. Find the circumference of the circle. Give your answer to 1 d.p. | | | | |
| R A G | | | 2 marks | | | R A G | | | 2 marks | |
| 5. Here is a triangular prism.    3cm  5 cm  8 cm  Work out the volume. | | | | | | 6. (a) Circle the number that is **both** a multiple of 3 and a multiple of 5  10 25 27 30 35  (b) Circle the number that is a prime factor of 189  7 9 13 17 189 | | | | |
| R A G | | | 3 marks | | | R A G | | | 2 marks | |
| 7. Write 280 as a product of its prime factors. | | | | | | 8. Which is the greater percentage?  18 out of 40  or 41 out of 90 | | | | |
| R A G | | | 2 marks | | | R A G | | | 2 marks | |
| 9. A train fare costs £23.55  All train fares are increased by 2.8%  Work out the new fare. | | | | | | 10. The workers in a company are in the ratio  The company has 150 female workers.  How many workers are there altogether? | | | | |
| R A G | | | 2 marks | | | R A G | | | 2 marks | |
| 11. Put these numbers in order starting with the smallest. You **must** show your working. | | | | | | 12. Below is a list of data.  5 1 9 3 2 5 6 7 1 1  Calculate the mean. | | | | |
| R A G | | | 2 marks | | | R A G | | | 2 marks | |

|  |  |
| --- | --- |
| **Section B - Problems** | |
| 1. The trapezium and the square have the same areas.   |  |  | | --- | --- | |  | Not drawn accurately |   What is the perimeter of the square? | |
|  | 4 marks |
| 2. Here is a cuboid.  The **areas** of the top and two sides are shown.    Work out the volume of the cuboid. | |
|  | 3 marks |

|  |  |  |
| --- | --- | --- |
| 3. Seeta did a puzzle in 3 minutes 45 seconds.  Ninal did the same puzzle in 7 minutes 28 seconds.  Seeta says,  ‘I did the puzzle in less than half the time Ninal did the puzzle.’  Is Seeta right?  You must show all your working. | | |
|  | 3 marks | |
| 4. Mr Brown and his 2 children are going to London by train.  An adult ticket costs £24.  A child ticket costs £12.  Mr Brown has a Family Railcard.   |  | | --- | | **Family Railcard gives**  off adult tickets  60% off child tickets |   Work out the total cost of the tickets when Mr Brown uses his Family Railcard. | | |
|  | | 4 marks |