| Date: ............................... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A: Number \& Algebra |  | B: Algebra, Proportion, Geometry \& Measure |  | C: Statistics \& Probability |  |  |
| 1. Work out: $9 \div 0.3$ | 8:1 | 11. Expand \& simplify: $(\mathrm{y}-1)(\mathrm{y}-2)$ | 8:16 | 0.93. What is the probability of failing it? |  | 8:26 |
| 2. Write 12 as the product of its prime factors. | 8:2 | 12. The ratio of blue: red balls is $4: 1$ Write the proportion of BLUE in the box as a fraction. | 8:17 |  |  |  |
| 3. Estimate by rounding to 1 sf an answer to: $23.4 \times 3.65$ | 8:3 | 13. To make 5litres of purple paint, red and blue are mixed in the ratio of $3: 2$. How much red paint would be needed for 20 litres of purple paint? | 8:18 | 22. Of the 40 rabbits, 17 are male. There are 8 black males \& 15 black females. What is the probability that a rabbit chosen is a female and not black? |  | 8:27 |
| 4. Evaluate: ${ }^{3}$ | 8:4 | 14. A car bought for $£ 550$ was sold for 20\% more. Complete the sum to find the selling price. | $\begin{aligned} & \hline \text { 8:19 } \\ & \text { 550x } \end{aligned}$ |  |  |  |
| 5. Factorise: 8d-8 | 8:6 | 15. A remote car travels 50 m in $1 / 4 \mathrm{~h}$. What was its speed? | 8:20 | 23. A coin is tossed twice. What is the probability of rolling two TAILS? |  | 8:28 |
| 6. Simplify: $7^{0}$ | 8:7 | 16. What is the sum of the exterior angles of a pentagon? | 8:21 |  |  |  |
| 7. Make ' $d$ ' the subject of the formula $w=5 d+1$ | 8:8 | 17. Work out the perimeter of this circle in terms of $\pi$. | 8:22 | 24. Work out the median class interval weekly pocket money |  | 8:29 |
| 8. Solve: $2(x+1)=x+5$ | 8:10 | 18. Work out the volume of this prism. | 8:23 | $4-6$ <br> $7-9$ <br> $10-12$ | 9 <br> 5 <br> 4 |  |
| 9. What is the gradient of the graph with the equation $y=x+6$ ? | 8:12 | 19. Enlarge triangle by sf $1 / 2$, centre $X$. |  |  | $\begin{aligned} & x \\ & x x^{x} \end{aligned}$ |  |
| 10. Give the nth term of the sequence $3,7,11,15,19 \ldots$ | 8:15 | 20. A map scale is 1:1000. What would 10 cm represent in metres? | 8:25 | I 165 160 155 150 | $190 \quad 200$ |  |
| Total (A) |  | Total (B) |  | Total (C) |  |  |
| Test Total ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) |  | R (0-9) | Y (10-19) |  | G (20-25) |  |

