| Name | Date | Class |  |
| :---: | :---: | :---: | :---: |
| Section A:Numbers \& calculating | Section B: Algebra | Section C: Using and applying |  |
| 7.1 <br> 1. To increase an amount by $40 \%$, what single multiplier would you use? | 7.6 <br> 11. Expand \& simplify: $(x-8)(x+2)$ | 21. |  |
| 7.1 <br> 2. To decrease an amount by $8 \%$, what single multiplier would you use? | 7.6 <br> 12. Expand \& simplify: $(x+7)(x-1)$ | To find ' $x$ ' choose one calculation: $\sqrt{9^{2}+6^{2}} \quad \text { OR } \quad \sqrt{9^{2}-6^{2}}$ |  |
| 7.2 <br> 3. Increase 250 ml by $40 \%$ | 14. Solve: $3 x-1<2$ | 22. <br> 80 is rounded to the nearest ten. |  |
| 7.2 <br> 4. Decrease 200 g by $8 \%$ | 7.8 <br> 14. Give the inequality | Write down the maximum possible length it could have been. |  |
| 7.3 <br> 5. Without a calculator work out: $0.03 \times 0.09$ | 7.9 <br> 15. Make a the subject of the formula: $P=2 a-3$ | 23. <br> A silver brooch has a mass of 315 g . The density of the silver is $10.5 \mathrm{~g} / \mathrm{cm}^{3}$ |  |
| 7.3 <br> 6. Without a calculator work out: $21 \div 0.3$ | 7.9 <br> 16. Work out the value of: $x y+y$ <br> When $x=5$ and $y=2$ | What is the volume of the silver? |  |
| 7.4 <br> 7. Round off 0.065 to one significant figure | 7.10 <br> 17. Write down the next term in this sequence: 2481632 ... | 24. <br> The relative frequency of yellow on a spinner is $2 / 3$. How many times would |  |
| 7.4 <br> 8. Estimate the answer to: $18.4 \div 0.47$ | 7.10 <br> 18. Write down the $3^{\text {rd }}$ term in the sequence given by: $T(n)=2 n^{2}$ | you expect a yellow in 180 spins? |  |
| 7.5 <br> 9. Use a calculator to work out: (1dp) $(2.4 \times 1.9)^{3} \div 2.03$ | 7.11 <br> 19. If $y=x^{2}-x-3$, <br> find the value of $y$ when $x=2$ | 25. <br> Work out the volume of this prism? |  |
| 7.5 <br> 10. Use a calculator to work out:(1dp) $\frac{62.3+19.5}{7.6 \times 1.9}$ | 7.11 <br> 20. If $y=x^{3}+2 x$, <br> find the value of $y$ when $x=2$ |  |  |
| Total (A) | Total (B) | Total (C) |  |
| Test Total ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) | R (0-9) | -19) $\quad$ G (20-25) |  |

