| Name | Date | Class |  |
| :---: | :---: | :---: | :---: |
| Section A:Numbers \& calculating | Section B: Algebra | Section C: Using and applying |  |
| 7.1 <br> 1. To increase an amount by $17.5 \%$, what single multiplier would you use? | 7.6 <br> 11. Expand \& simplify: $(x-2)(x+9)$ | 21. |  |
| 7.1 <br> 2. To decrease an amount by $16 \%$, what single multiplier would you use? | 7.6 <br> 12. Expand \& simplify: $(x+1)(x-5)$ | To find ' $x$ ' choose one calculation: $\sqrt{7^{2}+5^{2}} \quad \text { OR } \quad \sqrt{7^{2}-5^{2}}$ |  |
| 3. Increase $£ 160$ by $17.5 \%$ | 7.8 <br> 14. Solve: $3 x+11 \leq 2$ | 22. <br> 80 is rounded to the nearest ten. |  |
| 7.2 <br> 4. Decrease 800 g by $16 \%$ | 7.8 <br> 14. Give the inequality | Write down the minimum possible length it could have been. |  |
| 7.3 <br> 5. Without a calculator work out: $1.5 \times 2$ | 7.9 <br> 15. Make a the subject of the formula: $P=2 a+4$ | 23. <br> The volume of glass was $3600 \mathrm{~cm}^{3}$. The density of glass is $2.6 \mathrm{~g} / \mathrm{cm}^{3}$. |  |
| 7.3 <br> 6. Without a calculator work out: $12 \div 0.4$ | 7.9 <br> 16. Work out the value of: $x y+y$ <br> When $x=-3$ and $y=2$ | What is the mass of the glass? |  |
| 7.4 <br> 7. Round off 48.7 to one significant figure | 7.10 <br> 17. Write down the next term in this sequence: $3 \quad 5 \quad 9 \quad 15 \quad 23$... | 24. <br> The relative frequency of getting a HEAD when tossing a coin is $3 / 8$. How many |  |
| 7.4 <br> 8. Estimate the answer to: $284 \div 0.52$ | 7.10 <br> 18. Write down the $5^{\text {th }}$ term in the sequence given by: $T(n)=2 n^{2}$ | HEADS would you expect if the coin is tossed 400 times? |  |
| 7.5 <br> 9. Use a calculator to work out: (1dp) $\sqrt[3]{(9.6 x 43)}$ | 7.11 <br> 19. If $y=x^{2}-x-3$, <br> find the value of $y$ when $x=-4$ | 25. <br> Work out the volume of this prism? |  |
| 7.5 <br> 10. Use a calculator to work out: (1dp) $\frac{V 1000}{7.6 \times 1.9}$ | $7.11$ $\text { 20. If } y=x^{3}+2 x$ <br> find the value of $y$ when $x=-1$ |  |  |
| Total (A) | Total (B) | Total (C) |  |
| Test Total ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) | R (0-9) | Y (10-19) $\quad \mathrm{G}(20-25)$ |  |

