## Year 7 Term 4

| Learning <br> Aim | Emerging | Developing | Securing | Mastering |
| :---: | :---: | :---: | :---: | :---: |
| Percentages | Find simple fractions \& percentage of amounts. | Find any fraction/percentage of amount, inc. decimals \& percentages > 100\% Write percentage of one quantity to another. Change between fractions, decimals and percentages. | Percentage increase and decrease using a multiplier. |  |
| Examples | $\frac{2}{5}$ of $40=$ <br> $20 \%$ of 42 | Work out $2.8 \%$ of 248 Work out $250 \%$ of 30 Write $28 \%$ as a fraction Write $\frac{4}{5}$ as a percentage | Increase 84 by 3.5\% <br> Decrease 124 by $12 \%$ |  |
| Ratio/ Proportion | Simplify ratio | Write a ratio as a fraction and divide into a given quantity Solve simple proportion eg. Recipes, exchange rates |  |  |
| Examples | Simplify 45:15 | Share $£ 225$ in the ratio 2:7 150 g of flour is needed to make 15 cakes, how much flour is needed to make 40 cakes. |  |  |
| Algebra Expressions <br> Sequences | Understand and use algebraic notation <br> Continue finding next terms in linear sequences | Expand single brackets Factorise simple expressions Collecting like terms <br> Find missing terms anywhere in linear sequence | Expand double brackets Model simple situations such as perimeter from given expressions |  |
| Examples | Write 4 more than x Continue $7,10,13,16, \ldots . .$. | Simplify $2 a+3 b+a-5 b$ <br> Expand 5(x-9) <br> Write the nth term for the sequence 7, 10, 13, 16 | Expand and collect $2(x-5)-3(x+4)$ |  |


| Extension <br> opportunities | Introduction to: |
| :--- | :--- |
| Percentages | Simple and compound <br> interest <br> Simplifying expressions <br> \& factorise with powers |

You can find practice on all the topics taught this term at Mathsworkout.co.uk
Login: sarum
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Go to number section:17, Algebra section: 02, 03

Choosing the right level of difficulty for you within each topic area.

