## Arithmetic Progression

## KS2

|  | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: |
| Addition and Subtraction | $\begin{aligned} & \text { Up to HTO +/- HTO (WM) } \\ & \text { +/- Multiples of } 10(\mathrm{OF}) \\ & +/-10,100(\mathrm{OF}) \end{aligned}$ | $\begin{aligned} & \text { +/- THTO + THTO (WM) } \\ & \text { TO.TH +/- TO.TH (WM) } \\ & \text { +/- 10, 100, } 1000 \text { (OF) } \end{aligned}$ | $\begin{aligned} & \text { +/- 10, 100, 1000, } 10000 \text { (OF) } \\ & \text { +/- TTHTO and THTO (WM) } \\ & \text { +/- decimals to } 2 \text { places (WM) } \end{aligned}$ | + / - whole numbers and decimals (WM) |
| Multiplication | $\begin{gathered} \hline \mathrm{X} 3 \times 4 \times 6 \times 8 \times 11(\mathrm{OF}) \\ \times 10(\mathrm{OF}) \\ \sigma \times \sigma \times \sigma(\mathrm{WM}) \\ \mathrm{TO} \times 0(\mathrm{WM}) \end{gathered}$ | $\begin{gathered} \mathrm{X} 9 \times 7 \times 12(\mathrm{OF}) \\ \text { HTO } \times \mathrm{O}(\mathrm{WM}) \\ \times 10 \times 100 \mathrm{O}(\mathrm{~F}) \\ \sigma \times \sigma \times \sigma(\mathrm{WM}) \end{gathered}$ | X 101001000 (OF) Squared numbers (OF) Cubed Numbers (OF) Up to THTO $x$ U (WM) Up to THTO $x$ TU (WM) | Using known multiplication facts (OF) <br> Decimals $\times$ O (WM) THTO $\times$ O (WM) <br> Squared number + Cubed Number (WM) |
| Division | $\begin{gathered} \div 3 \div 4 \div 6 \div 8 \div 11(\mathrm{OF}) \\ \div 10(\mathrm{OF}) \\ \mathrm{HTO} \div O(2,5,3,4) \end{gathered}$ | $\begin{aligned} & \div 9 \div 7 \div 12(\mathrm{OF}) \\ & \div 10 \div 100(\mathrm{OF}) \end{aligned}$ <br> Up to $\mathrm{HTO} \div \mathrm{O}(W M)$ | $\div 101001000 \text { (OF) }$ <br> Using division facts for all tables (OF) $\text { THTO } \div \text { O (WM) }$ | Using known division facts (OF) $\begin{gathered} \text { THTO } \div \mathrm{O} \text { (WM) } \\ \text { THTO } \div \text { TO (WM) } \end{gathered}$ |
| Fractions | $\frac{1}{4}$ of whole (OF) $\frac{3}{4}$ of whole (OF) +/- fractions with the same denominator (OF) Compliments to 1 (OF) Fractions of amounts (WM) | ```+/- fractions with the same denominator (OF) Fractions of amounts (WM) Compliments to 1 (OF)``` | Complements to 1 (OF) <br> +/- Practions with different (OF) denominators (multiples) (WM) <br> +/-mixed fractions (WM) <br> Fractions of amounts (WM) <br> Fraction $\times$ Whole (OF) | Fractions of amounts (WM) <br> Percentages of amounts (WM) Whole Numbers $x$ Percentages <br> (WM) <br> Complements to 1 (OF) <br> Fraction x Fraction (OF) <br> +/- Mixed Numbers with <br> different denominators (WM) <br> Divide fraction by whole number (WM) |
| All Areas | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) BODMAS (WM) <br> Balancing Problems (WM) |

Arithmetic Progression
Year 3

|  | Autumn | Spring | Summer |
| :---: | :---: | :---: | :---: |
| Addition and Subtraction | $\begin{aligned} & \text { HTO +/- TO (WM) } \\ & +/-10,100 \end{aligned}$ | HTO +/- HTO (WM) | +/- Multiples of 10 (OF) |
| Multiplication | $x 3 \times 4 \times 11$ (OF) | $\begin{gathered} \times 6 \times 8 \text { (OF) } \\ \times 10 \text { (OF) } \end{gathered}$ | $\begin{aligned} & O \times O \times O(W M) \\ & \text { TO } \times 0(W M) \end{aligned}$ |
| Division | $\div 3 \div 4 \div 11$ (OF) | $\begin{gathered} \div 6 \div 8(\mathrm{OF}) \\ \div 10(\mathrm{OF}) \end{gathered}$ | HTO $\div$ O $(2,5,3,4)$ |
| Fractions | $\begin{aligned} & \frac{1}{4} \text { of whole (OF) } \\ & \frac{3}{4} \text { of whote (OF) } \end{aligned}$ | +/- fractions with the same denominator within 1 (OF) | Fractions of amounts (WM) Compliments to 1 (OF) |
| All Areas | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) |

Arithmetic Progression
Year 4

|  | Autumn | Spring | Summer |
| :---: | :---: | :---: | :---: |
| Addition and Subtraction | $\begin{aligned} & \text { THTO +/- HTU (WM) } \\ & +/-10,100,1000(W M) \end{aligned}$ | THTO +/- THTO (WM) | TO.TH +/- TO.TH (WM) |
| Multiplication | $\begin{aligned} & \times 9 \times 7 \times 12 \text { (OF) } \\ & \times 0 \text { and } 1 \text { (OF) } \end{aligned}$ | $\begin{aligned} & \times 10 \times 100(\mathrm{OF}) \\ & \text { HTO } \times 0(\mathrm{WM}) \end{aligned}$ | $0 \times 0 \times 0$ (WM) |
| Division | $\begin{aligned} & \div 9 \div 7 \div 12 \text { (OF) } \\ & \div 0 \text { and } 1(\mathrm{OF}) \end{aligned}$ | Up to HTO $\div \mathrm{O}(\mathrm{WM})$ | $\div 10 \div 100$ (OF) |
| Fractions |  | +/- fractions with the same denominator (OF) | Fractions of amounts (WM) Compliments to 1 (OF) |
| All Areas | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) |

## Arithmetic Progression <br> Year 5

|  | Autumn | Spring | Summer |
| :---: | :---: | :---: | :---: |
| Addition and Subtraction | $\begin{aligned} & \text { +/- 10, 100, 1000, } 10000 \text { (OF) } \\ & \text { +/- THTO and HTO (WM) } \end{aligned}$ | +/- TTHTO and THTO (WM) | +/- decimals to 2 places (WM) |
| Multiplication | $\begin{aligned} & \text { X } 101001000 \text { (OF) } \\ & \text { Squared numbers (OF) } \\ & \text { Up to THTO } \times \text { U (WM) } \end{aligned}$ | Cubed Numbers (OF) | Up to THTO $\times$ TU (WM) |
| Division | $\div 101001000$ (OF) | Using division facts for all tables (OF) $\text { THTO } \div 0(\mathrm{WM})$ |  |
| Fractions |  | +/- fractions with different denominators (multiples) (WM) <br> Fractions of a mounts (WM) <br> Fraction $x$ Whole (OF) | +/- mixed fractions (WM) Complements to 1 (OF) |
| All Areas | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) |

## Arithmetic Progression Year 6

|  | Autumn | Spring | Summer |
| :---: | :---: | :---: | :---: |
| Addition and Subtraction | + / - whole numbers and decimals (WM) | + / - whole numbers and decimals (WM) | ALL |
| Multiplication | $\begin{aligned} & \text { Using known multiplication facts (OF) } \\ & \text { Squared number }+ \text { Cubed Number (WM) } \\ & \text { THTO } \times O(W M) \end{aligned}$ | Decimals $\times$ O (WM) | ALL |
| Division | $\text { THTO } \div \mathrm{O} \text { (WM) }$ <br> Using known division facts (OF) | THTO $~$ TO (WM) | ALL |
| Fractions | Fraction $\times$ Fraction (OF) <br> Fractions of amounts (WM) <br> Divide fraction by whote number (WM) <br> +/- Mixed Numbers with different denominators (WM) | Complements to 1 (OF) <br> Percentages of amounts (WM) <br> Whote Numbers $x$ Percentages (WM) | ALL |
| All Areas | Missing Numbers (WM) Balancing Problems (WM) | Missing Numbers (WM) Balancing Problems (WM) BODMAS (WM) | ALL |

