



# OAK FARM JUNIOR SCHOOL

## CALCULATION POLICY:

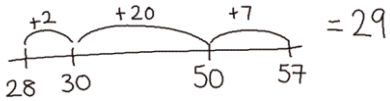
The 4 Operations (using written methods)

*Draft Version*

<b>ADDITION</b>	Year 3	<p>Informal written methods, e.g.</p> $42 + 35$ $40 + 30 = 70$ $2 + 5 = 7$ $70 + 7 = 77$	<p>Formal written method without carrying, e.g.</p> $\begin{array}{r} 42 \\ + 35 \\ \hline 77 \end{array}$	<p>Formal written method with carrying, e.g.</p> $\begin{array}{r} & 1 & & \\ & 4 & 5 & \\ + & 3 & 6 & \\ \hline & 8 & 1 & \end{array}$
	Year 4	<p>Formal written method with larger numbers but no carrying, e.g.</p> $\begin{array}{r} 2642 \\ + 1324 \\ \hline 3966 \end{array}$	<p>Formal written method with larger numbers and carrying, e.g.</p> $\begin{array}{r} & 1 & & 1 & & 1 & & \\ & 2 & 6 & 4 & 7 & & & \\ + & 1 & 3 & 5 & 6 & & & \\ \hline & 4 & 0 & 0 & 3 & & & \end{array}$	

Year 5 & 6	<p>Formal written method with decimal numbers with the same number of digits, e.g.</p> $  \begin{array}{r}  64.2 \\  + 32.6 \\  \hline  96.8  \end{array}  $	<p>Formal written method with decimal numbers with different number of digits, e.g.</p> $  \begin{array}{r}  264.2 \\  + \quad 32.6 \\  \hline  296.8  \end{array}  $	<p>Formal written method with decimal numbers and carrying, e.g.</p> $  \begin{array}{r}  \phantom{0}^1 2 \phantom{0}^1 6 \phantom{0}^1 4 \phantom{0} 7 \\  + \phantom{0} 1 \phantom{0} 3 \phantom{0} 5 \phantom{0} 6 \\  \hline  4 \phantom{0} 0 \phantom{0} 0 \phantom{0} 3  \end{array}  $
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SUBTRACTION

Year 3	<p>Informal written methods, e.g. number line: <math>57 - 28</math></p> 	<p>Formal written methods without exchanging, e.g.</p> $\begin{array}{r} 48 \\ - 26 \\ \hline 22 \end{array}$	<p>Formal written methods without exchanging, e.g.</p> $\begin{array}{r} 849 \\ - 325 \\ \hline 524 \end{array}$
Year 4	<p>Formal written methods with exchanging, e.g.</p> $\begin{array}{r} \overset{3}{\cancel{4}}5 \\ - 26 \\ \hline 19 \end{array}$	<p>Formal written methods with exchanging, e.g.</p> $\begin{array}{r} \overset{3}{\cancel{6}}\overset{1}{2} \\ - 326 \\ \hline 316 \end{array}$	



MULTIPLICATION	Year 3	Informal written method (TU x U), e.g.		Informal written method (HTU x U), e.g. grid method	
	$62 \times 5$ $60 \times 5 = 300$ $2 \times 5 = 10$ $300 + 10 = 310$		$\begin{array}{c c c} x & 300 & 60 & 2 \\ \hline 5 & 1500 & 300 & 10 = 1810 \end{array}$		
Year 4	Formal written method (TU x U), e.g.		Formal compact written method (TU x U) e.g.		Formal compact written method (HTU x U) e.g.
$\begin{array}{r} 17 \\ \times 5 \\ \hline 35 \\ + 50 \\ \hline 85 \end{array}$		$\begin{array}{r} \phantom{1}^3 7 \\ \times \phantom{1} 5 \\ \hline 85 \end{array}$		$\begin{array}{r} \phantom{2} \phantom{1}^3 7 \\ \times \phantom{1} \phantom{0} 5 \\ \hline 1085 \end{array}$	

	Year 5 & 6	Formal written method (ThHTU x U), e.g. $  \begin{array}{r}  \phantom{0}2\phantom{0}3\phantom{0}4\phantom{0}5 \\  \times \phantom{0}7 \\  \hline  16,415  \end{array}  $	Formal written method (ThHTU x TU), e.g. $  \begin{array}{r}  \phantom{000}1 \\  \phantom{0}1\phantom{0}1\phantom{0}2 \\  \times \phantom{0}2\phantom{0}4 \\  \hline  5380 \\  + 26900 \\  \hline  32280 \\  \phantom{00}1\phantom{0}1  \end{array}  $	Formal written method (HTU x .t), e.g. $  \begin{array}{r}  \phantom{00}2\phantom{0}3 \\  \times \phantom{0}4\phantom{0}\bullet\phantom{0}7 \\  \hline  161 \\  920 \\  \hline  108\bullet1  \end{array}  $

<b>DIVISION</b>	Year 3	Informal written methods, e.g.  $48 \div 3$  $10 \times 3 = 30$ $\underline{6} \times 3 = 18$ $16 \times 3 = 18$	
	Year 4	Formal written short division method TU $\div$ U (no remainders), e.g.  $\begin{array}{r} 14 \\ 4 \overline{)56} \end{array}$	Formal written short division method HTU $\div$ U (no remainders), e.g.  $\begin{array}{r} 032 \\ 6 \overline{)192} \end{array}$
	Year 5	Formal written short division method ThHTU $\div$ U (no remainders), e.g.  $\begin{array}{r} 0308 \\ 7 \overline{)2156} \end{array}$	Formal written short division method ThHTU $\div$ U (including remainders), e.g.  $\begin{array}{r} 0246r7 \\ 8 \overline{)1975} \end{array} = 246\frac{7}{8}$



Year 6	<p>Formal written short division method ThHTU ÷ TU (no remainders), e.g.</p> <p>1 → 15 2 → 30 3 → 45 4 → 60</p> $15 \overline{) 4560} = 304$	<p>Formal written short division method ThHTU ÷ TU (including remainders), e.g.</p> <p>1 → 12 2 → 24 3 → 36 4 → 48 5 → 60 <del>6</del> → 72</p> $12 \overline{) 7635} = 636 \frac{3}{12}$	<p>Formal written long division method ThHTU ÷ TU (including remainders), e.g.</p> $12 \overline{) 7635.00} = 636.25$