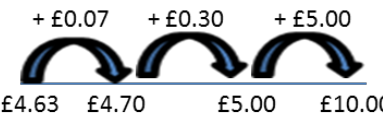
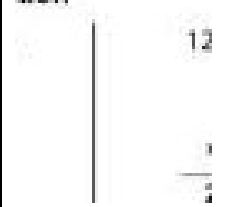
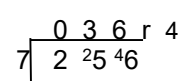


# Mount Pleasant Primary School Calculation Policy

## Year 5 - By the end of year 5 we expect children to:

| Addition   | Subtraction   | Multiplication   | Division  |
|--|---|--|---|
| <p><b>Add or subtract the nearest multiple of 10 or 100, then adjust mentally</b><br/>Continue as in Year 4 but with appropriate numbers e.g. <math>458 + 79 =</math> is the same as <math>458 + 80 - 1</math></p> <p><b>Column Addition</b><br/>Compact methods up to 5 digits, decimals and metric<br/>Carry in the units column first, then tens after this extend to hundreds and thousands column</p> $\begin{array}{r} 23587 \\ + 2675 \\ \hline 26262 \\ 111 \end{array}$ $\begin{array}{r} 23587 \\ + 12675 \\ \hline 36262 \\ 111 \end{array}$ <p>Extend to decimals (same number of decimal places) and adding several numbers (with different numbers of digits).<br/>Know that decimal points should line up under each other, particularly when adding and subtracting mixed amounts. Eg. <math>3.2\text{m} + 280\text{cm}</math></p> <p><b>Adding Fractions</b><br/>Begin to add related fractions using equivalences, e.g. <math>\frac{1}{2} + \frac{1}{6} = \frac{3}{6} + \frac{1}{6}</math></p> | <p><b>Subtract the nearest multiple of 10 or 100, and then adjust.</b><br/>Continue as in Year 4 but with appropriate numbers. <math>458 - 67 =</math><br/><math>458 - 70 + 3 =</math></p> <p><b>Complementary addition</b><br/>Use complementary addition for subtractions where the larger number is a multiple of 1000 and for subtractions of decimals with up to two places incl. amounts of money, e.g. <math>\pounds 10.00 - \pounds 4.63</math></p>  <p><b>Compact Column Subtraction – up to 4 digits and 4 digits, decimals, metric structured progression- exchanging from 10, then 100s</b><br/>Continue using compact column subtraction method. Extend to decimals (same number of decimal places)<br/>Introduce exchanging with the hundreds column.</p> $\begin{array}{r} 29 \\ 281015 \\ - 1157 \\ \hline 1148 \end{array}$ $\begin{array}{r} 4 \\ 49.516 \\ - 27.28 \\ \hline 22.236 \end{array}$ | <p><b>Short multiplication</b><br/>Multiplying number up to 4 digits by a one or two-digit number.</p> $\begin{array}{r} 23 \\ \times 7 \\ \hline \end{array}$ <p><b>Long Multiplication</b><br/>Multiply up to 4 digits by a 2-digit whole number</p>  <p><b>Problem solving/Reasoning</b><br/>Two step problems</p> <p>-Alysha eats 8 biscuits a day for the whole of September and October.<br/>How many biscuits does she eat altogether?</p> <p><b>Multiplying Fractions</b><br/>Begin to multiply fractions and mixed numbers by whole numbers <math>\leq 10</math>, e.g. <math>4 \times \frac{2}{3} = \frac{8}{3} = 2\frac{2}{3}</math>.</p> | <p><b>Short division</b><br/>Dividing a 3-digit number by a 1-digit</p> $256 \div 7$  <p>Dividing up to a 4-digit number by a 1-digit number.<br/>Express the remainder as a fraction moving to a decimal (2dp).</p> $4 \overline{) 2564} \text{ r } 1$ <p>Answer: <math>64\frac{1}{4}</math> or 64.25</p> |

Mount Pleasant Primary School Calculation Policy

Note- For time calculations and time problems  
(Use the number line method – counting on)

School starts at 8.55. We work for 1h 45m.

What time is break?

+0.05h                    +0.40h                    + 1.00h



8.55                    9.00                    9.40                    10.40

Counting on method for adding time

Subtracting Fractions

Begin to subtract related fractions using  
equivalences, e.g.  $\frac{1}{2} - \frac{1}{6} = \frac{2}{6}$

Note- For time calculations and time problems  
(Use the number line method – counting back)

The school fair starts at 11 o'clock. It  
takes me 1 hour and 45 minutes to walk  
to school. What time do I need to set off?

9.15                    9.30                    10.00                    11.00



- 0.15h                    - 0.30h                    - 1.00h

Counting back method for subtracting time