## Mathematics Short Term Plan

Year 5 Term 1 Week 3 Unit - Calculations

| Children exceeding MARE (3a/4c) | Children at MARE (3b) | Children just below MARE (3c) | Children well below MARE (2a) |
| :--- | :--- | :--- | :--- |
| OV | WH | LB | SD |
| MW | JK | OH | ET |
| TY | JK | JR |  |
| OB | LL |  |  |
| AB | FM |  |  |
| JB | LN |  |  |
| ND | MP |  |  |
| LE | JP |  |  |
| RE | SF | GT |  |
| AG |  |  |  |
| TH |  |  |  |
| CS |  |  |  |

This week's groupings:

| Orange <br> (BA/A) <br> LB <br> LN <br> JK <br> MP | Apple <br> (BA/A) <br> SD <br> JP <br> GT <br> WH | Banana <br> (BA/A) <br> ET <br> JK <br> BD <br> SF | Strawberry <br> (BA/A) <br> JR <br> FM <br> LL <br> OH | Mango $\begin{aligned} & (A+/ A A) \\ & \text { TH } \\ & J B \\ & N D \\ & A B \end{aligned}$ | Melon $(A+/ A A)$ <br> OV <br> RE <br> OB <br> LE | Peach $\begin{aligned} & (A+/ A A) \\ & M W \\ & T Y \\ & C S \\ & A G \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Week Beginning: | 16th September 2013 |  | Strand: Calculating |
| :---: | :---: | :---: | :---: |
| Mental/oral Objective/focus: | Recall multiplication and division facts at speed. | Key <br> Objectives: | Use practical and informal written methods to add and subtract two digit numbers. (C Level <br> 3) <br> Derive and recall all addition and subtraction facts for each number to 20. (C Level 3) <br> Derive and recall sums and differences of multiples of 10 and number pairs that total 100. (C <br> Level 3) <br> Derive and recall multiplication facts for the 2,3,4,5,6 and 10 times-tables and the corresponding division facts. (CLevel 3) <br> Use knowledge of number operations and corresponding inverses, including doubling and halving, to estimate and check calculations. (C Level 3) <br> Add or subtract mentally combinations of one- and two-digit numbers. (CLevel 3) <br> Develop and use written methods to record, support or explain addition and subtraction of <br> two-and three-digit numbers. (CLevel 3) <br> Derive and recall multiplication facts up to $10 \times 10$, the corresponding division facts and multiples of numbers to 10 up to the tenth multiple. (C Level 4) <br> Use knowledge of rounding, number operations and inverses to estimate and check calculations. (CLevel 4) <br> Refine and use efficient written methods to add and subtract two- and three-digit whole numbers and $£ . p$ (CLevel 4) |


| M | Mental/Oral LO (WBT): <br> WALT recall multiplication <br> and division facts at speed. |
| :---: | :--- |
|  | Activity <br> Complete speed tables. Pupils <br> have 5 minutes to complete as <br> much of the square as <br> possible. |


| Main LO: derive and recall multiplication and division facts. |
| :--- |
| AA <br> SC: Are able to derive and recall <br> facts up to $10 \times 10$. |
| A |
| SC: Begin to derive and recall facts |
| up to $10 \times 10$. | | BA |
| :--- |
| SC: Are able to recall facts for |
| the $2,3,4,5,6$ and 10 times- |
| table. |

## Vocabulary

Place
All - Teach - Teacher
Use a counting stick to help
children practise different times tables. Look in particular at the basics.
Have a "function machine" on the

## Practise/Apply:

Higher- Abacus 5.1, page 14
Middle- Abacus 5.1, page 13
Lower- Abacus 5.1, page 12
Special- Abacus 5.1, page 11
Extension: Abacus 5, Challenge, p. 5

## Plenary

Play "Corners" to continue to practise multiplication tables.

|  | IWB. Can children determine the <br> right multiplication table by <br> looking at the input and output? <br> What would happen, if I put it into <br> reverse? Can we work the new <br> results out as well? | Focus Group: Orange/Apple <br> Challenge pupils to explore other <br> times tables by looking at <br> patterns. What can we use to help <br> us find the 6 times table? How <br> about the 9s? | Focus Group: Banana/Strawberry <br> Challenge pupils to explore other <br> times tables by looking at patterns. <br> What can we use to help us find <br> the 6 times table? How about the <br> $9 s ?$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| T | Mental/Oral LO (WBT): <br> WALT recall multiplication and division facts at speed. | Main LO: Use place value to complete number sequences. <br> Vocabulary <br> Place value, digits, hundreds, thousands, ten thousands, tens, DIFFERENCE, rule, term | of to work <br> nes, posit | BA <br> SC: Can complete basic number sequences. <br> hundred thousands, millions, | Plenary |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Activity <br> Play quick game to practise multiplication and division facts. | Teach - All - Teacher <br> Use counting stick to start looking at sequences and numbers going up or down according to a particular pattern. Can children identify the pattern? Start with easy ones ( +1 , -10, etc.) <br> Have a look at different sequences on the board. Can they identify the mystery number? (DIFFERENCE between numbers in the sequence.) <br> Establish that the correct rule needs to be found. Place value can help us with this. | Practise <br> Complet next thr <br> Practise <br> Practise <br> Higher- <br> Middle- <br> Lower- <br> Special- <br> Extensio | pply - All - Pairs <br> UM, p.6, Q1 together, finding the numbers in the sequence. <br> pply - Independent <br> pply: <br> M, p. 6/7, Level 4+5 ONLY <br> 5, p.12, C:C <br> 5, p.12, C:B <br> 15, p.12, C:A <br> $n / a$ | Display a <br> sequence of square numbers as an example. Can the children determine the rule? (Square numbers are special numbers, similar to triangular numbers, cube numbers, or the |


|  |  | Focus Group: LB, ET, JR <br> Support children in finding the correct rule. <br> Complete tasks together and attempt to <br> challenge where possible. Begin working from <br> lowest level task (S) and try to work up to <br> second level (L), if confidence and <br> understanding increase. |
| :--- | :--- | :--- | :--- | :--- |



|  |  | solve. |
| :--- | :--- | :--- | :--- |


|  | Mental Oral LO (WBT): WALT | Main LO: Use written methods for AA <br> SC: Are able to use column addition to add whole numbers and decimals. | addition. <br> A <br> SC: Are able to use co addition to add threedigit numbers. | four- | BA <br> SC: Are able to use an empty number line to add two- and threedigit numbers. | Plenary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Vocabulary <br> Addition, column, number line, decimal, place value, digits, hundreds, thousands, ten thousands, tens, ones, position, hundred thousands, millions |  |  |  |  |
| Th |  | Teach - Teacher <br> Go through a miscalculated column addition. Can pupils identify the mistake made? How can it be corrected? <br> Take a look at basic column addition, before moving on to include numbers crossing columns. Children should follow on their whiteboards to practise the method. |  | Pract <br> H- TM <br> $M(2)$ <br> M(1)- <br> L- TM <br> S- Se <br> Exten | $\begin{aligned} & \text { /Apply Task: } \\ & \text { p. } 23 \\ & \text { 15, p. } 40, C: C \\ & \text { 15, p. } 40, ~ C: B \\ & \text { p. } 40, C: A \\ & \text { s F, ADDSUB, p. } 1 \\ & \text { n: Series F, RUN, p. } 15 \\ & \hline \end{aligned}$ |  |
|  |  |  |  | Focus <br> Take <br> work <br> decim | Melon/Mango/Peach ok at using column addition for decimals. Stress importance of points being aligned. |  |
|  |  |  |  | Focus <br> LSA <br> Work <br> method | BA/A groups, less any ch. with securing understanding of column particularly secure layout. |  |




Within in each Maths lesson there will be a Mental Oral starter linked to main teaching session if possible During the main body of the lesson you must plan for each group to receive

- Teach - teach the new skill / concept / method. To include modelling and shared example
- Practise - the skill / concept / method independently (of the teacher) in the same context as it was modelled

