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| Macintosh HD:Users:Office:Pictures:iPhoto Library.photolibrary:Previews:2015:12:17:20151217-102001:xn4LKbL3S4OMVGkfpO50ZQ:SAM_5364.JPG**Weekly Maths Planning Sheet Week Beg**: 19/10/20 | **Focus**: Arithmetic focus Division  | **Key Vocab**:calculate mentally formal method column method integer decimal add, plus, sum, total subtract, take away, difference multiply, product represent estimate round approximate formula term  |
| Learning Objectives | Main Teaching | Representing(Showing) | Fluency(Practising) | Probing Questions(Explaining) | Rich and Complex Tasks (Solving) |
| 1. Divide a 3/4-digit number by a 1-digit number using a written method

X2 sessions for some | What is dividing? What is meant by the term divide? How can we explain what we are doing to a number when we are dividing? Recap the bus stop method – most will have done this in year 5 - using the interactive whiteboard model 3 and 4 digit numbers divided by 1. **Model*** no exchange necessary e.g. $9366 ÷3$
* first digit is lower than divisor requiring exchange e.g. $2196 ÷3$
* single exchange e.g. $2376 ÷3$ or $8476 ÷4$
* two or more exchanges e.g. $4185 ÷5$
* examples with remainders e.g. $4189 ÷5$
 |  | Same progression as modelled set of division calculations8842 ÷ 2 3248 ÷ 4 5766 ÷ 62877 ÷ 38476 ÷ 44185 ÷ 54279 ÷ 5 9759 ÷ 7Over into a second session due to inaccuracy 9366 ÷ 34848 ÷ 42196 ÷ 34505 ÷ 52376 ÷ 36472 ÷ 83792 ÷ 49856 ÷ 84189 ÷ 5 7399 ÷ 4LA – working on dividing by 2, 3 and 5Sharing with the use of objects  | Convince me 1756 ÷ 5 will have a remainder of 1 |  |
| 1. Divide a 3-digit number by 2-digit number using a formal written method
 | **Model*** known times table, no remainder e.g. $756 ÷12$
* simple times table to derive, no remainder e.g. $966 ÷21$
* larger number requiring derivation of times table, no remainder $986 ÷34$
* examples with remainders e.g. $874 ÷15$
 |  | Same progression as modelled set of division calculationsHave divisions within the 12 x table in case 920 ÷ 10 612 ÷ 12864 ÷ 24945 ÷ 21468 ÷ 36672 ÷ 42864 ÷ 15923 ÷ 23328 ÷ 32LA – working on dividing by 2, 3 and 5 Sharing with remainders | Convince me 598 ÷ 26 = 23 |  |
| 1. Divide a 4-digit number by a 2-digit number using a formal written method

X2 sessions needed  | **Model*** known times table, no remainder e.g. $2856 ÷12$
* simple times table to derive, no remainder e.g. $6594 ÷21$
* larger number requiring derivation of times table, no remainder 3591$ ÷57$
* examples with remainders e.g. $4588 ÷16$

Taking two sessions |  | Some children staying within their times tables, so they are still dividing using the formal method 1 140 ÷ 121 188 ÷ 121 320 ÷ 122 136 ÷ 123 568 ÷ 124 738 ÷ 129 635 ÷ 12Majority – those accurate with x12 to progress to these calculations1 140 ÷ 121 001 ÷ 111 365 ÷ 211 056 ÷ 221 120 ÷ 144 788 ÷ 573 366 ÷ 345 269 ÷ 276 917 ÷ 469 308 ÷ 25LA – working on dividing by 2, 3 and 5 Bus stop method | Convince me that $6279 ÷23=273$Always, Sometimes, Never?Long division is needed to divide a four digit number by a two digit number |  |
| 1. Divide a 4-digit number by a 2-digit number using a formal written method giving the remainder as a fraction
 | Continue after half term * known times table, no remainder e.g. $2857 ÷12$
* simple times table to derive, no remainder e.g. $6597 ÷21$
* larger number requiring derivation of times table, no remainder 3541$ ÷57$
 | Using place value counters to complete the division practically. When the final remaining units are separated, using bar to represent how much of a full divisor they are. When dividing by 12 and having a remaining 5 ones, this represents or 5/12 of a whole column | 4637 ÷ 122398 ÷ 12 5437 ÷ 123928 ÷ 121965 ÷ 212130 ÷ 299822 ÷ 34 | Convince me that if I divide 132 sweets between 5 people, this gives 26 r2 or 26 2/5 each.  |  |
| 1. Divide a 4-digit number by a 2-digit number, giving an answer to up to 2dp, using a formal written method
 | Divide a 4-digit number by a 2-digit number, giving an answer to up to 2dp, using a formal written method * example resulting in exactly 1dp e.g. $4580 ÷16$
* example resulting in exactly 2dp e.g. $4576 ÷16$
* example resulting in longer decimal (requiring truncation) e.g. $4579÷16$
 |  | Answer to one decimal place 3928 ÷ 111965 ÷ 23Answer to two decimal places 2130 ÷ 299822 ÷ 349144 ÷ 29 | Convince me that $6143÷11=558.45 $to 2 decimal places. |  |
| 1. Recognise and solve a simple division problem, interpreting any remainders in the context as appropriate.
 | Using the bar model to represent a word or other division problem. For example: 6 people share £1764 equally between them. How much do they each receive? | Keeping with the use of bar models Remainder problems – an account has £9542 in it. If you spend £86 per day, after how many days will the money run out? word problem – sharing language e.g. 3282g flour to make 56 cupcakes. How much flour is in each cupcake? word problem – grouping language e.g. 2543 people go to Wembley. 52 people can fit on each bus. What is the minimum number of buses required?  |  Making the decision whether the remainder needs to be rounded up, done, expressed as a fraction or a decimal | Convince me that a remainder of 5 can mean different things in different questions |  |