Sandringham Pre-School
A great place to be two

Sandringham Primary School

Sandringham Primary and Pre-School Calculation policy 2015

Updated: 19.10.15

Sandringham Vision Statement

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. (NC 2014)

At Sandringham Primary School, every child can achieve in maths and it is our responsibility as teachers to provide the environment and experiences to make this possible. As teachers, we believe that every child is a capable mathematician with the ability to reason and problem solve.

Exploration and discovery are at the heart of our curriculum. Children will link old and new learning experiences together in order to develop fluency and build a deeper understanding of their maths.

Opportunities for reasoning, explanation and clarification are provided through talk. High quality dialogue within the classroom will make sure our children are challenging their own thoughts with those around them whilst broadening their knowledge and understanding.

At Sandringham Primary School, every child in every classroom has a "I can solve anything" attitude.

Introduction

The purpose of this calculation policy is to provide support and guidance for the teachers, parents and governors of Sandringham Primary School. At Sandringham, our teaching of maths is based on a mastery approach - we want our children to develop a deeper understanding of maths in which children are confident and articulate.

"in mathematics, you know you've mastered something when you can apply it to a totally new problem in an unfamiliar situation" Dr Helen Drury (2014)

Where has this approach stemmed from?

The Cockcroft report of 1982 looked in detail at the teaching and learning of mathematics across both Primary and Secondary schools in England and Wales. The report made many suggestions for improvement - including more opportunities for exploration, developing life skills as well as the importance of a deep understanding of maths. The recommendations made reflect our mastery approach to the curriculum.

Why Singapore?

The National Curriculum (2014) Primary Maths has clear links to the principles that underpin those found in many South-East Asian countries where performance outstrips that of the UK. Countries include Singapore, China and Japan. Results in recent years from such countries show that on average by the age of 15, students are outperforming those compared to schools in England by three years (OECD).

This was not always the case in South East Asia. During the 1980's students in the countries mentioned performed poorly in maths. Teaching methods were based on rote memorisation, procedure and computation. The poor performance of students provided the stimulus for change in the style of teaching maths.

The Mastery Approach to teaching and learning was introduced to countries in Southeast Asia during the 1990's, and consequently results have risen steeply. Maths teaching is based on a problem solving approach where children are encouraged to think deeply, discuss and share their mathematical ideas - this is something reflected in our own National Curriculum.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

→ Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

→ Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

→ Can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At Sandringham Primary School we strive to provide learning opportunities on a daily basis that will ensure our children are able to develop these vital key skills. We understand the importance of teaching the small steps necessary to lead to a mastery understanding.

A Sandringham Mathematician:

Has imaginative ideas

Asks questions

Is happy to make mistakes and learn from them

Enjoys describing, explaining and discussing their work

Looks for patterns and connections between learning

Shows resilience when things are tough – they keep going!

The aims of the policy are to provide guidance on the steps needed when teaching the four main operations:

Addition
Subtraction
Multiplication
Division

The policy is designed to show the microscopic steps that are needed at each level before moving to the next. It is important to note that children will need variation of the same type of question in each example - it is not sufficient to say that children need to work through the following in a linear only process answering each question in turn. The examples given need to be provided in a variety of context.

The mathematical language used to describe each calculation should be encouraged throughout. Appendix I provides an explanation of each mathematical term described in the policy.

Addition

Note - The steps described below are the steps required to master column method. It is assumed children are confident with the prerequisite skills as described in the "Teaching number skills" document.

Addend + addend = sum

Children should be encouraged to use subtraction as the inverse to check answers

Commutativity should be discussed throughout

"Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers." NC 2014 This should be considered for steps 1 & 2

1. 2 digit + 2 digit: one or both the numbers are multiples of 10s

   E.g. 20 + 60, 23 + 30, 56 + 20, 70 + 20, increase 50 by 36

2. 2 digit + 2 digit: The maximum total in either column is 9 or below - no carrying/exchange is needed.

   E.g. 32 + 45, 66 + 23, 25 + 34, the total of 41 and 35 is

3. 2 digit + 2 digit: The total in the units column **only** can total to 10 and above carrying/exchange will be introduced.

   E.g. 27 + 34, 48 + 26, 37 more than 46 equals

4. 2 digit + 2 digit: The totals in the tens column **only** can total to 10 and above – carrying/exchange will be used in the tens column only.

   E.g. 32 + 84, 56 + 73, If I combine 72 and 86, I will have

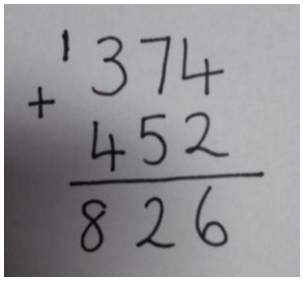
5. 2 digit + 2 digit: The totals in both the tens and units can total 10 or above - carrying/exchange will be used in **both** columns.

   E.g. 75 + 86, 67 + 76, 87 plus 64 equals

6. 3 digit + 3 digit: The totals of the units column **only** can total 10 or above. The totals of the tens and hundreds columns must be 9 or fewer - carrying/exchange will be used in the units column only.

   E.g 247 + 316, 556 + 347, increase 624 by 279

7. 3 digit + 3 digit: The totals of the tens column **only** can total 10 or above. The totals of the hundreds and units columns must be 9 or fewer - carrying/exchange will be used in the tens column only.



E.g 261 + 472, 593 + 326, 183 increased by 774 equals

8. 3 digit + 3 digit: The totals of the hundreds column **only** can total above the 100. The totals of the tens and units columns must be 9 or fewer - carrying/exchange will be used in the hundreds columns only.

   E.g. 731 + 642, 475 + 724, The total of 364 and 845 is

9. 3 digit + 3 digit: The total of **2 or 3** of the columns can include totals above 10 – carrying/exchange will be used in ⅔ of the columns in each question.

   E.g. 476 + 387, 691 + 742, 278 and 925 equal

Assessment 1-9

10. 3 digit + 2 digit: This will need a variety of carrying/exchange and examples without carrying/exchange. The larger number should be placed on top.

    E.g. 346 + 37, 765 + 62, increase 521 by 39

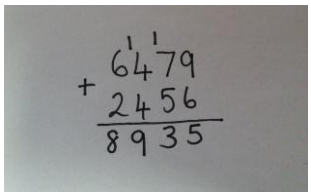
11. 2 digit + 2 digit + 2 digit: Begin to introduce totalling numbers above 20. Carrying/exchange in a mixture of one of both columns.

    E.g. 96 + 35 + 74, 72 + 63 + 78, The total of 75,83 and 61

12. Finding the total of 3 numbers, this should be a mixture of 2 and 3 digit numbers. Carrying/exchange should occur in one, two or three columns. Children should focus on writing clearly using columns, place the larger number first.

    E.g. 67 + 239 + 46, 213 + 58 + 54, Find the total of 67, 243 and 115

13. 4 digit + 4 digit: Carrying/exchange should occur in one or all columns in the **hundreds, tens and units.** It should **not** occur in the thousands.



    E.g. 3475 + 2561, 4175 + 1339, If I increase 1640 by 3627 I will make

14. 4 digit + 4 digit: Carrying/exchange should occur in **all** columns including the thousands column

    E.g. 5476 + 2347, 7621 + 2673, 2157 more than 1689 is

15. Finding the totals of differing lengths of numbers - including carrying/exchanging

E.g. 3465 + 86, 35 + 678, 65 more than 3487 is

16. Finding the totals of 3 differing lengths of numbers - including carrying/exchanging. Children should focus on writing clearly using columns, place the larger number first.

E.g. 4562 + 43 + 187, 176 + 23 + 7431, Combine the following numbers to find the total: 4987, 32, 630
17. Children should now be able to working with any length of number: E.g 476982 + 2738, 27563 + 275, 721 + 27553
Assessment of stages 10-17
18. Introduce decimal 2 digit + 2 digit using column method. No carrying/exchange (1dp) E.g. 3.2 + 4.5, 6.4 + 3.2, Find the total of 4.7 and 4.3
19. Decimal column addition: 2 digit + 2 digit, carrying/exchange **only** in the units column (1dp) E.g. 3.5 + 3.7, 2.7 + 4.8, The total of 2.6 and 4.7
20. Decimal column addition: 2 digit + 2 digit, carrying/exchange in **both** units and tens columns (1dp) E.g 7.5 + 6.7, 8.9 + 2.3, 3.8 add 5.7 equals
21. Decimal column addition: 2 digit + 3 digit. No carrying/exchange, number to 1dp. E.g. 3.5 + 12.2, 54.6 + 1.3, Find the total of 2.5 and 31.4
22. Decimal column addition: 2 digit + 3 digit - carrying/exchange in any column (1dp) E.g. 4.2 + 24.6, 36.4 + 2.4, add together 3.6 and 21.5
23. Adding three or more numbers together of any length and including decimal numbers. This should include any length of decimal places as children are ready. E.g. 5.65 + 23 + 215, 7.6 + 3267 + 320, Find the total of the following numbers: 546, 2.23 and 4765
Assessment of steps 18 - 23

Subtraction

Note - The steps described below are the steps required to master column method. It is assumed children are confident with the prerequisite skills as described in the "Teaching number skills" document.

Minuend - subtrahend = difference

Children should be encouraged to use their knowledge of inverse throughout the steps to check their own working out.

1. 2 digit - 2 digit: No exchange. E.g. 67 - 32, 94 subtract 72, Decrease 78 by 67
2. 2 digit - 2 digit: The value of the unit digit in the subtractor to be greater meaning exchange **only** from the tens column E.g. 46 - 28, reduce 65 by 38, 29 fewer than 73 is
3. 3 digit - 3 digit: No exchange.

E.g. 276 - 154, Reduce 869 by 642, Minus 218 from 479

4. 3 digit - 2 digit: No exchange. It is important numbers are carefully checked to ensure correct alignment.

E.g. 577 - 64, If I took 87 from 398 I would have, reduce 763 by 651

5. 3 digit - 3 digit: The value if the unit digit in the subtrahend to be greater meaning exchange **only** from the tens column

E.g. 568 - 349, Take 267 from 872, Subtract 754 from 976

6. 3 digit - 3 digit: The value of the tens digit in the subtrahend will be greater meaning exchange **only** from the hundreds

E.g. 648 - 382, 837 subtract 275, 364 less than 726

7. 3 digit - 3 digit: The value of the digits in both the tens and units in the subtrahend is greater - meaning exchange from **both** the tens and hundreds.

E.g. 877 - 498, 625 minus 378, subtract 698 from 925

Assessment of steps 1-7

8. 3 digit - 3 digit but the solution will result in a zero in the hundreds column. Exchange from the tens and hundreds.

E.g. 453 - 367, 672 minus 581, 846 subtract 757

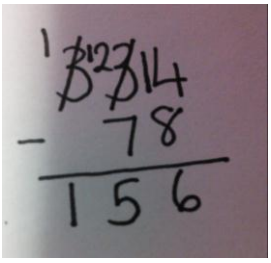
9. 3 digit - 2 digit: The value of the unit digit in the subtrahend will be greater meaning exchange from the tens. Check alignment is clear when writing the calculation.

E.g. 673 - 37, reduce 836 by 28, 47 less than 673 equals

10. 3 digit - 2 digit: The value of the tens digit in the subtractor will be greater meaning exchange from the hundreds. Check alignment is clear when writing the calculation.

E.g. 845 - 73, 763 subtract 81, decrease 738 by 55

11. 3 digit - 2 digit: The value of the tens and units digits in the subtrahend is greater meaning exchange from the tens and hundreds.



E.g. 234 - 58, 643 minus 67, 84 less than 576

1 3. Subtracting pairs of numbers with 4 digits or more, no exchange. Check children are lining up the digits correctly in the column.

E.g. 6743 - 2531, 2765 minus 1610, 5439 less than 9987 is

14. Subtracting pairs of numbers where the subtrahend is 2 digits shorter in place value than the minuend: No exchange.

E.g. 37689 - 432, decrease 689328 by 6117, 534 less than 76413 is

Assessment of steps 8-14

15. 3 digit - 3 digit: The value of the unit digit will be zero in both numbers (the minuend and subtrahend). Include exchange.

E.g. 580 - 320, 390 less than 570 is, 680 subtract 250

16. 3 digit - 3 digit: The value of the tens digit will be zero in both numbers.
E.g 506 - 203, subtract 608 from 809, 705 less than 908 is

17. Repeat steps 13 & 14 with numbers involving 4 or more digits and the subtrahend having the same number or less digits.

E.g. 4532 - 85, decrease 6743 by 67, 49 less than 47628 is

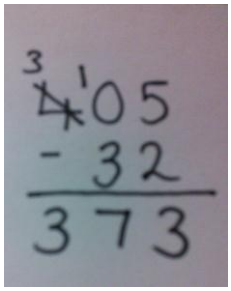
18. The same as steps 15 & 16 with any sized numbers including decimals. The zero in the place value must align and there must be the same number of dp in a question.

E.g 14.06-1.03, 154.02 is less than 275.07, reduce 72.04 by 52.02

19. 3 digit - 2 digit: The subtrahend should contain digits between 1-9 (no zero should be included) The number above should include a zero digit in the unit column, this should be aligned with a non zero digit below.

E.g 340 -26, 780 subtract 46, 370 minus 92

20. 3 digit - 2 digit: The subtrahend must have a digit 1-9 (no zero) in the tens column. The above number should have a zero in the tens column - this should align with the non zero below. There should be a digit 1-9 in the hundreds column in the above number - not a zero.



E.g. 207-32, 609 minus 45, 67 less than 708

21. 3 digit - 2 digit: The unit digit in the subtrahend is greater than the unit digit in the number above. The number above must have a zero in the ten column.

E.g 201 - 32, 604 subtract 47, 38 less than 509 is

22. 3 digit - 2 digit: The three digit must have a zero in both the tens and units.

E.g. 300 - 57, 600 subtract 43, reduce 800 by 64

23. 4 digit - 3 digit: The value of the unit digit in the subtrahend will be **smaller** than the value of the unit in the above number. The above number will have a zero in both the hundreds and tens column.

E.g 4007 - 654, reduce 7003 by 361, 472 less than 8008 is

24. 4 digit - 3 digits: The value of the unit digit in the subtrahend will be **larger** than the value of the unit in the above number. The above number will have a zero in both the hundreds and tens column.

E.g. 1004 - 458. 768 less than 9005 is, decrease 6005 by 269

Assessment of steps 15-24

25. The above steps (1-24 should be repeated in turn including decimal numbers to 1dp. Assessments should be made at the same points as you move through the steps. Note: Some steps will need more time spent on them.

The context of money should be used and children should be moving towards using numbers up to 2dp.

E.g. £10.00 - £1.23, The book cost £7.65. I gave the shopkeeper £20.00. How much change will I receive? £10.00 was given to Sara, she spent £3.56. How much money did she have left?

Multiplication

Note - The steps described below are the steps required to master column method. It is assumed children are confident with the prerequisite skills as described in the "Teaching number skills" document.

factor x factor = product

Children should be encouraged to use division (inverse) as a checking tool

Commutativity should be discussed throughout

1. 2 digit x 1 digit: No carrying. 2, 5 & 10 times tables E.g 32 lots of 2, 5 x 11, 2 multiplied by 34
2. 2 digit x 1 digit: No carrying. 2, 5, 10, 3, 4, 8 times tables E.g. 21 x 4, multiply 32 by 3, 16 lots of 2
3. 3 digit x 1 digit: No carrying. 2 times tables only E.g. 324 x 2, 2 lots of 443, 2 times 312

4. 2 digit x 1 digit: Carrying into the tens column. 2 times table only

E.g. 2 x 27, 36 multiplied by 2, double 47

5. 2 digit x 1 digit: Carrying in both columns (tens and hundreds). 2 times table only.

E.g. 76 x 2, 2 lots of 87, 69 multiplied by 2

Assessment of steps 1-5

6. 2 digit x 1 digit:Carrying in both columns. Numbers within the 2 - 9 times tables

E.g. 5 x 73, multiply 6 by 86, 7 lots of 67

7. 3 digit x 1 digit: Carrying in both columns, 2-0 times tables.

E.g. 345 x 6, 9 lots of 437, multiply 7 by 276

8. 3 x 1 digit Carrying in both columns. A zero should be in the tens column

E.g 507 x 5, multiply 7 by 208, 6 groups of 407

9. Numbers with any length of digit x 1 digit: Carrying in both columns

E.g. 245 x 3, multiply 165 by 7, times 214 by 8

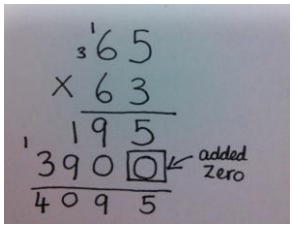
Assessment of steps 5 - 9

10. 2 digit x 2 digit (one of the numbers being used should be between 11-19)
E.g. 34 x 26, multiply 17 by 56, 27 lots of 18 are

11. 2 digit x 2 digit: One of the multipliers to be a multiple of 10

E.g 45 x 70, 60 lots of 67, 14 groups of 70

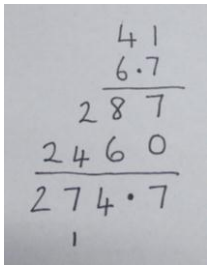
12. 2 digit x 2 digit: The answer to the tens (in the bottom number) x the units in the multiplier (the above number) must equal a multiple of 10. Children must be clear what the purpose of adding the "zero" is when multiplying the tens:
E.g.



Note: the multiple of 10 in this example is "300" and came from 60 x 5. The 60 from the bottom number multiplied by the 5 in the top number (the "multiplier")

13. 2 digit x 2 digit: The numbers can be of any value

E.g. 65 x 27, multiply 75 by 56, 82 lots of 32

14. 3 digit x 2 digit: No zero place holders in either number you are multiplying E.g. 763 x 35, multiply 826 by 27, 67 lots of 376
15. 3 digit x 2 digit: Zero place holders to be included within the numbers being multiplied E.g. 406 x 29, multiply 909 by 17, 76 times 220
16. 4 digit x 2 digit following the same steps as 13, 14, 15
Assessment of steps 9 - 16
Multiplying involving decimals: Children need to be secure in the above steps. The removal of the decimal point to complete the calculation is useful - but it needs to be added back at the end.
17. 2 digit (1 dp) x 1 digit
18. 3 digit (1 dp) x 1 digit
19. 2 digit with 1 dp x 2 digit: The final answer of the calculation will be a zero E.g multiply 32 by 4.5, 3.5 x 64, A pen costs £3.60. How much will 25 pens cost?
20. 2 digit with 1 dp x 2 digit number: Any 2 digit number given      E.g. 6.7 x 41, multiply 37 and 9.3, 64 groups of 4.8
21. 2 digit (with 1 dp) x 3 digit: Any 2 numbers can be used E.g. 623 x 3.6, multiply 8.4 and 235, 3.2 times 522
22. Any money amount x 2 digit number E.g. £56.76 x 32, 74 lots of £28.98, £25.76 times 56
23. 3 digit x 3 digit: Any numbers used E.g 745 x 286, multiply 673 and 276, 887 times 113
Assessment of steps 16-23

Division

Note - The steps described below are the steps required to master column method. It is assumed children are confident with the prerequisite skills as described in the "Teaching number skills" document

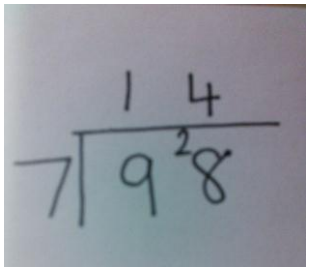
Dividend ÷divisor = quotient

Non-whole number answers should be taught as fractions (e.g. 45 ÷ 6 = 7 3/6 or $7 1/2$)

Children should be encouraged to use multiplication (inverse) as a checking tool

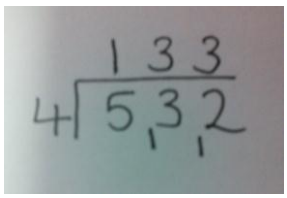
1. 2 digit ÷1 digit with no remainder (quotient is 10 or lower) Children to show their working by writing out with times tables E.g. $30 \div 6 = 5$ $56 \div 8 = 7$ $36 \div 9 = 4$ 42 divided by 6 = 7
2. 2 digit ÷ 1 digit with remainder (quotient is 10 or lower) Children to show their working by writing out with times tables E.g $45 \div 6 = 7\ 1/2$ 32 □□□□□□□□ □□ $5 = 6.4$ $19 \div 2 = 9\ 1/2$
Assessment of steps 1-2: Children will not be able to access any step below until this is complete
3. 2 digit ÷1 digit with no remainder or carrying E.g. $96 \div 3$ □□□□□□ 63 □□ 3, $\Delta = 84 \div 4$

4. 2 digit ÷ 1 digit without remainders in the answer



E.g. $81 \div 3 =$, 95 □□□□□□□□ □□ 5, $78 \div 6 =$

5. 3 digit ÷1 digit: Quotient should be a three-digit number with no zeros. The value in the hundreds column will be greater than the divisor) **No remainders**



E.g. $\Delta = 976 \div 8, 868 \div 7 =$, 426 □□□□□□□□ □□ 3

6. 2 digit ÷1 digit with remainder (quotient higher than 10)

E.g. 71 □□□□□□□□ □□ 2, $91 \div 8, 87 \div 6$

7. 3 digit ÷1 digit **with remainders**. Quotient will be 3 digit with no zero. The value in the hundreds column of the dividend should be greater than divisor

E.g. $837 \div 6,$ □□□□□□□ 935 □□ 8, $\Delta = 563 \div 2$

8. 4 digit ÷1 digit with remainders. As above (The quotient will be the same length of digits as the number in the question)

pic 6

E.g. $7594 \div 6, 9587$ □□□□□□□□ □□ $4, 5857 \div 4$

9. As steps 2-7 for numbers with varying amounts of decimal places - no remainders

E.g. $413.1 \div 3$, 76.83 □□□□□□□□ □□ $3, \Delta = 427.2 \div 3$

Assessment of steps 3-9

10. 3 digit ÷1 digit. The divisor is greater than the hundreds column. Quotient will be 2 digit with no zero. No remainders

E.g. $414 \div 6$, □□□□□□□ 215 □□ $5, 432$ □□□□□□□□ □□ 8

11. 3 digit ÷1 digit. The divisor is greater than the hundreds column. Quotient will be 2 digit with no zero. **With** remainders

E.g. $137 \div 2$, 431 □□□□□□□□ □□ 8, $328 \div 7$

12. 4 digit ÷1 digit. The divisor is greater than the thousands column. Quotient will be three digit - **no** remainders

E.g. □□□□□□□ 2593 □□ $3,7543 \div 9,1795 \div 2$

13. 3 digit ÷1 digit. The divisor is equal to the value in the hundreds column. The quotient has a zero in the tens column. With and without remainder

E.g. $217 \div 2,849$ □□□□□□□□ □□ $8,758 \div 7$

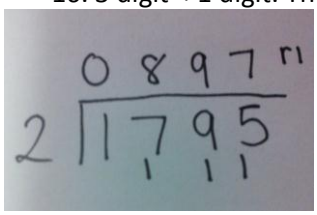
14. 4 digit ÷1 digit. The divisor is equal to the value in the thousands column. The quotient has a zero in the hundreds column. With and without remainder

E.g $9527 \div 9$, 7603 □□□□□□□□ □□ $7,\triangle = 4330 \div 4$

15. 4 digit ÷1 digit. The quotient is a 4 digit number and has a zero in the tens column. With and without remainders

E.g. $5527 \div 5$, 6830 □□□□□□□□ □□ $4,9642 \div 8$

16. 3 digit ÷1 digit. The quotient is 3 digit and has zero in the units - with remainders



E.g $811 \div 3$, □□□□□□□ 965 □□ 6, □□□□□□□ 752 □□ 3

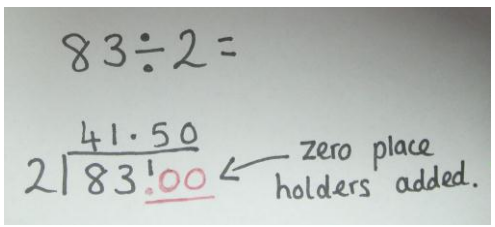
17. 4 digit ÷1 digit. The divisor is greater than the place value in the thousands column. The quotient should have zero's in the answer.

E.g. $2432 \div 6$, □□□□□□□ 1442 □□ $8,3614 \div 6$

18. Division of any money amounts without remainder. The above steps should be applied in order to ensure understanding and progression

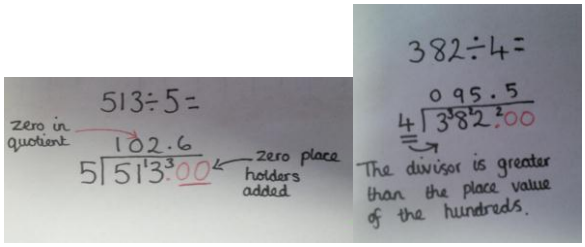
Assessment of steps 10 -18

19. 2 digit ÷1 digit include zero place holders to extend to give an exact decimal answer . There should be no zero's in quotient. Divisors must be 2, 4, 5 or 8



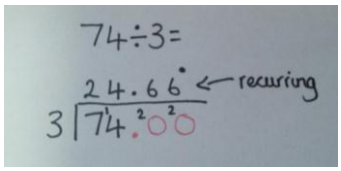
E.g. 37.00÷ 2, 95 □□□□□□□□ □□ $4,27.00 \div 5$, 33 divided by 4

20. 3 digit ÷1 digit include zero place holder to give an exact decimal answer. Zero in quotient OR the divisor is greater than the place value of the hundreds. Divisors must be 2, 4, 5 or 8



E.g. 382 divided by 4, Divide 436.00 by 5

21. 2 digit ÷ 1 digit. Extend with zero place holders (as in steps 19 & 20) Divisors must be 3, 6, or 9. This will give a quotient with recurring)



E.g. 31 divided by 6, divide 43 by 3, $14.00 \div 3$

Assessment of steps 19-21

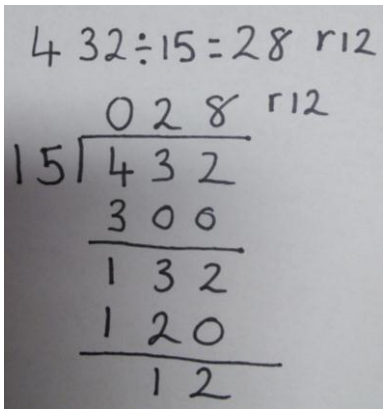
22. 3 digit ÷2 digit. No remainder

E.g. 864 □□□□□□□□ □□ 12, □□□□□□□ 966 □□ $42, 512 \div 16$

23. 4 digit ÷ 2 digit. No remainder

E.g. $1344 \div 12$, 1845 □□□□□□□□ □□ $15, 1032 \div 12$

24. 3 digit ÷ 2 digit. With remainder



E.g. $548 \div 18, 387$ □□□□□□□□ □□ 24, □□□□□□□ 786 □□ 40

25. 4 digit ÷2 digit. With remainder

E.g. $1176 \div 14, 1356$ □□□□□□□□ □□ $20, 1169 \div 25$

Assessment of steps 22 - 25

Appendix I

Addition

Addend - The numbers you are adding together
Sum - The result of adding 2 or more numbers

addition, greater, increase, more than, total, add and, plus

Subtraction

Minuend - The first number in a subtraction.
Subtrahend - The second number in a subtraction. The number you are subtracting from the minuend.
Difference - The result of subtracting one number from another. How much one number differs from the other.

subtract, reduce, minus, less than, decrease, fewer difference between

Multiplication

Factor - The numbers/amounts you are multiplying together
Product - The answer when 2 or more numbers/amounts are multiplied together

multiplication, multiply, times, repeated addition, lots of, groups of, product of

Division

Dividend - The number/amount that you want to divide
Divisor - The number/amount that you are dividing by
Quotient - The answer after you have divided 2 numbers/amounts

divide, groups of, lots of, share, halve, quarter