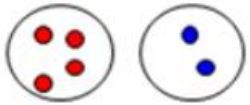
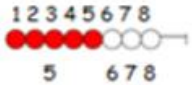
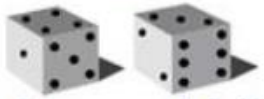
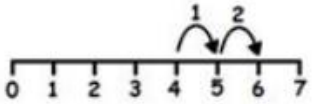
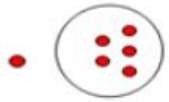
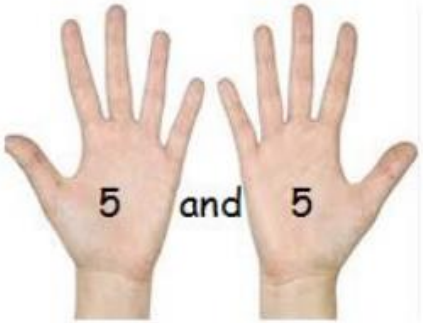
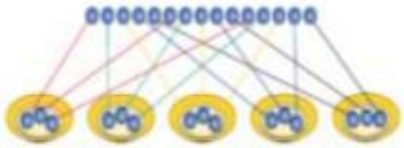
Calculation Policy

KILNHURST PRIMARY SCHOOL

Expect the BEST, Give the BEST, Be the BEST

September 2017/2018

EYFS	
Addition	Subtraction
Add two single digit numbers  1, 2, 3, 4, 5, 6. *Bead strings can be used to illustrate addition including brigand ten by counting on 2 then 3.* 5 + 3 = 8  1 2 3 4 5 6 7 8 5 6 7 8 Count on to find the answer Practically with objects, fingers etc. 5 + 2 "Put 5 in your head, 6, 7." Dice... 4 + 3 = 7  4, 5, 6, 7. *On a prepared number line (start with the bigger number)...* 2 + 4 = 6  0 1 2 3 4 5 6 7 **Understand and use vocabulary for addition:** Add, more, and, make, sum, total, altogether, score, double, one more, two more, ten more…how many more to make…? How many more is…than…? is the same as	Subtract two single digit numbers Counters on plates  6 take away 1 leaves 1, 2, 3, 4, 5. Cross out drawn objects to represent what has been taken away: 3 take away 2 is 1  Start with 3 … 2, 1. Count on or back to find the answer Practically, for example: Group objects on a table then cover some to visualize the calculation: 2 less than 4 is 2  Start with 2… 3, 4. Coins  I had 10 pennies. I spent 4 pence. How much do I have left? Start with 10… 9, 8, 7, 6. **Understand and use vocabulary for subtraction:** take (away), leave, how many are left/left over? How many have gone? One less, two less…ten less….How many fewer is….than? difference between is the same as

Multiplication	Division
Solve problems including doubling Practically double a group of objects to find double of a number by combining then counting the two groups:  Double 4 is 8.  is 10 **Understand and use vocabulary for multiplication** count on (from, to), count back (from, to), count in ones, twos... tens... is the same as	**Solve problems including halving and sharing** Sharing objects  One for you. One for me... Is it fair? How many do we each have? 15 shared between 5 is 3.  Grouping objects Put groups of objects on plates. How many groups of 4 are there in 12 stars?  **Understand and use vocabulary for division** half, halve, count out, share out, left, left over is the same as

EYFS – Mental Skills
40- 60 months: At this stage of development, children should be able to recognise numbers 1 to 5. They can also: • Counts up to three or four objects by saying one number name for each item. • Counts actions or objects which cannot be moved. • Counts objects to 10, and beginning to count beyond 10. • Estimates how many objects they can see and checks by counting them. • Uses the language of ‘more’ and ‘fewer’ to compare two sets of objects. • Finds the total number of items in two groups by counting all of them. • Says the number that is one more than a given number. • Finds one more or one less from a group of up to five objects, then ten objects. • In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. • Records, using marks that they can interpret and explain. • Begins to identify own mathematical problems based on own interests and fascinations.
Early Learning Goal
Early Learning Goal: Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Year 1- Written Strategies

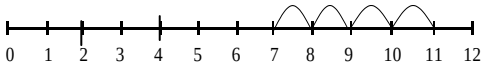
Addition

Number lines- count on in ones

One and two digit numbers to 20
e.g 3 + 12
Autumn/Spring Terms
Numbered number lines

Relate addition to counting on using a numbered number line.

7 + 4

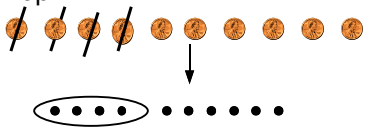


Recording by - drawing jumps on prepared lines.

Summer Term
AS ABOVE but by constructing own blank number lines

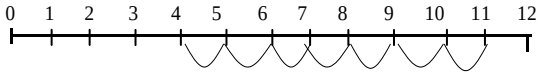
Subtraction

Pictures / marks
Sam spent 4p. What was his change from 10p?

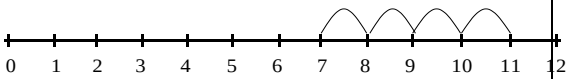


Number lines – count back in ones
One and 2 digit numbers to 20 e.g 3 + 12
17 - 6
Autumn Term
Introduce jumping under the line to count back.

11 – 7
(Counting back)



Spring Term
The difference between 7 and 11
(Counting up)



Summer Term

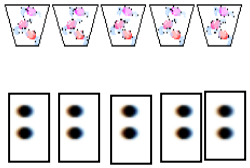
AS ABOVE (both strategies) but by constructing own blank number lines

Multiplication

Spring Term

Pictures and symbols
There are 3 sweets in one bag.
How many sweets are there in 5 bags?

Summer Term
Related to counting in 2, 5 and 10
Pictures and symbols and arrays

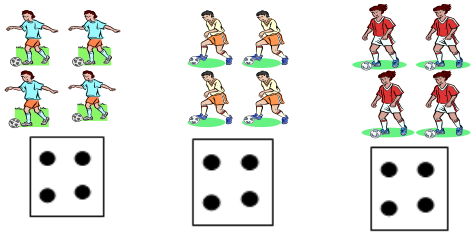


Division

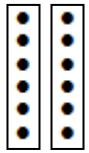
Spring Term

Pictures/Symbols: Grouping

12 children get into teams of 4 to play a game. How many teams are there?



Summer Term
Arrays
12 ÷ 2 = 6



Year 1 – Mental Skills

Addition	Subtraction	Multiplication	Division
• **Say one more than any number to 20 (Autumn).** • **Add a pair of single-digit numbers, e.g. 4 + 5 up to 10 (Autumn)** - *by counting on in ones* - *by reordering numbers (put largest first)* • **Know by heart all number bonds to 10 (Autumn) and 20 (Spring).** • **Add a single-digit number to a teens number, e.g. 13 + 5 (Spring)** - *by counting on in ones* - *by reordering numbers (put largest first)* • **Add a single-digit to 10, and add a multiple of 10 to a single-digit number, e.g. 10 + 7, 7 + 30 (Summer)** - *by reordering numbers (put largest first)* • **Add near doubles, e.g. 6 + 7 (Summer)** - *by partition: double and adjust*	**Autumn Term** • **Say one less than any number to 20.** • **subtract a pair of single-digit numbers, e.g. 8 – 3** *by counting back in ones* **Spring/Summer Term** • **subtract a single-digit number from ten or a teens number, e.g. 17 – 3** *by counting back in ones*	**Every term** • **count on from and back in ones, twos, fives or tens from a range of multiples** **Spring/Summer** • **Recall the doubles of numbers to 24.** • **Know by heart all multiplication facts for 2 up to 2 x 12**	**Every term** • **count on from and back in ones, twos, fives or tens from a range of multiples** **Spring/Summer** • **Recall the halves of numbers to 24.** • **Know by heart all division facts for 2 up to 24**

Year 1 - Counting

- Count to and across 100, forwards and backwards beginning with 0 or 1 or from any given number **(Autumn Term)**
- Count in different multiples including ones, twos, fives and tens **(Spring/ Summer)**

Year 2- Written Strategies

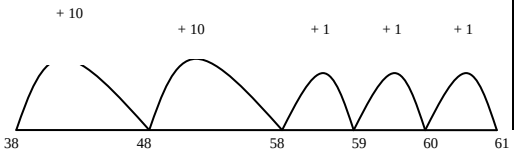
Addition

Autumn Term

TU +TU

Number line - Partition the second number only into tens and ones – numbers up to 100,

e.g 38 + 23 = 38+10+10+1+1+1

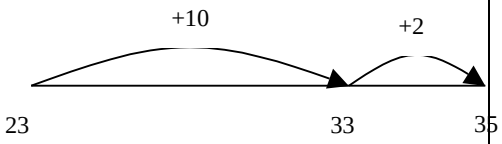


Spring Term

Partitioning but into separate parts (not ones)

23 + 12 =

10 2



Summer Term

Crossing over the ten boundary.

e.g. 37 + 25 =

Subtraction

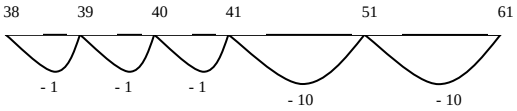
Autumn Term

Use known number facts and place value to subtract

TU –TU Number line –

Partition into tens and ones – numbers up to 100

e.g 61 - 23 = 61 – 10 – 10 – 1 – 1 – 1



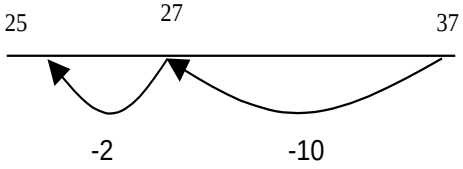
Spring Term

Partitioning but into separate parts (not ones)

37 – 12

10 2

= 37 – 10 – 2 = 27 – 2 = 25



Summer Term

Crossing the ten boundary.

e.g. 61 - 27 =

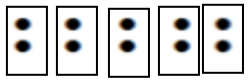
Key language to inter-change:

- difference
- subtraction
- minus
- take away

Multiplication

Autumn Term

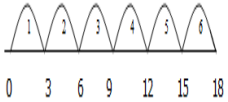
Pictures, symbols and arrays



Spring/Summer Term

Number lines – repeated addition

6 x 3 = 3+3+3+3+3+3 = 18



Division

Autumn Term

Pictures/Symbols: division as sharing

Sharing – 6 sweets are shared between 2 people. How many do they have each?

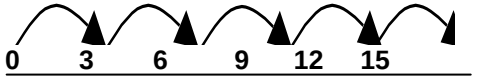
Spring/Summer Term

Number lines

15 ÷ 3 can be modelled as:

Sharing – 15 shared between

OR



5 jumps so 15 ÷ 3 = 5

Year 2 – Mental Skills

Addition	Subtraction	Multiplication	Division
Autumn • **add a pair of single-digit numbers, including crossing 10, e.g. 5 + 8** - *by counting on in ones* - *by reordering* • **add a single-digit number to a two-digit number, including crossing the tens boundary, e.g. 23 + 5 then 28 + 5** - *count on In ones* - *reordering numbers* **Spring** • **add a multiple of 10 to any two-digit number, e.g. 27 + 60,** - *count on in tens and ones to find total* - *add a multiple of 10 and adjust* • **add 3 one digit numbers e.g 4+6+8** - *use pairs making 10.* **Summer** • **Know by heart all sums of multiples of 10 up to 100** - *Use knowledge of pairs to 10.*	**Autumn** • **subtract a pair of single-digit numbers, including crossing 10, e.g. 12 – 7** - *by counting back in ones* - *use knowledge of pairs making 10* • **subtract any single-digit number from a multiple of 10, e.g. 80 – 7** - *by counting back in ones* - *use knowledge of pairs making 10* • **subtract a single-digit number from a two-digit number, including crossing the tens boundary, e.g. 57 – 3, 52 – 7** **Spring** • **subtract a multiple of 10 from any two-digit number, e.g. 72 – 50** - *count back in tens and ones to find the difference.* • **Can subtract a two-digit number from another two-digit number when no regrouping is required. (e.g. 74 – 33)** - *Partition, subtraction, recombine* **Summer** • **Know by heart all differences of multiples of 10 up to 100** - *Use knowledge of pairs to 10.*	**Autumn** • **Know by heart all multiplication facts for 10 up to 10 x 12.** • **Know by heart all multiplication facts for 5 up to 5 x 12.** **Spring** • **double any multiple of 5 up to 50, e.g. double 35** - *by partitioning (double the tens and ones separately, then recombine)* - *know doubling is multiplying by 2* • **find the total number of objects when they are organised into groups of 2, 5 or 10** - *use knowledge of multiplication facts from the 2, 5 and 10 times-tables, e.g. recognise that there are 15 objects altogether because there are three groups of five* **Summer** **Problem solving with the above** **Recognise multiples of 2,5 and 10 up to 100.**	**Autumn** • **Know by heart all division facts for 10 up to 120.** • **know all division facts for 5 up to 60** **Spring** • **halve any multiple of 10 up to 100, e.g. halve 90** - *by partitioning (halve the tens and ones separately, then recombine)* - *know halving is dividing by 2* • **find the total number of objects when they are organised into groups of 2, 5 or 10** - *use knowledge of multiplication facts from the 2, 5 and 10 times-tables, e.g. recognise that there are 15 objects altogether because there are three groups of five* **Summer** **Problem solving with the above**

Year 2 - Counting

- Count in steps of 2, 3 and 5 from 0 and count in tens from any number, forward or backward **(Autumn)**
- Count in multiples of 3 **(Spring)**
- Count in fractions up to 10, starting from any number (using ½ and 2/4 equivalence so 1 ¼, 1 ½, 1 ¾…) **(Summer)**

Year 3- Written Strategies

Addition

Autumn /Spring Term

Formal column addition (up to HTU + HTU)

Formal method, showing numbers carried underneath.

```
  358
+  73
  431
   11
```

Summer Term

Extend to decimals in the context of money (vertically)

£ 2.50 + £ 1.75 = £ 4.25

```
  £ 2.50
+ £ 1.75
  £  4.25
        1
```

Subtraction

Autumn Term

Continue to use a number line until secure.

Spring/Summer Term

HTU – HTU

Formal column subtraction – decomposition

```
  3 14  1
  ~~3~~~~5~~2
- 1 7 8
  1 7 4
```

Multiplication

Autumn Term

Use known facts and place value to carry out simple multiplications.

23 x 4 = 92

23 x 4 = (20 x 4) + (3 x 4)
= (80) + (12)
= 92

Spring Term

```
 20  +  3
x        4
 80 + 12 = 92
```

Summer Term

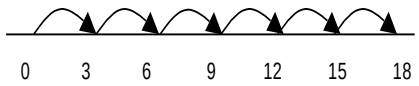
```
   2 3
x    4
   9 2
   1
```

Division

Autumn Term

18 ÷ 3 can be modelled as:

Grouping - How many 3's make 18?



Spring/Summer Term

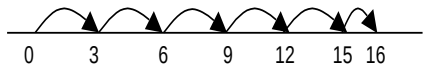
Remainders

16 ÷ 3 = 5 r1

Sharing - 16 shared between 3, how many left over?

Grouping – How many 3's make 16, how many left over?

e.g.



Year 3 – Mental Skills

Addition	Subtraction	Multiplication	Division
Autumn • **add groups of small numbers, e.g. 5 – 3 + 2** • **add two-digit numbers e.g. 34 + 65** - *partition: add tens and ones separately, then recombine* • **add near doubles (23 + 24),** - *Reorder when adding partition: double and adjust* **Spring** • **add ones, tens and hundreds to 3 digit numbers** - *partition: count on in tens and ones to find the total* **Summer** • **add two-digit or three-digit multiples of 10, e.g. 120 + 40 = 160** - *use related calculations and knowledge of place value* • **Know by heart all number bonds that total 100**	**Autumn** • **subtract groups of small numbers, e.g. 5 – 3 + 2** • **subtract a two-digit number from a multiple of 10, e.g. 90 – 27** - *partition: count back in tens and ones to find the difference* **Spring** • **subtract two-digit numbers e.g. 68 – 35** - *partition: count back in tens and ones to find the difference* **Summer** • **subtract two-digit or three-digit multiples of 10, e.g. 120 – 40 = 80** - *use related calculations and knowledge of place value*	**Autumn** • **multiply one-digit or two-digit numbers by 10 or 100, e.g. 7 × 100, 46 × 10, 54 x 100** • **Know by heart all multiplication facts for 3 up to 3 x 12.** • **Know by heart all multiplication facts for 4 up to 10 x 12.** **Spring** • **Know by heart all multiplication facts for 8 up to 8 x 12.** • **Know by heart all multiplication facts for 6 up to 6 x 12.** • **Recognise multiples of 2, 5 and 10 up to 1000.** **Summer** • **double any multiple of 5 up to 100, e.g. double 35** - *partition: when doubling, double the tens and ones separately, then recombine* - *use knowledge that halving and doubling are inverse operations*	**Autumn** • **know all division facts for 3 up to 36** • **Know by heart all division facts for 4 up to 48.** **Spring** • **Know by heart all division facts for 8 up to 96.** • **Know by heart all division facts for 6 up to 72.** **Summer** • **halve any multiple of 10 up to 200, e.g. halve 170** - *partition: when halving, halve the tens and ones separately, then recombine* - *use knowledge that halving and doubling are inverse operations*

Year 3 - Counting

- Count from 0 in multiples of 4, 8, 50 and 100 **(Autumn)**
- Count in tens and hundreds **(Spring)**
- Count up or down in tenths **(Summer)**

Year 4- Written Strategies

Addition	Subtraction	Multiplication	Division
Autumn Term **ThHTU + ThHTU** 3587 + 675 4262 1 1 1 **Spring Term** Adding several numbers (with different numbers of digits). **Summer Term:** Extend to decimals (same number of decimals places)	**Autumn/Spring Term** ThHTU – ThHTU 8 12 1 ~~9~~ ~~3~~ 2 – 4 5 7 4 7 5 **Spring/Summer Term:** Reasoning/ application	**Autumn Term** 2 4 × 6 1 4 4 2 **Spring Term** 3 4 2 × 7 2 3 9 4 2 1 **Summer Term:** ThHTU x U 1 1 2 5 7 7 8 7 5 1 3	**NO REMAINDERS** 81÷3= 2 7 3)8 1 **Autumn Term:** TU ÷ U **Spring Term:** HTU ÷ U **Summer Term:** ThHTU ÷ U

Year 4 – Mental Skills

Addition	Subtraction	Multiplication	Division
Autumn • **add any pair of two-digit numbers, including crossing the tens and 100 boundary, e.g. 47 + 58** - *partition: add tens and ones separately, then recombine* **Spring** • **add a near multiple of 10, e.g. 56 + 29,** - *partition: add a multiple of 10 and adjust, e.g. 56 + 29 = 56 + 30 – 1* **Summer** • **add tenths.** • **add one digit whole numbers and tenths**	**Autumn** • **subtract any pair of two-digit numbers, including crossing the tens and 100 boundary, e.g. 91 – 35** - *partition: subtract tens and then ones, e.g. subtracting 27 by subtracting 20 then 7* **Spring** • **subtract a near multiple of 10, e.g. 86 – 38** - *partition: subtract a multiple of 10 and adjust, e.g. 86 – 38 = 86 – 40 + 2* **Summer** • **subtract tenths.** • **subtract one digit whole numbers and tenths.**	**Autumn** • **Know by heart all the multiplication facts for 7 up to 7 x 12.** • **Know by heart all the multiplication facts for 9 up to 9 x 12.** • **double any two-digit number, e.g. double 39** - *partition: double the tens and ones separately, then recombine* **Spring** • **double any multiple of 10 or 100, e.g. double 340, double 800,** • **multiply numbers to 1000 by 10 and then 100 (whole-number answers), e.g. 325 × 10, 42 × 100** - *understand that when a number is multiplied by 10 or 100, its digits move one or two places to the left and zero is used as a place holder* • **multiply a multiple of 10 to 100 by a single-digit number, e.g. 40 × 3** - *use knowledge of multiplication facts and place value, e.g. 7 x 8 = 56 to find 70 x 8, 7 x 80* **Summer** • **multiply numbers to 20 by a single-digit, e.g. 17 × 3** - *use partitioning and the distributive law to multiply, e.g.13 × 4 = (10 + 3) × 4 = (10 × 4) + (3 × 4) = 40 + 12 = 5* • **give the factor pair associated with a multiplication fact, e.g. identify that if 2 x 3 = 6 then 6 has the factor pair 2 and 3**	**Autumn** • **Know by heart all division facts for 8 up to 96.** • **Know by heart all division facts for 6 up to 72.** • **halve any number to 200** - *partition: halve the tens and ones separately, then recombine* **Spring** • **halve the corresponding multiples of 10 and 100** • **divide numbers to 1000 by 10 and then 100 (whole-number answers), e.g. 600 ÷ 100, 850 ÷ 10** - *understand that when a number is divided by 10 or 100, its digits move one or two places to the right and zero is used as a place holder* **Summer** • **identify the remainder when dividing by 2, 5 or 10** • **find unit fractions and simple non-unit fractions of numbers and quantities, e.g. 38 of 24**

Year 4 - Counting

- Count in multiples of 6, 7, 9, 25 and 1000.
- Count backwards through 0 to include negative numbers
- Count up and down in hundredths

Year 5- Written Strategies

Addition

Autumn Term

Questions with numbers with more than 4 digits.
e.g. 23,506 + 17, 429 =

Spring Term

Questions with numbers up to 3dp (same number of decimal places).
e.g. 34.654 + 17.976 =

Summer Term

Questions with numbers with different amounts of dp
e.g. 124.9 + 117.25 = 242.15

```
   124.90
 + 117.25
   242.15
    11
```

Subtraction

Autumn Term

Questions with numbers with more than 4 digits.
e.g. 23,506 - 17, 429 =

Spring Term

Questions with numbers up to 3dp (same number of decimal places).
e.g. 34.654 - 17.976 =

Summer Term

Questions with numbers with different amounts of dp
e.g. 124.9 - 117.25 = 242.65

```
     1 1 8 1
   1~~2~~4.~~9~~0
 - 117.25
     7.65
```

Multiplication

Autumn Term: U.th x U

Spring/Summer Term:

HTU x TU and ThHTU x TU

```
     234
x     56
   1404
   2 2
  11700
  1 2
  13104
```

Division

Autumn Term

Division **with remainders**: HTU ÷ U and ThHTU ÷ U
365÷3 =

```
   121  r2
3 |365
```

Spring/ Summer Term

Division **with decimals** up to 2dp
£54 ÷ 8 =

```
     6. 7 5
8 |5^5 4.^6 0^4 0
```

Year 5 – Mental Skills

Addition	Subtraction	Multiplication	Division
Autumn • **add three-digit multiples of 10, e.g. 350+ 360** • **add a near multiple of 10 or 100 to any two-digit or three-digit number, e.g. 235 + 198** **Summer** • **add any pairs of decimal fractions each with units and tenths, e.g. 5.7 + 2.5**	**Autumn** • **subtract a pair of three-digit multiples of 10, e.g. 620 – 380** • **subtract a near multiple of 10 or 100 to any two-digit or three-digit number, e.g. 235 – 198** - *subtract a multiple of 10 or 100 and adjust* **Spring** • **find the difference between near multiples of 100, e.g. 607 – 588, or of 1000, e.g. 6070 – 4087** - *counting on/add on to find the difference* **Summer** • **subtract any pairs of decimal fractions each with units and tenths, e.g. 6.3 – 4.8** - *counting up from the smaller to the larger number* - *use knowledge of place value and related calculations, e.g. 6.3 – 4.8 using 63 – 48*	**Autumn** • **Know by heart all multiplication facts for 12 up to 12 x 12** • **Know all square numbers between 1 and 12** • **Know all squares of multiples of 10** • **multiply whole numbers and decimals by 10, 100 or 1000, e.g. 4.3 × 10, 0.75 × 100** - *understand that when a number is multiplied by 10 or 100, its digits move one or two places to the left relative to the decimal point, and zero is used as a place holder* **Spring** • **multiply two-digit numbers by 4 or 8, e.g. 26 × 4** *(double, double again-4- and double again-8)* • **multiply two-digit numbers by 5 or 20, e.g. 320 × 5, 14 × 20** *(x 10 and half it-5, x 10 and double it- x 20)* • **multiply by 25 or 50, e.g. 48 × 25, 32 × 50** *(multiply by 100 and half- 50, multiply by 100 and half and half- 25)* **Summer** • **double three-digit multiples of 10 to 500, e.g. 380 × 2,** • **multiply pairs of multiples of 10, e.g. 60 × 30, and a multiple of 100 by a single digit number, e.g. 900 × 8** *(x tables related facts)* • **find factor pairs for numbers to 100, e.g. 30 has the factor pairs 1 × 30** • **Find common factors of two numbers**	**Autumn** • **Know by heart all division facts for 12 up to 144.** • **Know all square roots of numbers between 1 and 144.** • **Know all square roots of multiples of 10** • **divide whole numbers and decimals by 10, 100 or 1000, e.g. 25 ÷ 10, 673 ÷ 100, 74 ÷ 100** - *use understanding that when a number is divided by 10 or 100, its digits move one or two places to the right relative to the decimal point, and zero is used as a place holder* **Spring** • **divide two-digit numbers by 4 or 8, e.g. 96 ÷ 8** *(half, half again- 4- and half again -8)* • **find fractions of whole numbers or quantities, e.g. 2/3 of 27, 4/5 of 70 kg** • **find 50%, 25% or 10% of whole numbers or quantities, e.g. 25% of 20 kg, 10% of £80** **Summer** • **find the corresponding halves, e.g. 760 ÷ 2** • **divide a multiple of 10 by a single-digit number (whole number answers) e.g. 80 ÷ 4, 270 ÷ 3** *(related x table facts)* • **find the remainder after dividing a two-digit number by a single-digit number, e.g. 27 ÷ 4 = 6 R 3** *(x table facts)*

Year 5 – Counting

- Count forwards and backwards in steps of powers of 10 for any given number up to 1000000.
- Count forwards or backwards with negative and positive whole numbers through 0.
- Count on or back in hundreds, tens, ones and tenths

Year 6- Written Strategies

Addition	Subtraction	Multiplication	Division
Questions with numbers with different amounts of dp **(Y5 Summer)** e.g. 124.9 + 117.25 = 242.15 124.90 + 117.25 242.15 11	Questions with numbers with different amounts of dp **(Y5 Summer)** e.g. 124.9 - 117.25 = 242.65 1 1 8 1 1~~2~~4.~~9~~0 - 117.25 7.65	HTU x TU and ThHTU x TU **(Y5 Summer)** 234 x 56 1404 2 2 11700 1 2 13104	**Autumn Term** Division **with decimals** to 2dp **(Y5 Summer)** **Spring/Summer Term** **Long division** 2 8 r 12 1 5) 4 3 2 3 0 0 1 3 2 1 2 0 1 2 2 8 1 5) 4 3 2 3 0 0 15×20 1 3 2 1 2 0 15×8 1 2 $\frac{12}{15} = \frac{4}{5}$ Answer: $28\frac{4}{5}$ 2 8 · 8 1 5) 4 3 2 · 0 3 0 1 3 2 1 2 0 1 2 0 1 2 0 0 Answer: 28·8

Year 6 – Mental Skills

Addition	Subtraction	Multiplication	Division
Autumn • **find doubles of decimals each with units and tenths, e.g. 1.6 + 1.6** - *use knowledge of place value and of doubles of two-digit whole numbers* • **add near doubles of decimals, e.g. 2.5 + 2.6** • **add a decimal with units and tenths, that is nearly a whole number, e.g. 4.3 + 2.9** - *partition: add a whole number and adjust, e.g. 4.3 + 2.9 = 4.3 + 3 – 0.1,* **Spring** • **add pairs of decimals with units, tenths or hundredths, e.g. 0.7 + 3.38** - *use knowledge of place value and related calculations, e.g. 680 + 430, 6.8 + 4.3, 0.68 + 0.43 can all be worked out using the related calculation 68 + 43*	**Autumn** • **subtract a decimal with units and tenths, that is nearly a whole number, e.g. 6.5 – 3.8** - *partition: subtract a whole number and adjust, e.g. 6.5 – 3.8 = 6.5 – 4 + 0.2* - *partition: subtract a whole number and adjust, e.g. 6.5 – 3.8 = 6.5 – 4 + 0.2* **Spring** • **subtract pairs of decimals with units, tenths or hundredths, e.g. 3.38 – 0.7** - *use knowledge of place value and of doubles of two-digit whole numbers* -	**Autumn** • **double decimals with units and tenths, e.g. double 7.6,** • **multiply pairs of multiples of 10 and 100, e.g. 50 × 30, 600 × 20** • **multiply two-digit decimals such as** **0.8 × 7** **Spring** • **identify prime, square and composite numbers.** • **multiply pairs of two-digit and single-digit numbers, e.g. 28 × 3** **Summer** • **scale up using known facts, e.g. given that three oranges cost 24p, find the cost of four oranges** - *Use knowledge of multiplication and division facts to identify factor pairs and numbers with only two factors*	**Autumn** • **find halves of double decimals with units and tenths, , e.g. half of 15.2** • **divide multiples of 100 by a multiple of 10 or 100 (whole number answers), e.g. 600 ÷ 20, 800 ÷ 400, 2100 ÷ 300** • **divide two-digit decimals such as 4.8 ÷ 6** • **divide a two-digit number by a single-digit number, e.g. 68 ÷ 4** **Spring** • **divide by 25 or 50, e.g. 480 ÷ 25, 3200 ÷ 50** *- form an equivalent calculation, e.g. to divide by 25, divide by 100, then multiply by 4; to divide by 50, divide by 100, then double* • **find 10% or multiples of 10%, of whole numbers and quantities, e.g. 30% of 50 ml, 40% of £30, 70% of 200 g** • **simplify fractions by cancelling** **Summer** • **scale down using known facts, e.g. given that three oranges cost 24p, find the cost of four oranges**

Year 6 – Counting

- Count on or back in hundreds, tens, ones, tenths and hundredths