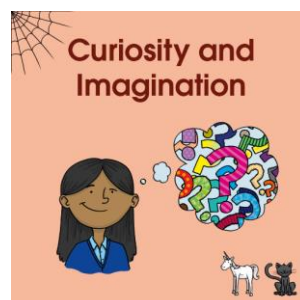




# Supporting your child at home

Year 4  
Maple Learning Zone

November 2019



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## Times Tables in Year 4

For children to be confident with their times tables it is essential that they are fluent and flexible. They should be able to make links across their times tables and have an understanding of the fact families surrounding the times tables.

|    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

By the time children reach Year 4, they *should* already know their 2, 5 and 10 (Year 2) times tables and their 3, 4 and 8 times tables (Year 3). We focus on learning our 6, 7, 9, 11 and 12 times tables throughout Year 4.

We discuss the links between each times table and how making these links supports children knowing new times tables by heart more efficiently. For example, knowing that  $4 \times 4$  is the same as  $8 \times 2$ . Once children have learnt multiples of 4, they know half of the 8 times tables.

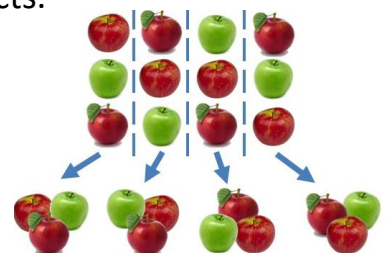
Similarly, we want children to be able to make links between multiplication and division. Not only understanding that multiplication is commutative but also that you can start with the whole (the largest amount) and group to find the linked division facts.

$$4 \times 3 = 12$$

$$3 \times 4 = 12$$

$$12 \div 3 = 4$$

$$12 \div 4 = 3$$



You can show this by using amounts to support this understanding at home.

These are the key essentials of mathematics in Year 4 which children need to secure.

This does not cover the whole maths curriculum, just the most critical skills. On the following page, you can find all mathematics content taught during Year 4.

## Counting.

- I can count in 7s, 9s, 11s and 12s.

## Written calculation.

- I can divide a two digit number by one digit number with no remainder (e.g.  $72 \div 4$ ; using a formal written method).
- I can multiply a two digit number by a one digit number (e.g. using column multiplication to answer  $76 \times 8$ ).
- I can add and subtract using column method using numbers up to four digits (e.g.  $4236 + 1447$ )

## Measure.

- I can tell the time on an analogue clock to one minute.

## Place value.

- I can multiply or divide a number by ten or one hundred up a four-digit number (e.g.  $72 \times 10$ ;  $16 \times 100$ ;  $935 \div 10$ )
- I can apply this when I am working with measures.
- Round a four-digit number to the nearest 10 (e.g.  $2468 \rightarrow 2470$ )
- When using decimals I can recognise the place value of tenths (e.g.  $7.4$  is 7 1s and 4 tenths)
- I can add or subtract 1, 10, 100 or 1000 to a four digit number. (e.g.  $1734 + 1000$ ;  $2745 + 100$ ;  $1563 + 10$ ;  $4762 - 1000$ ;  $8762 - 100$ ,  $7152 - 10$ ).

## Mental calculation.

- I **know** the 7, 9, 11, and 12 times table up to  $\times 12$  of each one.
- I can **recall** the related division facts for 7, 9, 11 and 12 times tables up to  $\times 12$ .

## Fractions and Decimals.

- I **know** the fractions to decimals conversions for 0.5, 0.25, 0.75, 1. 0.1 and 0.2. (e.g. that 0.5 is  $\frac{1}{2}$ , that  $\frac{3}{4}$  is 0.75)

|   |  |
|---|--|
| <b>Number - place value</b>                 |  |
|   | Count backwards through zero, including negative numbers   |
|   | Count in multiples of 6,7,9,   |
|   | Count in multiples of 25 and 1000  |
|   | Find 1000 more or less than a given number.  |
|   | Recognise place value of each digit in a four-digit number.  |
|   | <b>order and compare numbers beyond 100</b>  |
|   | <b>Round any number to the nearest 10, 100 or 1000</b>   |
|   | read Roman numerals to 100 (I to C)  |
| <b>Number- addition and subtraction</b>     |  |
|   | Add and subtract using mental methods fluently involving larger numbers                                |
|   | Choose and use appropriate mental strategies to solve calculations                                     |
|   | Add and subtract numbers with up to 4 digits using formal written methods where appropriate            |
|   | <b>Solve two step problems in a range of contexts, choosing strategies.</b>                            |
|   | Use inverse operations and estimation to check calculations  |
| <b>Number - multiplication and division</b> |  |
|   | <b>Know tables up to 12 × 12</b>   |
|   | Use place value to multiply and divide mentally (e.g. by 1,10,100)                                     |
|   | Use known or derived facts to multiply and divide mentally   |
|   | Multiply 3 numbers including using the associative law $(6 \times 3) \times 4 = 6 \times (3 \times 4)$ |
|   | Use factor pairs and commutativity in mental calculations  |
|   | Solve using multiplication using the distributive law $24 \times 8 = (20 \times 8) + (4 \times 8)$     |
|   | Solve problems using multiplication as scaling   |
|   | Use formal short multiplication to multiply 2 and 3 digit numbers by 1 digit numbers.                  |
|   | Solve harder correspondence problems such as m objects are connected to n objects                      |
| <b>Fractions</b>                            |  |
|   | <b>Recognise and show, using diagrams, families of equivalent fractions.</b>                           |
|   | Solve problems using fractions to divide quantities including non unit fractions.                      |
|   | Add and subtract fractions with the same denominator.  |
|   | <b>Recognise and use hundredths</b>  |
|   | Recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ and $\frac{3}{4}$             |
|   | Divide one- or two-digit numbers by 10 and 100, using tenths and hundredths                            |
|   | <b>Round decimals with one decimal place to the nearest whole number</b>                               |
|   | Compare numbers up to two decimal places   |
|   | <b>Solve problems including money using decimals and fractions.</b>                                    |
| <b>Measurement</b>                          |  |
|   | <b>Convert between different units of metric measurement, e.g. cm/m; £/p, l/ml</b>                     |
|   | Measure and calculate the perimeter of rectilinear shapes using m and cm                               |
|   | Find the area of rectilinear shapes by counting squares  |
|   | Solve problems converting units of time e.g. hours to minutes; months to years                         |
|   | Convert between analogue and digital time  |
|   | Convert between 12 and 24 hour clock   |
| <b>Geometry- properties of shapes</b>       |  |
|   | <b>Compare and classify shapes, including quadrilaterals and triangles</b>                             |
|   | identify acute and obtuse angles; order angles up to 180 degrees.                                      |
|   | <b>identify lines of symmetry in 2D shapes presented at different orientation)</b>                     |
|   | Complete a simple symmetric figure with respect to a specific line of symmetry.                        |
|   | Geometry- position ,direction and movement   |
|   | Describe positions on a 2-D grid in the first quadrant using co-ordinates                              |
|   | <b>Plot specified points to complete a given polygon</b>   |
|   | Describe translations using a given unit to the left/right and up/down                                 |
| <b>Statistics</b>                           |  |
|   | Interpret and present discrete and continuous data on appropriate graphs                               |
|   | <b>Solve comparison, sum and difference problems info in charts/ graphs</b>                            |

## Formal written methods used in Y4:

So far, we have looked at formal written methods for both addition and subtraction. To build on children's knowledge and application of place value, we refer to 'borrowing' as 'renaming', 'regrouping' or 'exchanging'. This gives the children a deeper understanding of where they are 'borrowing' from, e.g. 1 ten (in the tens column) can become 10 ones (in the ones column) if required. We appreciate that there are a variety of ways to lay out an addition or subtraction calculation, but below you will find how we expect to see children presenting learning in Y4:

### Addition, (including renaming) :

$$\begin{array}{r} 1 \quad 2 \quad 4 \\ + \quad 4 \quad 5 \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 2 \quad 4 \\ + \quad 4 \quad 5 \quad 6 \\ \hline \quad \quad \quad 1 \\ \quad \quad \quad \quad 0 \end{array}$$

$$\begin{array}{r} 1 \quad 2 \quad 4 \\ + \quad 4 \quad 5 \quad 6 \\ \hline \quad \quad \quad 1 \\ \quad \quad \quad \quad 8 \quad 0 \end{array}$$

$$\begin{array}{r} 1 \quad 2 \quad 4 \\ + \quad 4 \quad 5 \quad 6 \\ \hline \quad \quad \quad 1 \\ \quad \quad \quad \quad 5 \quad 8 \quad 0 \end{array}$$

**Step 1:** Layout the calculation in the correct columns, e.g. hundreds, tens and ones. Leave space under the calculation for renaming.

**Step 2:** 4 ones add 6 ones gives us 10 ones. Unable to put 10 ones in ones column, so rename to 1 ten and place in tens column, (red 1).

**Step 3:** Add tens column: 2 tens + 5 tens + (renamed) 1 ten = 8 tens. Write this answer underneath.

**Step 4:** Complete calculation by adding 1 hundred to the 4 hundreds, (5). Write this answer underneath. Use inverse to check, e.g.  $580 - 124 = 456$

### Subtraction, (including renaming) :

$$\begin{array}{r} 6 \quad 6 \quad 4 \\ - \quad 4 \quad 5 \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad 5 \quad 14 \\ 6 \quad \cancel{6} \quad \cancel{4} \\ - \quad 4 \quad 5 \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \quad \quad 5 \quad 14 \\ 6 \quad \cancel{6} \quad \cancel{4} \\ - \quad 4 \quad 5 \quad 6 \\ \hline \quad \quad \quad 0 \quad 8 \end{array}$$

$$\begin{array}{r} \quad \quad 5 \quad 14 \\ 6 \quad \cancel{6} \quad \cancel{4} \\ - \quad 4 \quad 5 \quad 6 \\ \hline \quad \quad \quad 2 \quad 0 \quad 8 \end{array}$$

**Step 1:** Layout the calculation in the correct columns, e.g. hundreds, tens and ones.

**Step 2:** Unable to subtract 4 ones from 6 ones. Rename 1 of the tens (6 tens becomes 5 tens) to be 10 ones. Add this to your ones column, (4 ones becomes 14 ones).

**Step 3:** Subtract the 6 ones from 14 ones. Write this answer underneath, (8). Subtract 5 tens from 5 tens. Write this answer underneath, (0).

**Step 4:** Subtract the 4 hundreds from 6 hundreds. Write this answer underneath, (2). Use the inverse to double check answer, e.g.  $456 + 208 = 664$

NumberGym is an online maths learning tool which we would love children to access from home in order to practise key mathematical skills. It can be accessed from any computer. Tablet Apps are available from App and Play stores, but require additional payment.

To access your child's NumberGym account please do the following:

Go to <https://goo.gl/NYXbwM>

Enter the user (wfa) and password (wfa) – both lowercase.

### Select an area.

Users will then be prompted to enter their user name.

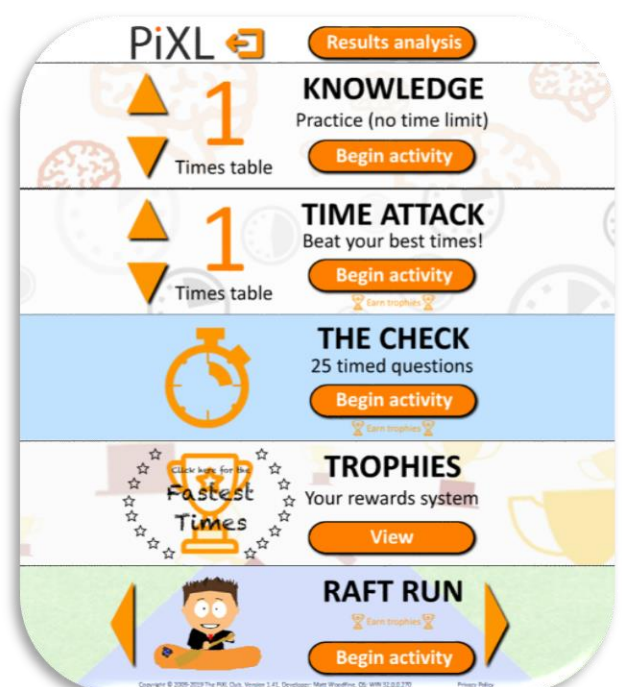
Your child's username is the first 4 letters of their first and last names (all in lowercase).

e.g. Janet Jones would be janejone  
Jo Nur would be jonur

Children also have access to PiXL Times Tables, which can be accessed via the website:

<https://timestable.pixl.org.uk/Timestables>  
or via the free app.

Login details have been sent home with all children, but if you require a reminder, please make a member of the teaching team aware.



Year 4 National Curriculum states that children should ‘use the diagonal and horizontal strokes that are needed to join letters’ and to ‘increase the legibility, consistency and quality of their handwriting’.

### What does this mean for our learners?

Below are some materials for cursive handwriting which can be used by you and your children to support correct letter formation and letter joins.

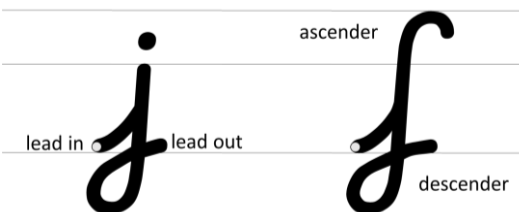
**Cursive letter formation for lower case.** All letters start from the line (lead in).

a b c d e f g h i j k l m n o p q r s t u

v w x y z

abcdefghijklmnopqrstuvwxyz

Capital letters do not join in cursive writing but all other letters within a word do. Letters join to the next letter from their lead out.



Letters start with the lead in on the line. When joining from r, v, w the joining lead out is not on the line. E.g.

brave

Words should be completely written without the need to lift the pencil and fully before going back to add dots on ‘i’ or cross-bar on ‘t’.



Further support can be given for children to understand size of handwriting by using highlighted lines. This will allow children to understand how big each letter should be and where ascenders/descenders should be drawn to, e.g.

The quick brown fox jumps over

the lazy dog.

Copies of this sheet as a PDF can be found easily online, or can be printed off/sent to you by either Mr Savory or Miss Hardy.

### Lower Key Stage 2 – Spelling – High Frequency and Common Exception Words

The words below are taken directly from the National Curriculum. These are words which children should aim to be able to spell confidently in their writing by the end of Year 4. Confident spelling allows children to write fluently rather than having to stop often to think about spelling a word. When children are unsure about a spelling we encourage them to have a go and consider ‘does it look right?’ For unfamiliar words children should make ‘phonetically plausible attempts’ i.e. select appropriate sounds and write those sounds to spell a word. For example, children might write the word inflate as inflait (as ai is a known way of making the ‘ai’ sound and appropriate choice for the position of that sound within the word). Children know many different strategies to learn to spell words and can use these in their practise.

#### Word list – years 3 and 4

|                |              |                |                 |
|----------------|--------------|----------------|-----------------|
| accident(ally) | early        | knowledge      | purpose         |
| actual(ly)     | earth        | learn          | quarter         |
| address        | eight/eighth | length         | question        |
| answer         | enough       | library        | recent          |
| appear         | exercise     | material       | regular         |
| arrive         | experience   | medicine       | reign           |
| believe        | experiment   | mention        | remember        |
| bicycle        | extreme      | minute         | sentence        |
| breath         | famous       | natural        | separate        |
| breathe        | favourite    | naughty        | special         |
| build          | February     | notice         | straight        |
| busy/business  | forward(s)   | occasion(ally) | strange         |
| calendar       | fruit        | often          | strength        |
| caught         | grammar      | opposite       | suppose         |
| centre         | group        | ordinary       | surprise        |
| century        | guard        | particular     | therefore       |
| certain        | guide        | peculiar       | though/although |
| circle         | heard        | perhaps        | thought         |
| complete       | heart        | popular        | through         |
| consider       | height       | position       | various         |
| continue       | history      | possess(ion)   | weight          |
| decide         | imagine      | possible       | woman/women     |
| describe       | increase     | potatoes       |                 |
| different      | important    | pressure       |                 |
| difficult      | interest     | probably       |                 |
| disappear      | island       | promise        |                 |

## **Year 4 Reading:**

The National Curriculum states that learners should be able to apply their growing knowledge of root words, prefixes and suffixes (which will also support spelling), to continue to develop positive attitudes to reading and to show an understanding of what they have read by accessing a variety of texts, including fiction, non-fiction, poetry, plays and reference books.

### **Fluency:**

Encourage children to listen to themselves as they read and to determine if it sounds right. Likewise, children should read all the way through a word and not guess based on the first few letters (even though their guess may fit the text but be incorrect). If children have needed to sound out (segment) and then blend the sounds to read a word this impacts their fluency. Helping children to re-read a sentence (perhaps several times) helps to increase comprehension. Children should use picture clues where available, but should not be over-reliant on them.

As children become more confident and fluent reading at their current book level this is a great opportunity to begin focussing on comprehension. As teachers we will often teach using books that the children can confidently read in order to teach these comprehension skills. This is a key factor in our decisions around when to progress a child on to a new reading level.

### **Reading comprehension:**

#### **Facts / retrieving information:**

These questions help to determine if the reader understands what they have read based on the words on the page. They also allow children to develop memory and skim reading skills should they need to return to the book to retrieve information. Most likely these will be Who, What, When and Where questions, but children should be encouraged to identify the evidence within the book.

Inference – using clues from within the text as well as other information (including personal experience and links to other books or films). These questions will require children to think and explain why or why not and will probably be less clear cut from the words on the page. Questions asking children to consider characters' feelings, considering alternatives (what might have happened, what would you have done, what could they have done differently) help children to develop their reading comprehension.

Predicting – based on the cover, blurb or having read a few pages, asking children to suggest what might happen and explain why, based on evidence and links to other things.

Summarising – talking about what they have previously read before continuing to read a book or retelling a story using the structure and key information from a story.

Critiquing – discussing likes, dislikes, links to other books or experiences or children raising questions having read a book.

Children may also ask adults questions about what they have read. The ability to create questions further illustrates an understanding of their books at a deeper level.

Children should also develop the ability to use a dictionary to check the meaning of unknown words, as well as explaining the meaning of words in context, e.g. "The boy was bewildered. This means that that the boy was confused."

## Year 4 Writing Key Objectives:

Below you can find the key objectives for spelling and handwriting in Year 4, along with objectives relating to composition of writing, vocabulary, grammar and punctuation. Children are required to demonstrate their understanding of these areas in order to be 'on track' in terms of age-related expectations.

**A useful website to access the entire curriculum is:**

<http://www.primarycurriculum.me.uk/year4>

This helpful website allows you to look through each area of the curriculum quickly and easily, as opposed to scrolling through a large PDF document.

### **Spelling:**

Use prefixes and suffixes from Y3/4 appendix and know how to add them  
Spell and use words which are often misspelled from the Y3/4 word list  
Spell and use homophones and near homophones from the Y3/4/ list  
Use the suffixes tion, ation, sion, cian to form nouns  
Use and spell the 'in' prefix when it is changed to 'il', 'ir', 'im'  
Use the suffix 'ly' to form adverbs  
Use the suffix 'ous' to form adjectives  
Spell words with : 'ou', 'ch', 'que', 'gue', 'sc' from the spelling appendix  
Write simple dictated words and sentences that include spelling (and punctuation) taught  
Use dictionaries effectively using 1st 3 letters of a word to check spelling.

### **Handwriting**

Increase legibility, consistency, quality of handwriting, e.g. downstrokes parallel and equal

### **Composition**

Discuss and record ideas about what they are planning to write.  
Adopt features (structure, vocabulary and grammar of existing texts to shape own writing)  
Build sentences with varied vocabulary and increasing range of structures  
In narratives, create settings, characters and plot.  
Use simple organisational devices in non-fiction (headings, sub headings)  
Use paragraphs to organise ideas around a theme  
Assess effectiveness of own and others' writing and suggest improvements  
Proofread writing for spelling and punctuation errors  
Propose changes to grammar and vocabulary, including pronoun consistency.  
Read aloud using appropriate intonation, tone and volume

### **Vocabulary. Grammar and punctuation**

Secure understanding of grammatical difference between plural and possessive -s  
Use apostrophes to mark plural possession.  
Use the possessive apostrophe with irregular plurals (e.g. children's )  
Use fronted adverbials, e.g., later that day, I heard the bad news.  
Use commas after fronted adverbials  
Begin to use expanded noun phrases to add detail.  
Recognise and use standard English verb inflections  
Use conjunctions to add time ( e.g. when, while)  
Use adverbs and prepositions to add time and place  
Use inverted commas, commas and other punctuation to punctuate direct speech correctly  
Use appropriate pronouns within and across sentences to aid cohesion and avoid repetition.