

Barnham Primary School

Learning guide for Year 2



End of year expectations for children in Year 2



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Behaviours for learning

Children in Year 2 need to continue positive attitudes to education and learning in order to succeed on their journey through the school. They also need to be best prepared to enter Key Stage 2 when they start in Year 3. We expect that their behaviours for learning, developed in Year R and built upon as they move through Year 1 will continue. Children will continue learn through a regular morning routine of Maths and English (moving from phonics towards standard English sessions, in line with the expectations for Key Stage 2). In the afternoons, they will learn through other curriculum areas, such as geography, history, PE or topic-themed learning.

Throughout their time at school, children are expected to develop a number of speaking and listening skills, building on the skills developed in Year R and Year 1. The National Curriculum for English states that 'spoken language underpins the development of reading and writing' and as such, we expect children by the end of Year 2 to be able to:

- **Speak in full sentences**, using vocabulary they know and have been taught across the year. They should be able to **adapt their speaking voice to an audience**, knowing when colloquial language or more formal language are appropriate.
- **Listen attentively** and **responding** to questions such as 'who, what, why, where, when.'
- **Make relevant comments** and **ask questions** about a subject being discussed, using and building on their prior knowledge of the subject.
- **Hold a conversation** with peers or adults, stopping to listen to someone else's opinion and respecting what they say. They will also learn how to agree or disagree on a subject.
- **Participate** in small group, class and one-to-one discussions, allowing others to take turns in a discussion and valuing their opinions.
- **Offer explanations** for why things might happen, giving evidence from a range of sources that they have learnt about.
- **Express their ideas and feelings** using the correct past, present or future tenses.

In class each day, for the majority of lessons, children will be expected to do the following:

- Say 'good morning' to familiar adults. Ask and answer the question 'how are you today?'
- Sit on the floor or carpet with their legs crossed, with other children.
- Face the person who is talking, maintaining focus for the majority of a 20-30 minute whole class input.
- Follow the flow of a lesson, including speech, visual prompts and discussions with peers.
- Recall key information about what has been taught, including providing a simple definition of key vocabulary.
- Sitting on a chair when working, with feet on the floor and maintain an upright position.
- Hold a pencil using tripod grip to write fluently and for longer periods of time, developing a cursive handwriting style.
- Using correct letter formation to write, joining lower case letters and knowing the position of a letter on the line.
- Hold a pair of scissors and use efficiently to cut out to a line.
- Hold a glue stick and be able to stick one piece of paper to another, taking care to present work with the audience and purpose in mind.
- Use and take care of personal possessions, for example pencil cases, jumpers and coats.

At different points during the day, they will also take part in other activities and the following additional skills are required:

- Standing and walking in a line with other children, including waiting in a line.
- Sitting in rows for a whole-school assembly.
- Packing or unpacking a bag with their belongings (water bottle, lunch box and pencil case).
- Using the toilet independently and washing hands.
- Using a knife and fork to hold and cut food.
- Sorting and maintaining resources within the classroom, taking increasing responsibility for small tasks which contribute to class life.
- Say 'please' and 'thank-you' at appropriate times.
- Resolving conflicts with peers, listening to others views and compromising.
- Putting on and removing clothing, like coats, trousers, hats, gloves, t-shirts and jumpers.

Rewarding Great Role Models at BPS - Dojo Rewards

At BPS our goal is for children to become self-motivated in their drive to be successful learners, confident individuals and responsible citizens. Our reward system, that includes the reward of Dojo points, helps us to do this. Dojos are given to the children for hard work, extra effort, overcoming learning challenges, being kind and collaborating with their classmates. In each class and year group there will also be specific categories that children can earn more dojos for. For example, reading regularly, completing any homework, or improving learning outcomes.

There may be times as well that a Dojo may be removed if a reminder is required for a child to help them better understand the expectations and goals we are working towards. This happens very infrequently, but can occur.

As the children earn their Dojo points they work towards the achievement of being celebrated by their class and the school, receiving a badge which helps signify that they have reached a milestone of success. The boundaries for this goal are 100 dojos, 200 dojos, 300 dojos and 400 dojos. In the event of a child reaching 500 dojos, which has only happened a handful of times; that child becomes the head teacher for some time and Mr Everett takes on their class work and activities.

It is vital to reward the children and to help them be motivated to achieve; and through the whole school community celebration when a child reaches a dojo milestone, we are able to help make that experience and very memorable one.

End of Year 2 expectations for learning

From the current National Curriculum for England

Reading – comprehension

By the end of Year 2, to meet an expected level, children should be able to:

- listen to, discuss and express views about a wide range of contemporary and classic poetry, stories and non-fiction at a level beyond that at which they can read independently.
- discuss the sequence of events in books and how items of information are related.
- become increasingly familiar with and retell a wider range of stories, fairy stories and traditional tales.
- be introduced to non-fiction books that are structured in different ways.
- recognise simple recurring literary language in stories and poetry.
- discuss and clarify the meanings of words, linking new meanings to known vocabulary.
- discuss their favourite words and phrases.
- continue to build up a repertoire of poems learnt by heart, appreciating these and reciting some, with appropriate intonation to make the meaning clear.
- show understanding of books by drawing on what they already know or on background information and vocabulary provided by the teacher.
- show understanding of books by checking that the text makes sense to them as they read, and correcting inaccurate reading.
- show understanding of books by making inferences on the basis of what is being said and done.
- show understanding of books by answering and asking questions.
- show understanding of books by predicting what might happen on the basis of what has been read so far.
- participate in discussion about books, poems and other works that are read to them and those that they can read for themselves, taking turns and listening to what others say.
- explain and discuss their understanding of books, poems and other material, both those that they listen to and those that they read for themselves.

Reading – word reading

By the end of Year 2, to meet an expected level, children should be able to:

- continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent.
- read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes.
- read accurately words of two or more syllables that contain the same graphemes as above.
- read words containing common suffixes (eg -ly, -less, -ful).
- read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word.

- read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered.
- read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation.
- reread these books to build up their fluency and confidence in word reading.

Writing – transcription

By the end of Year 2, to meet an expected level, children should be able to:

- spell by segmenting spoken words into phonemes and representing these by graphemes, spelling many correctly
- spell by learning new ways of spelling phonemes for which 1 or more spellings are already known, and learn some words with each spelling, including a few common homophones (eg to, too, two).
- spell by learning to spell common exception words.
- spell by learning to spell more words with contracted forms.
- spell by learning the possessive apostrophe (singular) [for example, the girl's book].
- spell by distinguishing between homophones and near-homophones.
- add suffixes to spell longer words including –ment, –ness, –ful, –less, –ly.
- apply spelling rules and guidance, as listed in the National Curriculum English Appendix.
- write from memory simple sentences dictated by the teacher that include words using the sounds/phonemes, common exception words and punctuation taught so far.

Writing – handwriting

By the end of Year 2, to meet an expected level, children should be able to:

- form lower-case letters of the correct size relative to one another.
- start using some of the diagonal and horizontal strokes needed to join letters and understand which letters, when adjacent to one another, are best left un-joined.
- write capital letters and digits of the correct size, orientation and relationship to one another and to lower-case letters.
- use spacing between words that reflects the size of the letters.

Writing – composition

By the end of Year 2, to meet an expected level, children should be able to:

- develop positive attitudes towards and stamina for writing by:
 - writing narratives about personal experiences and those of others (real and fictional),
 - writing about real events,
 - writing poetry,
 - writing for different purposes.
- consider what they are going to write before beginning by:

planning or saying out loud what they are going to write about,
writing down ideas and/or key words, including new vocabulary,
encapsulating what they want to say, sentence by sentence.

- make simple additions, revisions and corrections to their own writing by:
evaluating their writing with the teacher and other pupils,
rereading to check that their writing makes sense and that verbs to indicate
time are used correctly and consistently, including verbs in the continuous form,
proofreading to check for errors in spelling, grammar and punctuation (for
example, ends of sentences punctuated correctly).
- read aloud what they have written with appropriate intonation to make the meaning
clear.

Writing – vocabulary, grammar and punctuation

By the end of Year 2, to meet an expected level, children should be able to:

- learning how to use both familiar and new punctuation correctly – see National Curriculum English Appendix, including full stops, capital letters, exclamation marks, question marks, commas for lists and apostrophes for contracted forms and the possessive (singular).
- learn how to use: sentences with different forms: statement, question, exclamation, command.
- learn how to use: expanded noun phrases to describe and specify [for example, the blue butterfly].
- learn how to use: the present and past tenses correctly and consistently, including the progressive form.
- learn how to use: subordination (using when, if, that, or because) and co-ordination (using or, and, or but).
- learn how to use: the grammar for year 2 in National Curriculum English Appendix.
- learn how to use: some features of written standard english.
- use and understand the grammatical terminology in National Curriculum English Appendix in discussing their writing.

Maths – number and place value

By the end of Year 2, to meet an expected level, children should be able to:

- count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward.
- recognise the place value of each digit in a two-digit number (10s, 1s).
- identify, represent and estimate numbers using different representations, including the number line.
- compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.
- read and write numbers to at least 100 in numerals and in words.
- use place value and number facts to solve problems.

Maths – addition and subtraction

By the end of Year 2, to meet an expected level, children should be able to:

- solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.
- solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods.
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
 - a two-digit number and 1s,
 - a two-digit number and 10s,
 - 2 two-digit numbers,
 - adding 3 one-digit numbers.
- show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot.
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Maths – multiplication and division

By the end of Year 2, to meet an expected level, children should be able to:

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals ($=$) signs.
- show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot.
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Maths – fractions

By the end of Year 2, to meet an expected level, children should be able to:

- recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.
- write simple fractions, for example $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Maths – measurement

By the end of Year 2, to meet an expected level, children should be able to:

- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
- compare and order lengths, mass, volume/capacity and record the results using >, < and =.
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
- find different combinations of coins that equal the same amounts of money.
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
- compare and sequence intervals of time.
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
- know the number of minutes in an hour and the number of hours in a day.

Maths – geometry

By the end of Year 2, to meet an expected level, children should be able to:

- identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line.
- identify and describe the properties of 3-D shapes, including the number of edges, vertices (corners) and faces.
- identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].
- compare and sort common 2-D and 3-D shapes and everyday objects.
- order and arrange combinations of mathematical objects in patterns and sequences.
- use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

Maths – statistics

By the end of Year 2, to meet an expected level, children should be able to:

- interpret and construct simple pictograms, tally charts, block diagrams and tables.
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.
- ask-and-answer questions about totalling and comparing categorical data.

Reading in school

As of April 2021, the government asks that all schools use an approved phonics scheme from a list of providers to deliver daily phonics and English teaching to younger classes. At Barnham Primary School, we use and adapt the systematic, synthetic phonics scheme 'Read, Write, Inc' developed by Ruth Miskin (see parent youtube channel here https://www.youtube.com/channel/UCo7fbLgY2oA_cFCIg9GdxtQ)

We continue to teach phonics in the first part of Year 2, streaming the children for English sessions depending on their learning needs. Children are taught to read and write daily, to aide with retention and to provide time to practise this learning. They continue to be taught, or to revisit, a number of **phonemes** (units of sound represented by a letter or letters), initially as single letters then as **digraphs** (two letters together making a sound, like SH or CH) and **trigraphs** (three letters making a sound, like AIR or IGH). At the start of each session, they practise reading these sounds using **flashcards**, sometimes learning a new sound. As the children enter Year 2, we start preparing most of them for 'standard English' sessions. When they are ready, we move them into a group that is no longer Read, Write, Inc based. In this group, they will continue to practise reading and writing daily, as well as being introduced to all of the spelling, punctuation and grammar requirements for the Year 2 curriculum. Lots of their writing will be based on the topic themes for Key Stage 1 and will include different genres of writing, in preparation for entering Key Stage 2 at the start of Year 3.

Because the Read, Write, Inc teaching is tailored to different needs, some children in Year 2 may still attend a group working at a different level to their peers. They might move back a group to consolidate, practise and fill gaps using texts they have already encountered. This support in building their understanding, regularly revisiting taught sounds and building confidence in what they are reading.

Reading at home

Throughout Year 1 and Year 2, your child will come home with a reading scheme book to practise reading at home. This book will contain sounds and words they have already been taught, so that they can develop fluency and comprehension skills at home. We recommend children read at home **at least 3 times each week**, to enable them to build confidence, retain information about a story and develop the skills of fluency and sight reading as well. During a reading session at home, please continue to practise:

- Holding a book correctly.
- Talking about the **front cover** and **title** of the book.
- Using what we have read to talk about the **beginning, middle** and **end** of each story.
- Using what we have read to talk about the **characters** in each story.
- Using what we have read to **answer questions**, like what happened to each character? What part of the book did we like? What did we not like?

The reading scheme books allow you to regularly practise all of the skills listed above, but also:

- Identifying sounds (or **phonemes**) within a text.
- Blending sounds to read words.
- Reading groups of words as a **sentence**.
- Re-reading sentences to support understanding of what has happened.
- Re-reading the whole book to improve **fluency** (the ability to read accurately, with expression and with an understanding of punctuation).

As children progress in their reading in Year 2 and become more fluent readers, the focus will shift as there is more emphasis on the skills of **comprehension**. This means that children will spend more time talking about their understanding of the story, answering questions based on the acronym VIPERS which we use in Key Stage 2 to ask questions about:

VOCABULARY - what does this word tell you? Why has the author chosen that word instead of another?

INFERENCE - what do you think this section means? Why do you think that? How does this section or word make you feel? Why did this event happen?

PREDICTION - look at the cover and title, what do you think this book will be about? Where do you think this character will go next? What might happen to them? How do you think they will solve this problem? How will this story end?

EXPLANATION - what is similar or different about these 2 characters? Explain why that happened / why they did that? Which of these characters or decisions is better? Why? Is there anything you would change about this story and why?

RETRIEVAL- who are the main characters in the story? Where was it set and how do you know? Find a word that explains how the character is feeling? What type of text is this? (non-fiction, fiction, narrative etc).

SEQUENCE - what happens in the opening part of the story? How and where does the story start? What is the 'problem' in the story and how is it resolved? Can you summarise the beginning/middle/end of the story?

In school, children are taught reading and writing skills **daily**, through phonics lessons and lots of other lessons too. We also read on a one-to-one basis with children and aim for an adult (class teacher or TA) to read in school with your child at least once a fortnight. Children will also have access to library books within school. These are chosen by the child and are to share at home, they are not necessarily linked to your child's ability to read.

Homework

Homework provides an opportunity for children to consolidate learning at home, as well as providing parents with time to discuss what children have learned in school. At Barnham Primary School, we organise our homework into manageable, termly homework booklets to provide a flexible approach for families. These booklets aim to encourage regular practise of **English, Maths** and **Topic** work at home, practising and building on skills and knowledge taught in class.

Each child in Year 2 will be provided with a homework booklet at the start of each term. Homework at Barnham Primary School is **optional**, but strongly recommended. For each week there is a suggested piece of homework which links with what is taking place in class, or a piece that consolidates what the children have already learnt. We try and make our homework fun, relevant and tailored to the curriculum needs of the children.

Homework in Year 2 may include any of the following;

- Counting, number ordering, adding, subtracting, multiplication or division problems.
- Red words to learn to read and write (red words cannot be sounded out and need to be learnt by sight).
- Fact-finding projects (for example, find out about a famous explorer!).

If at any point the homework set in your child's home learning journal is unclear, or you need support in how to encourage your child to work at home, please discuss this with your child's class teacher.

Appendix 1: Phonemes

As a school, we use the government validated phonics scheme **Read, Write, Inc** until the point in Year 2 where children are ready to take part in standard English sessions. The scheme sets out the sounds to review in the following groups over the course of Year 2:

Set 2 Sounds

ay  may I play?	ee  what can you see?	igh  fly high	ow  blow the snow	oo  poo at the zoo
oo  look at a book	ar  start the car	or  shut the door	air  that's not fair	ir  whirl and twirl
			ou  shout it out	oy  toy for a boy

Set 3 Sounds

ea  cup of tea	oi  spoil the boy	ie  terrible cat	au  Paul the astronaut	e-e  go Hill and Saddle
a-e  make a cake	i-e  nice smile	o-e  phone home	u-e  huge brute	aw  yawn at dawn
are  care and share	ur  nurse with a purse	er  a better letter	ow  brown cow	ai  snail in the rain
oa  goat in a boat	ew  chew the stew	ire  fire, fire!	ear  hear with your ear	ure  sure it's pure
wh  whisk, whisk	ph  take a photo	kn  knock knock, who's there?	ue  come to the rescue!	

Appendix 2: Red words (not decodable)

Red Words Set 1

I	the	my	you	said
your	are	be	of	no

Red Words Set 2

what	all	was	we	so
to	me	call	her	there
want	go	old	some	he

Red Words Set 3

does	tall	come	watch	who
were	brother	any	their	where
two	small	love	many	here
once	buy	worse	thought	talk
caught	bought	walk	could	anyone
would	great	son	water	should

Red Words Set 4

they	half	Monday	eight	eighteen
going	over	fourteen	orange	Wednesday
by	laugh	April	don't	July
do	these	four	because	can't
one	people	February	grey	another
ball	Mr	Mrs	bear	other
through	baby	only	told	why
even	key	mother	eye	friend

Appendix 3: National Curriculum for English appendix

Details of content to be introduced in English in Year 2

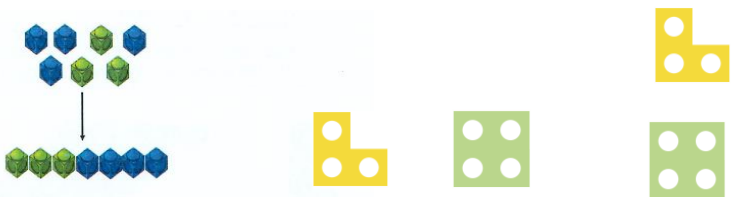
Word	Formation of nouns using suffixes such as –ness, –er and by compounding (for example, whiteboard, superman). Formation of adjectives using suffixes such as –ful, –less. Use of the suffixes –er, –est in adjectives and the use of –ly in Standard English to turn adjectives into adverbs .
Sentence	Subordination (using when, if, that, because) and co-ordination (using or, and, but) . Expanded noun phrases for description and specification (for example, the blue butterfly, plain flour, the man in the moon). How the grammatical patterns in a sentence indicate its function as a statement, question, exclamation or command.
Text	Correct choice and consistent use of present tense and past tense throughout writing. Use of the progressive form of verbs in the present and past tense to mark actions in progress (for example, she is drumming, he was shouting)
Punctuation	Use of capital letters, full stops, question marks and exclamation marks to demarcate sentences Commas to separate items in a list Apostrophes to mark where letters are missing in spelling and to mark singular possession in nouns (for example, the girl's name)
Terminology for pupils	noun, noun phrase statement, question, exclamation, command compound, suffix adjective, adverb, verb tense (past, present) apostrophe, comma

Glossary of terms above:

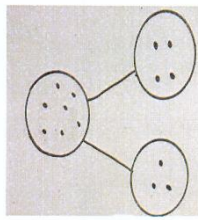
Suffix	A letter or group of letters added to the end of a root word that changes the word's meaning.
Prefix	A letter or group of letters added to the start of a root word that changes the word's meaning.
Root word	A root word is the fundamental unit or a word – a prefix or suffix can be added to change the root word.
Verb	A word used to describe an action, state or occurrence.
Progressive forms of verbs	Verbs that show actions at different points in time, for example I am singing, I was singing, I will be singing.
Adjectives	A word that describes a noun or pronoun.
Adverbs	A word or phrase used to modify a verb.
Noun	A naming word.
Clause	A group of words in a sentence that contains a subject and a verb.
Subordination	Combining two sentences in a way that makes one more important than the other.
Co-ordination	Combining two sentences in a way that gives them equal weighting.
Expanded noun phrase	Adding more detail to writing by using more than one adjective to describe.

Appendix 4: Year 2 Maths

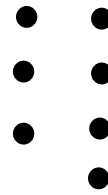
As a school, we have a comprehensive Mathematics progression curriculum allowing children to build on skills from Year R to Year 6 (Parent guide to the 4 Operations). This sets out what Maths looks like for each year group. Below are the Year 2 steps and what they might look like for your child:

End of year expectations	What does this look like?
<u>Counting, place value & mental methods</u> <u>By the end of Year 2:</u> I can use mental recall of addition and subtraction facts to 10.	Children will know, and quickly recall, number bonds to 10. ie: $1 + 9 = 10$, $2 + 8 = 10$, $3 + 7 = 10$ etc Children will use knowledge that subtraction is the inverse of addition to recall subtraction facts to 10. ie: $1 + 9 = 10$ so $10 - 1 = 9$ or $10 - 9 = 1$
I can recognise the place value of each digit in a 2-digit number	Children will understand the value of each number in a 2-digit number. For example, they will know that 37 is 3 tens and 7 ones, not a 3 and a 7.
I can identify, represent and estimate numbers using different representations	Children will use their knowledge of place value, as above, to read numbers and show their relative position on a number line. Children will also be able to estimate using their knowledge of number. Children will be able to represent numbers using different equipment, for examples tens and ones counters.
I can compare and order numbers from 0 to 100 using the $<$ $>$ and $=$ symbols	Children can say which number is larger or which number is smaller. They can read the $<$ and $>$ symbols as $<$ less than, $>$ greater than and use these alongside the $=$ equals symbol to compare and order numbers. For example: $7 < 9$, $21 > 12$ or $3 + 3 = 6$
I can read and write numbers to at least 100 in numerals and words	Children will be able to read 2-digit numbers to 100. Children will be able to read numbers as words to 100, for example 21 as twenty one, 78 as seventy-eight.
<u>Addition</u> <u>By the end of Year 2:</u> I can add numbers using objects, pictorial representation and mentally, including: 2 digits plus ones 2-digits plus 10s 2 digit plus 2-digit Adding three single digit numbers	Children can use the methods below to solve the following addition problems: 1 digit + 1 digit 2 digit + 1 digit 2 digit + 2 digit 1 digit + 1 digit + 1 digit Children can add two numbers by combining groups of objects, for example $3 + 4 =$ 

Children can solve additions by drawing a simple diagram or by knowing number facts (see number bonds previously).

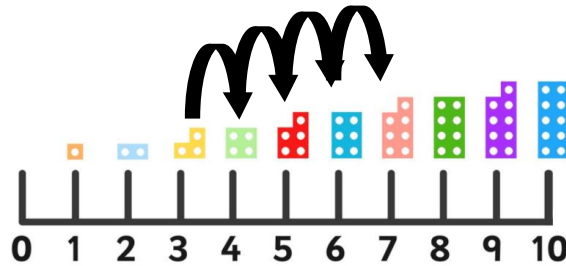


$$3 + 4 = 7$$

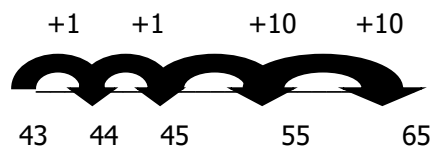


3	4

Children can add two numbers using a printed number line: $3 + 4 = 7$



Children can add two numbers using an empty number line ie: $43 + 22 = 65$



Children can begin to partition and add 2-digit numbers informally, for example

$$43 + 22$$

$$40 + 20 = 60$$

$$3 + 2 = 5$$

$$60 + 5 = 65$$

Children can add using a hundred square, for example

$$16 + 32 = 48$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Subtraction

By the end of Year 2:

I can subtract numbers using objects, pictorial

Children can use the methods below to solve the following subtraction problems:

1 digit - 1 digit

2 digit - 1 digit

2 digit - 2 digit

representation and mentally, including:

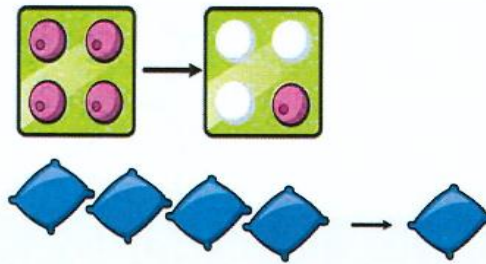
2 digits minus ones

2-digits minus 10s

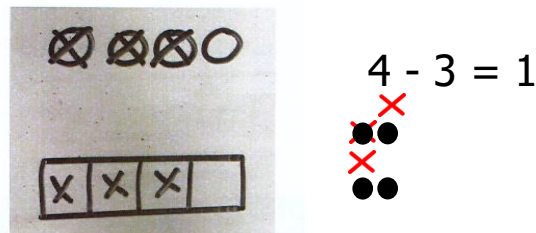
2 digit minus 2-digit

Children can subtract two numbers by physically taking away objects, for example

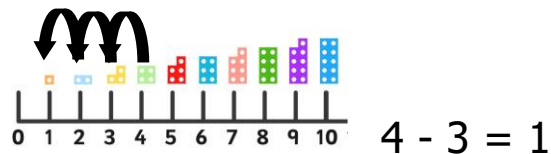
$$4 - 3 = 1$$



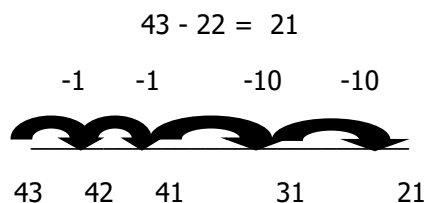
Children can subtract using a simple diagram, for example:



Children can subtract using a printed number line:



Children can subtract using an empty number line:



Children can subtract using a hundred square, for example

$$99 - 88 = 11$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Multiplication

By the end of Year 2:

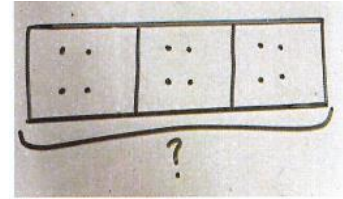
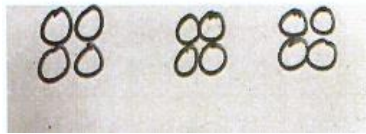
I can solve multiplication problems using materials, arrays, repeated addition,

Children will be able to use objects (numicon, blocks, counters etc) to solve simple multiplication problems. For example: $3 \times 4 = 12$

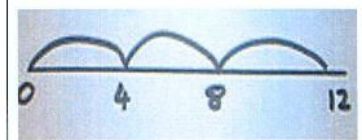
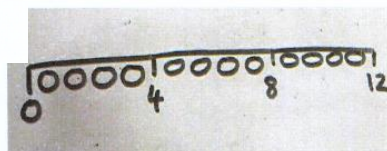


mental methods, including problems in contexts.

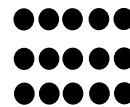
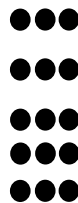
Children will be able to use simple diagrams to show and solve multiplication problems. For example, $3 \times 4 =$:



Children will understand multiplication as repeated addition (the same number added over again). For example, 3×4 is $4 + 4 + 4 =$:



Children will begin to use arrays to understand the commutative nature of multiplication (for example 3×5 or 5×3 give the same answers)



Children will use knowledge of multiplication vocabulary to express this in number sentences.

ie: $3 \times 2 = 6$ and $2 \times 3 = 6$

Children will understand that doubling is multiplying by 2.

I can recall and use multiplication facts (and associated division facts) for the 2x, 5x and 10x tables

Children will be able to recite the 2x, 5x and 10x tables in order, knowing the pattern of numbers as set out below:

2 4 6 8 10 12 14 16 18 20 22 24

5 10 15 20 25 30 35 40 45 50 55 60

10 20 30 40 50 60 70 80 90 100 110 120

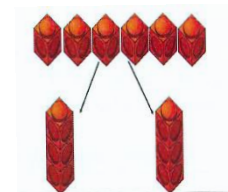
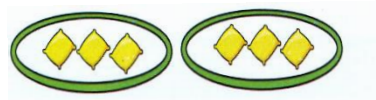
When asked, children will be able to swiftly answer times tables questions for 2x, 5x and 10x table, for example 'what is 5×5 ?' and 'what is $25 \div 5$?'

Division

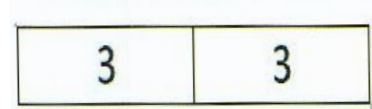
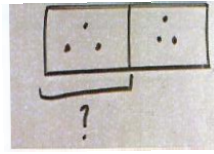
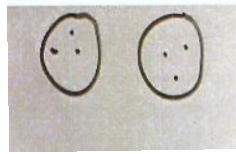
By the end of Year 2:

I can solve division problems using materials, arrays, repeated addition, mental methods, including problems in contexts.

Children can understand division as a physical sharing of objects, first between 2 then between 5 and 10. For example, $6 \div 2 = 3$



Children can read and attempt to solve division problems using simple diagrams or drawings. For example, $6 \div 2 = 3$



Children can understand division as repeated subtraction, using diagrams or visual representations for support.

