

# New Waltham Academy

Understanding how children learn to <u>read</u>, <u>write</u> and <u>calculate</u> at New Waltham Academy

Believe, Achieve, Succeed



## Welcome to a guide that shows you how children in New Waltham Academy progress in reading, writing and mathematics.

#### **Up-to-date**

Teaching methods may have changed since you last attended school. It's very important that you understand how your child learns in a modern school like New Waltham Academy and you probably need to 're-learn' some things. This book will give you an overview of what's involved.

#### How to use this guide

You don't need to read it all at once... just use it when needed. For example:

- your child could be asking you about long division as part of their maths homework, so you could go to the division page in the 'Learn to Calculate' section.
- or you could be worried about your child's writing progress, so you might read the sections on how to develop this.
- or you may want to help with your child read at home, so go to the 'Supporting your child with their Reading' section.

#### Workshops

We also hold workshops where we help parents to understand how children are taught at New Waltham Academy.

#### Got any questions?

If you have any questions concerning how your child learns at New Waltham Academy or don't totally understand our modern teaching methods, please do not hesitate to get in touch. We welcome each question, because it shows you want to be involved in your child's education. So...ask away!



## **Learning to Read**

Here at New Waltham Academy we are very aware of the terrific support that you provide when helping your children read. As a school we work hard to promote a love of reading and are very proud of the achievements our children make as they move through the school, leaving as confident fluent readers – in fact, real bookworms!

We cannot stress enough the importance of hearing your child read. By spending time each day with a book you are acting as an excellent role model, developing your child's listening skills, helping develop their vocabulary and allowing them to discover imaginary worlds, wonderful characters and fantastic plots. Reading feeds into writing – an avid reader becomes a very good writer.

Reading to your child and hearing your child read every day allows you to share quality time together even in upper Key Stage 2! It can also support their learning in school. Below are some questions and activities that we would like you to use when reading with your child which will help develop their fluency, confidence and comprehension. Fifteen minutes a day can make such a difference to your child becoming a bookworm and we want to thank you in advance for your continued support. If you have any questions or require further guidance on how you can help your child at home, please don't hesitate to contact your child's class teacher.

#### **How Reading is taught** in our school

The skills of reading are taught in regular guided reading sessions. Guided reading in school is planned according to the end of year expectations for each year group. The children practise the skills for reading on a daily basis and are constantly given opportunities to read, for example, information gathering, instructions, stories, labels and captions – in fact the list is endless!

#### **Home Reading Logs**

It is important that Reading Records are completed at home as it gives the teacher an idea of how often your child reads, how well they are doing and provides an opportunity for written dialogue between the class teacher and parents. You could write about your child's confidence, pace and fluency; how they responded to your questions; any strategies they may have used and whether they read with enthusiasm and enjoyment. If your child reads other books at home we would like you to write the title and date in the reading log too – this will help build a picture of your child as a reader. The teacher will read your comments regularly

#### **School Reading Book**

#### Early Years and Key Stage 1

Every week your child will bring home a book they have chosen from the school library. The book is their choice. Once read, the book can be exchanged for another however we do expect that reading books are changed weekly.

#### **Key Stage 2**

Your child chooses a reading book from our school library. This book is checked by the teacher to ensure it is appropriate to their reading level and age. They may choose to read a book they have from home instead. We ask for children to read at home at least three times a week and an adult to sign the reading log to show reading has taken place.

What Else Can Your Child Read?

- Comics
- Magazines
- Travel Brochures
- Recipes
- Instructions for games
- Letters from you, family or friends
- Newspapers
- · Sports reports Shopping Lists

### **Learning to Read**

#### Supporting your child with their reading

We hope the following guidelines will help you to support your child with reading. Before you start, ensure you have plenty of time to make the reading a happy and relaxed experience. Sit your child next to you, making sure you are both comfortable.

Talk about the book before you start to read

- Why did you choose this book?
- This looks interesting.
- What do you think it is going to be about?
- · Let's look at the front cover for some clues.
- What is in the picture?
- What is in the title?
- Let's read the blurb on the back.
- Flick through the book so your child can look at the pictures and become familiar with the book.

If they come across an unfamiliar word

- · Miss out that word and read on. Now go back and guess what it might be.
- Look at the picture for a clue.
- Try to sound out the word e.g. b r u s h.

If a child cannot work out what an unknown word is after a few seconds, it is important to tell them so that the flow of the reading is not interrupted too much.

If a child misreads a word do not correct it immediately. Wait until a suitable break in the text.

- Back here you said (repeat what they said). That doesn't make sense does it?
- I liked the way you tried to work out what that word would be.
- Yes, that would make sense but it's not the word the author used.

#### It is important that you respond to the content of the book

Here are some questions you could ask your child.

#### Narrative (story)

#### Looking at the text

- Is this a story, a poem or information book? How do vou know?
- Is it a true story? How do you know?
- What kind of story is it? (fairy story, adventure story, scary story, funny story...)
- Does it remind you of any other book you have read? Why?
- Did you like this book? Why did you like it?

#### Looking at the characters

- Who are the characters in this story?
- Who is your favourite character? Why? Who is your least favourite character? Why?
- Which character would you like to be? Why?

#### Looking at the plot and setting

What are the main things that happened in the story? What is the problem? How was it resolved?

- Do you know any other stories that are similar? What are they? How are they similar?
- Where did the story take place? Can you describe the
- Does the setting remind you of anywhere you have

#### Non-fiction books: comparing fiction and nonfiction

- Look at the contents and index pages. Where are they found? How are they used? Are they in alphabetical order?
- Look at other features such as photographs, captions and labels. What are these for? How can we learn from them?



#### **Book-related activities for you to** do with your child

**Learning to Read** 

Here are some ideas for fun activities vou can do

- ✓ Draw and describe the characters.
- ✓ Draw or write a new story ending.
- ✓ Write or draw the characters and put them in order of importance.
- ✓ Draw the setting and describe it.
- ✓ Draw a new story setting.
- ✓ Write down interesting facts to share with the class.
- ✓ Write a simple book review to share with the class.



#### **Useful Reading Websites**

www.oxfordowl.co.uk - free online Oxford Reading Tree resources

www.bbc.co.uk - school section words and pictures phonic activities

www.phonicsplay.co.uk

www.literacvtrust.org.uk

www.crickweb.co.uk

www.woodlands-iunior.kent.sch.uk/interactive/ onlinestory.htm

www.bbc.co.uk/cbeebies/stories

www.familylearning.org.uk

www.topmarks.co.ukwww.readingforlife.org.uk/

www.bookstart.org.uk

#### Ten fabulous apps

Read Me Stories – Children's books - Free

Sentence Reading Magic – Free

abc Pocket Phonics Lite – Free

abc Pocket Phonics- Pay fee

Word Magic – Pay fee

The Story Mouse Talking Books - Free

ABC Animals - Pay fee

Reading for Kids – I like Reading – Free

Word Domino – Free

Read with Biff, Chip & Kipper ... Free



## **Speaking and Listening**

Speaking and listening are at the heart of children's learning. Children need to be confident communicators and active listeners in order to learn about the world they live in. Language skills are crucial, and children begin to develop these skills from birth.

At school children are taught to:

- · Think about what they say
- Choose the right words
- Listen to others before they speak
- Talk to others
- · Share ideas

## 'Listening and Speaking are the roots of reading and writing'

(Ofsted 2005)

From the very earliest stages parents are teaching their children to communicate - through playing, chatting, singing, commenting and questioning parents are modelling speaking and listening.

#### Here are some ways to develop your child's speaking and listening skills

- Make time to talk to your child
- Encourage your child to talk in full sentences
- Listen patiently and encourage your child to listen to you
- · Actively encourage longer conversations.
- Asking questions
- Be a good role model

• Model appropriate body language e.g. eye contact





## Writing

### Writing at New Waltham Academy

Writing is an integral part of the curriculum at New Waltham Academy. It is a vital life skill and enables children to access all areas of the curriculum.

#### Writing within the school

Where possible, writing at New Waltham Academy, is cross-curricular. This means key writing skills are taught in science, history, geography – in fact all areas of the curriculum! We use the Nelson handwriting scheme to develop handwriting, expecting that all children will leave school writing in a joined, neat style.

#### The Letter forms

abcdefghijklm nopqrstuvwxyz

#### The Capital letters

ABCDEFGHIJKLMN OPQRSTUVWXYZ

#### The Numerals

1234567890

## Supporting your child with writing at home

Whilst parents' support with developing reading skills is widely acknowledged, so too should the support with developing your child's writing. We ask that you help us by making sure your child's written homework is completed while seated at a table, in pencil with any corrections shown by a single line crossing out the mistake, with sentences punctuated and words spelt correctly. This is in line with the school's English policy. We ask that you encourage your child to take pride in their written work in the same way that we do every day in school.

There are many writing opportunities that you could encourage at home, for example letters, blogs, emails, book reviews, lists, diary entries – again opportunities to write at home will reinforce skills learnt in school and link writing with everyday life skills.



## Learning to Calculate at New Waltham Academy

### **Language for Addition page 11** Language for Subtraction page 14 Language for Multiplication page 17 **Language for Division page 19**

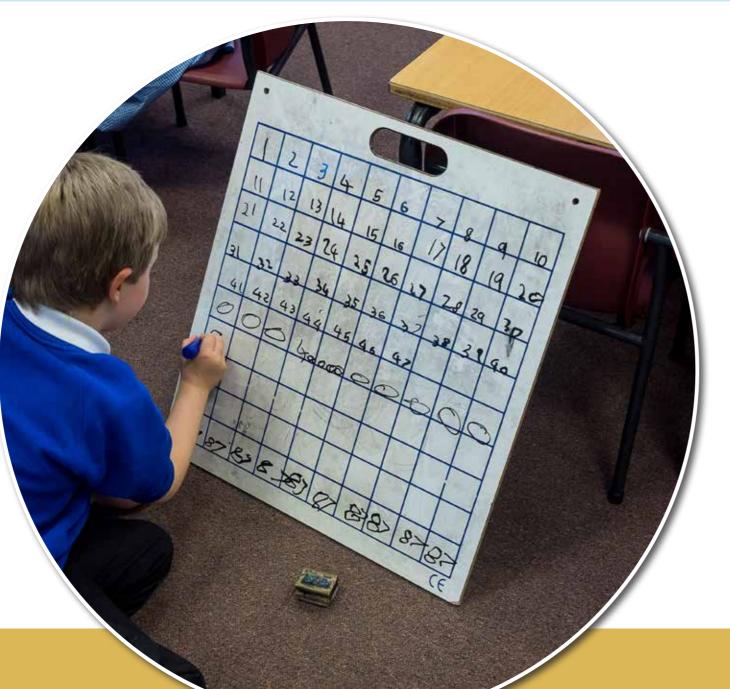
Written methods of calculations are based on mental strategies. Each of the four operations builds on secure mental skills which provide the foundation for jottings and informal and then formal written methods of recording.

Skills need to be taught, practised and reviewed constantly. These skills lead on to more formal written methods of calculation.

Strategies for calculation must be supported by familiar models and images. When approaching a new strategy it is important to start with numbers that your child can easily manipulate so that they have every opportunity to fully grasp each concept.

The transition between stages should not be hurried as not all children will be ready to move on to the next stage at the same time, therefore the progression in this document is outlined in stages. Previous stages may need to be revisited to consolidate understanding before progressing. Failure to secure understanding can lead to misconceptions later so it is essential learning is personalised for every child to ensure solid mathematical foundations are laid which can be built upon in the future.

A sound understanding of the number system and number facts including times tables is essential for your child to carry out calculations efficiently and accurately.



## **Language for Addition +**

more than - find the total - more - altogether - total - add - count on - sum - plus - increase

### **Progression in methods for addition**

1. Practical apparatus e.g. Numicon, head and fingers, 100 squares and Base 10

1	2	3	4	5	6	7	8	9	10
2. Number Line									



Tens		Units			
40	+	3			
20	+	8			
60	+	11	=	71	-

Extend, using hundreds, tens and units

4. Compact Method



### | Stage 1 – Number Track

Use a puppet to practise counting forwards. Practise adding small numbers. If the puppet makes a 'mistake' can the child spot it?







sets of objects and find out how many are there all together

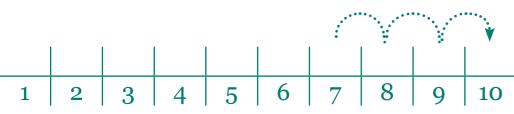
Combine two



and

Remember to use the different words linked to 'addition'

**Stage 2 – Introducing the number line** 



Use a puppet to reinforce counting forwards. Link to number track. Start with a fully numbered number line and then progress to encouraging your child to sketch their own to help with calculation.

13 + 11

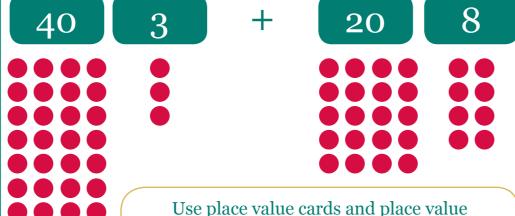
Ensure your child understands place value e.g. 11 is one ten and one unit or one

Start on the largest number

Add the tens

... and then the units

## Stage 3 – The Expanded Method (partitioning & recombining)

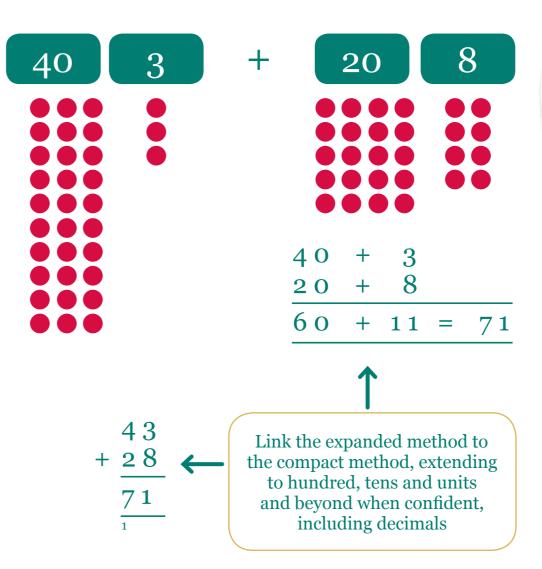


Use place value cards and place value apparatus alongside written jottings. Partition the numbers into tens and units, add and then recombine.

When the children is confident with this method, they should be extended by using hundreds, tens and units.

Tens Units 40 + 3 20 + 8 60 + 11 = 71

### **Stage 4 – Compact Method**





## Language for Subtraction -

count back - minus - take away - find the difference - subtract - less than - decrease

Progression in methods for subtraction

1. Practical apparatus e.g. Numicon, head and fingers, 100 squares, Base 10 or number track



- 2. Number Line
- 3.43 20 = 2323 - 7 = 16

Extend, using hundreds, tens and units

4. Compact Method

Compact Met

#### | Stage 1 – Number Track

Use a puppet to practise counting backwards. Practise taking away small numbers. If the puppet makes a 'mistake' can the child spot it? What happens if we start at 7 and take away 3?





Remember
to use the
different
words linked
to 'subtraction'
'subtraction'

### **Stage 2 – Introducing the number line**



Use a puppet to reinforce counting backwards. Link to number track. Start with a fully numbered number line and then progress to encouraging the children to sketch their own to help with calculation.



Start counting back in ones and then progress to larger jumps



33 23 20 14

Start on the largest number

Count back the tens

... and then the units

### **Stage 3 – Expanded Method**

$$43 - 20 = 23$$

$$23 - 7 = 16$$

Use place value apparatus alongside written jottings.
Partition the numbers into tens and units, subtract and then recombine

When the children are confident with this method, they should be extended by using hundreds, tens and units.



### **Stage 4 – Compact Method**

Extend to hundreds. tens and units and beyond when confident, including decimals.

Is the answer sensible?





#### lots of - times - groups of - multiple - product - multiply

### **Progression in methods for multiplication**

Repeated addition with practical apparatus including Numicon and number lines.



$$2 + 2 + 2 + 2$$

#### Arrays



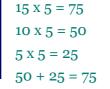


### 3. Grid method

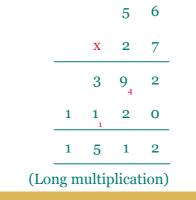
X	10	2			5	6		
o	100	20				2	X	
3	30	6		1	1	2	_	
					1			
			(Short multiplication)					

$$100 + 30 + 20 + 6 = 156$$

### 2. Partitioning



### 4. Compact Method



#### **Stage 1 – Repeated addition**





... & arrays









4 X 2

Your Children needs to understand that multiplication is the same as repeated addition. Find opportunities to count in groups e.g. socks, 'fingers' on 4 hand prints.

Children need to be able to see numbers as arrays. An array is an arrangement of a number visually in rows and columns



1 x 8

### Stage 3 – The grid method



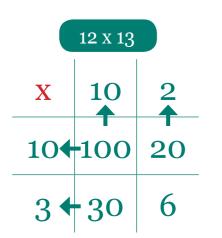
1. Partition the numbers into tens and units. Draw a grid and place the partitioned numbers across the top and down the side of the grid.

2. Multiply each of the part of the partitioned numbers and write the answers in the sections of the grid.

3. Lastly add together the answers to find the final total.

When learning the grid method use place value equipment to help

see the numbers.



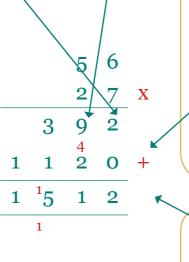
### Stage 4 – Compact method – Long multiplication

1. Always begin by multiplying the units by the units, then the units by the tens (7x6, then 7x5

5. You can extend this to HTU by multiplying the hundreds by the units, then the tens and then the hundreds.

Again, you put your answer on a new line but remember the two zeros when multiplying by the hundreds.

2. Next multiply the tens by the units and then the tens by the tens, putting your answers on a new row.



3. Because
you are
multiplying
by 'tens' you
must put a zero
in the units
column before
you start that
row.

4. When you have your two rows, add them together.

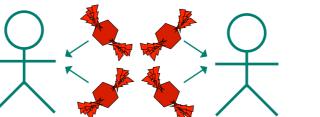
## **Language for Division ÷**

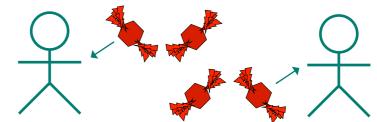
equal groups of - divide - share - remainders

#### **Progression in methods for division**

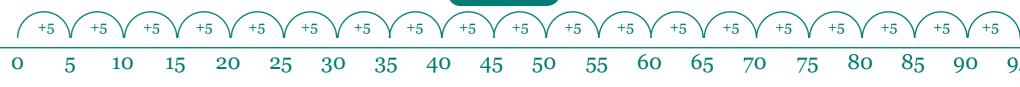
1. Sharing...

...and grouping





2. ...Chunking up

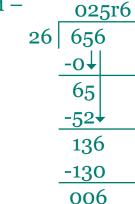


3. Partitioning and inverse operations (fact families)

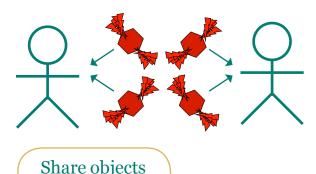
$$95 \div 5 = 19$$
 $5 \times 10 = 50$ 
 $5 \times 9 = 45$ 
 $80$ 
 $5 \times 19 = 95$ 

4. Compact method – short division

5. Compact method – long division



### Stage 1 - Sharing ...

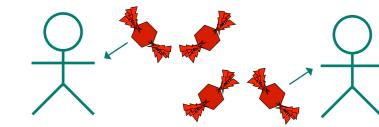


We introduce the ÷ sign and explain that it means to find how many lots of one number there is in another, e.g.  $15 \div 3 =$ means how many lots of 3 are there in 15?

## ... and grouping

practically one

at a time



Share objects practically in groups.

#### | Stage 2 – Chunking up

Always start by writing o at the start of the number line and the biggest number at the end. Jump along the number line, keep adding on the number you are dividing by until you reach your end number. To find your answer, count the number of jumps. This will tell you: e.g. how many lots of 5 there are in 95.

### Chunking up

#### $95 \div 5 = 19$



#### Chunking up with remainders

Again, count the jumps, this time, when you can't add 5 without passing the end number, count on in 1's, these will be your remainders.

#### $89 \div 5 = 17 \text{ r4}$

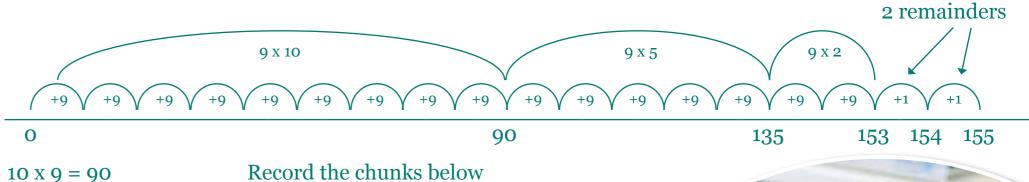


The 'remainder' jumps can go under the line to emphasise that they are remainders.

#### **Stage 3 – Chunking up to partitioning**

Once your child has grasped jumping along the number line, we can begin grouping the chunks together using multiplication facts.

 $155 \div 9 = 17r2$ 



 $5 \times 9 = 45$  $2 \times 9 = 18$ 10 + 5 + 2 = 17  $\leftarrow$  Add the chunks together

When your child is ready, partition in chunks without the number line.



#### **Stage 4 – Short division or the bus stop method**

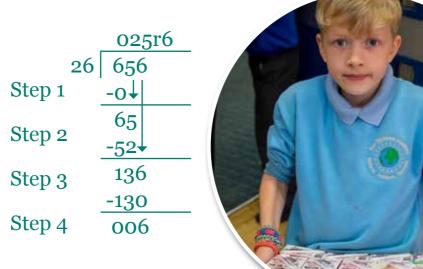
Here, we simply say how many 7's are there in 9? This gives us 1 with 2 left over. We place the 2 next to the 6 so that becomes 26. We then ask how many 7's are there in 26? This gives us 3 with 5 left over



#### | Stage 5 – Long division

- Step 1. How many groups of 26 are there in 6? 0 so subtract that before carrying down the 5.
- Step 2. How many groups of 26 are there in 65? 2 groups is 52 so subtract that before carrying down the 6.
- Step 3. How many groups of 26 are there in 136? 5 groups is 130 so subtract that.
- Step 4. There are no groups of 26 in 6 so that is the remainder.

Encourage your child to jot down multiples of 26 on their paper to help them.



#### **Mathematical Language**

**Number sentence or calculation** e.g. 2 + 4, 5 - 3,  $6 \times 3$ ,  $12 \div 3$ 

**Partition** splitting a number up e.g. 123 ... 100 + 20 + 3

**Recombine** putting a number back together e.g. 100 + 20 + 3 ... 123

**Bridging** crossing over 10/100 etc

**Exchanging** e.g. swapping a 10 for 10 ones

**Place value** the value of each digit in a number e.g. hundreds, tens and ones (units)

**Remember** the children need to be using all the different words for +, -, x and ÷

We hope you find the information contained in this booklet useful and beneficial in supporting your child through their learning journey for mathematics.

Please feel free at any time, to discuss these strategies with your class teacher who will be only too pleased to help.

Thank you for helping us to develop a positive home school partnership and maximize your child's learning potential!





'We hope this booklet has helped you to understand how your child is learning to read, write and calculate at New Waltham Academy. If, at any time, you would like to know more please arrange to speak to your child's teacher at a mutually convenient time.'

