



ENGLISH and MATHS

A guide for DPS families

November 2023

The main aim of this presentation is to explain what we teach in English and Maths and how we teach these important subjects.

Our aim is to help you to help us support your child on their learning journey to be the best they can be.



Fixed mindset =

I can't do
this - it's
too hard

I have
reached my
limit



Growth mindset =

I can do
this!

This seems hard, I
may have to work on
this for a while!



English @ DPS



The English curriculum is made up of the following elements:

Spoken language

This underpins reading and writing. The quality and variety of language that children hear and speak is important. The children should be involved in discussions, debates and drama.

Reading

Reading is made up of three parts:

- Word reading
- Comprehension
- Fluency

Reading is essential. It is important that children can read confidently and fluently in preparation for secondary school and they read for enjoyment.

Writing

Writing is made up of two parts:

- Transcription (spelling and handwriting)
- Articulating ideas (articulating ideas and structuring them in speech and writing).

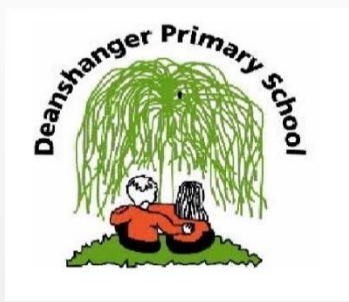
Spelling, vocabulary, grammar and punctuation are essential to this process. SPaG



Reading in Reception and Key stage 1



- Children have daily whole class phonic lessons.
- Children read with an adult at least 3 times a week in school through their reading practice sessions.
- Children have daily story times.
- Children also have individualised reading books which they take home and share with their parents. The Big Cat books are colour banded and are specifically chosen and linked to their phonic knowledge.
- Children requiring extra support will receive 1:1 daily reading.
- They have a weekly library session where they discuss and share books, choose a sharing book to take home and share with their parents/carers.
- Each child has a 'Reading Eggs' account. This reinforces the teaching of phonics in a fun and interactive way using technology!
- Children in Year 1 will participate in the Phonics Screening Check, which is a statutory. More information will be shared later, in the term.
- During Year 2, children will take part in formal reading comprehension activities.
- Daily Reading will support your child to become a successful learner – We learn to read so we can read to learn!



How can you help at home?

- **Team up with the teacher.** Ask how you can highlight phonics and reading outside of class, and share any concerns you have (Weekly phonics homework)
- **Listen to your child read daily.** If your child stumbles on a word, encourage them to sound it out. But if they still can't get it, provide the word so they don't get discouraged.
- **Boost comprehension.** Ask questions like, "What do you think will happen next?" or "What did he mean by that?"
- **Revisit familiar books.** It's okay if your child wants to re-read favourite books from earlier years. In fact, it's actually beneficial!
- **Read aloud.** Choose books on topics that excite your child and read them together!
- **Spread the joy.** Show your child how much you value reading by having plenty of books and magazines around the house. You'll teach phonics as well as cultivate a lifelong love of reading.
- **Online Reading platforms** – E-Collins, Reading Eggs (Key Stage 1) and Accelerated Reader.

Please see Home School Diary from page 11 onwards for more top tips on phonics, reading and spelling.

Reading in Key Stage Two

It is important that children still read. It is important that you still listen to them read and ask questions.

"Research has repeatedly shown that motivation to read decreases with age, especially if pupils' attitudes towards reading become less positive. If children do not enjoy reading when they are young, then they are unlikely to do so when they get older."

What do we do?

Focus is on reading comprehension with emphasis on vocabulary and fluency

- Children have individualised readers. This is based on the 'Accelerated Reader' program. We often have ERIC times. Children can access e-books through myON.
- All children have a weekly library session. They can read their book and choose a new title. We try and encourage the children to read one book at a time.
- We use the VIPERs skills throughout our learning, developing vocabulary, inference, prediction, explanation and retrieval skills.
- We take part in formal reading comprehension sessions where children write answers in response to a text.
- Accelerated Reader is a computerised reading system. It is well established and has a proven track record. We use this from Year 2 and above.



Writing at Deanshanger

'If a child can't talk it, they can't write it.'

TALK IS ESSENTIAL TO WRITING

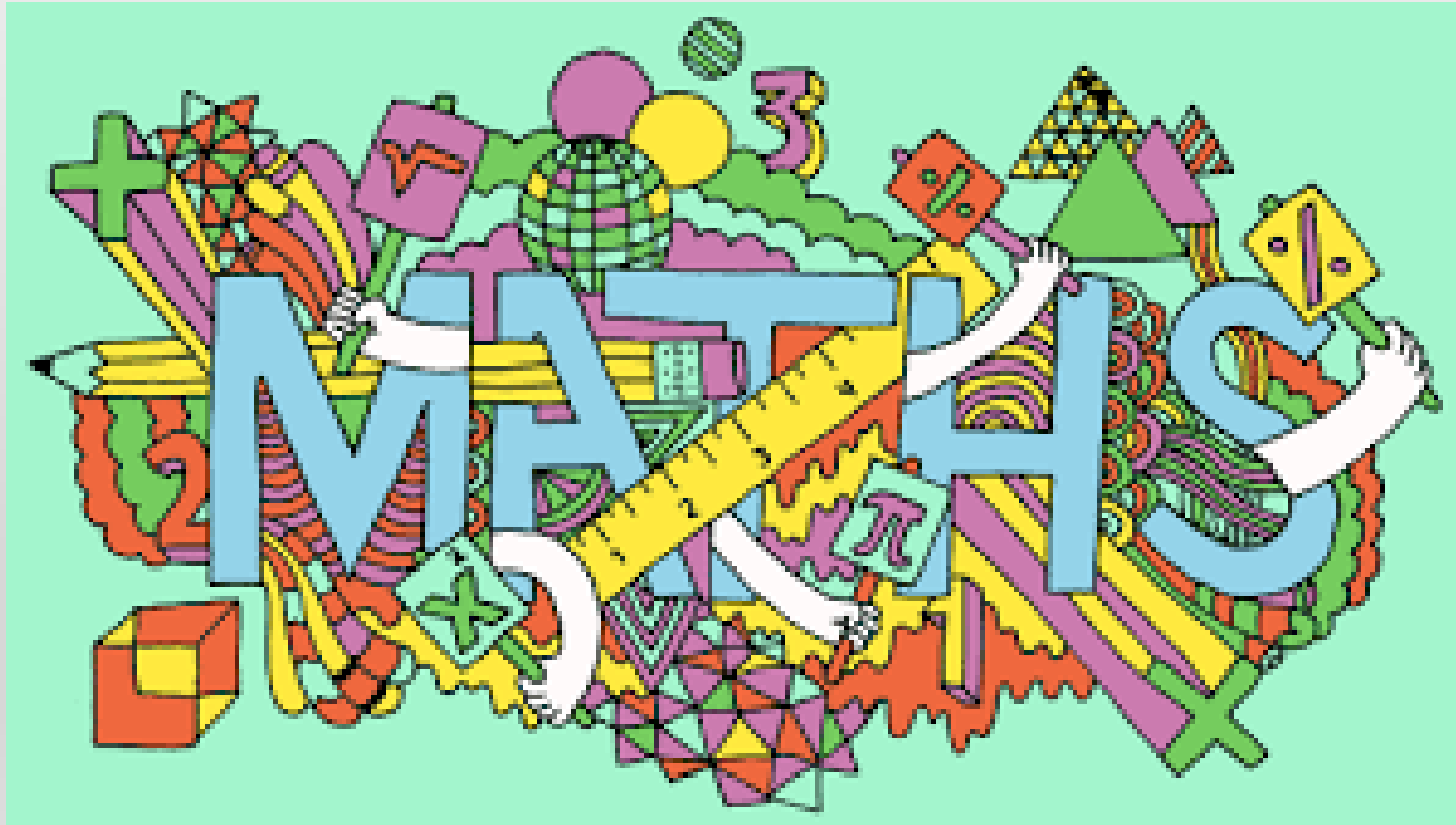
- Children across the school have daily literacy lessons.
- Each month the children complete their 'FOTM' writing independently to demonstrate progress and to identify next steps.
- Handwriting. In KS1 there are daily handwriting sessions. In KS2 there is regular practice.
- Punctuation/Grammar. We have weekly punctuation and grammar lessons throughout the school.
- Spelling. We have weekly spelling tests and learn different spelling patterns. These are set out in the national curriculum.
- Talk for writing is essential to writing. It is very important that children familiarise themselves with various text types, use the language of texts and discuss their ideas before they write. Children discuss their ideas during and after they write to evaluate their work.
- We also use strategies like 'Drama for Writing' to aid writing.
- Writing is developed across the curriculum during our IPC lessons as well as through literacy sessions.
- Children complete different types of writing such as recounts, instructions, narratives, poetry, reports, explanations and arguments and persuasion.

Our long-term plans are on our school website. They show the type of writing we do in each year group. A lot of our writing is linked to the International Primary Curriculum (IPC)

Year 3 Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
IPC Unit	Chocolate	Scavengers and Settlers	Active Planet	Material World/ Feel The Force	Temples, Tombs and Treasure	Bienvenue en France
Year Group Novels Story time takes place daily and lasts for 15 minutes or more - this is particularly important as Reading to children is a statutory requirement of the National Curriculum.	Charlie and the Chocolate Factory - Roald Dahl	Stig of the Dump - Clive King	The Iron Man - Ted Hughes	The Iron Man - Ted Hughes	The Time-Travelling Cat and the Egyptian Goddess - Julia Jarman	The Time-Travelling Cat and the Egyptian Goddess - Julia Jarman
Approaches to Writing	<ul style="list-style-type: none"> Plan their writing by discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar - discussing and recording ideas. Draft and write by composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures. Expressing time, place and cause using conjunctions e.g. when, before after while so Adverbs e.g. then, next, soon, therefore OR prepositions e.g. before, after, during, in and because of. Organising paragraphs around a theme In narratives, creating a setting, characters and a plot. 					

Maths@DPS



The Mathematics curriculum is made up of the following elements:

Number

This includes the concepts of place value, addition subtraction, multiplication, division, fractions (including decimals and percentages).

Measurement

This covers length, mass, volume and time.

Geometry

Geometry is made up of two parts: Properties of shapes and Position and direction.

Statistics

This involves presenting and interpreting data in different forms.

Algebra and Ratio and Proportion

This knowledge is taught in Year 6 and links to number and Geometry.

The key skills that are developed are fluency, reasoning and problem-solving.

How we teach maths at Deanshanger Primary School:

Across the school maths is taught daily. It is a core subject. Children are either taught in class groups or in ability groups..

Teachers are using the White Rose scheme of work and each year group coverage is outlined in The White Rose programme of study. Children will visit topics for a number of weeks at a time, each area is broken down into simple manageable steps.

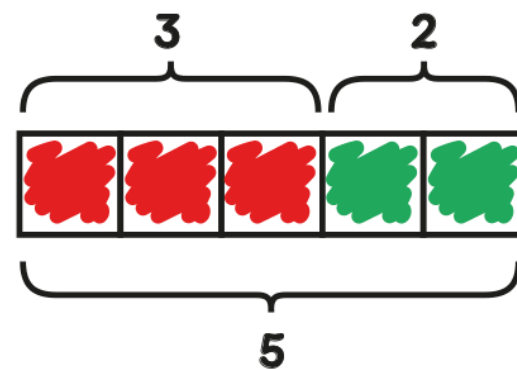
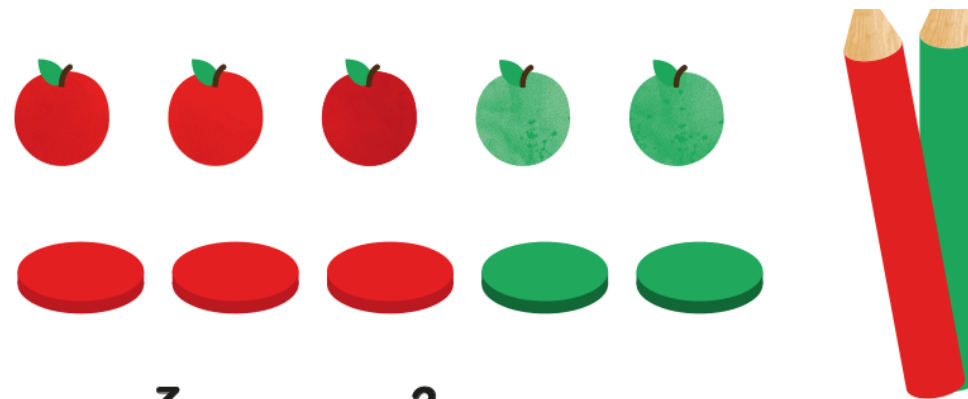
All maths lessons are differentiated to meet every child's needs and is carefully planned using teacher's ongoing assessments to ensure challenge and progression.

In Years 2-6 the star system is used, one star - is working towards, two star - working securely, three star- working at a greater depth and shooting star provide a challenging activity. When the teacher identifies a pupil's misconception, they will make time for a short-term intervention to address this in preparation for the next lesson.

Teachers use a variety of resources and representations in their teaching and the use of manipulatives is key to support children's mathematical understanding. The resources become more refined throughout the school e.g egg boxes > numicon > 10 frames > 100 squares > blank number lines. This supports the Concrete/Pictorial/Abstract learning model.

The CPA approach to mathematics

Concrete, Pictorial, Abstract (CPA) is a highly effective approach to teaching that develops a deep and sustainable understanding of maths in pupils. Often referred to as the concrete, representational, abstract framework, CPA was developed by American psychologist Jerome Bruner. It is an essential technique within the Singapore method of teaching maths for mastery.



$$3 + 2 = \boxed{5}$$

Elements of Maths

Fluency, Problem Solving and Reasoning

Throughout Deanshanger Primary School, we aim to ensure that our teaching incorporates a balance of these three skills. These are all integral to every aspect of the mathematics curriculum and are key to the application of maths in everyday life.

Arithmetic:

Answering maths questions quickly using both mental and written strategies.

In all stages in school aspects of arithmetic are used.

In KS1 Arithmetic is assessed in daily lessons.

In KS2 Arithmetic (Fluent-in-Five) is taught three times per week.

Times tables:

Children begin counting in number patterns from FS.

In Years 1 and 2 they begin to learn 2, 5, 10 and 3 times table.

In Years 3 and 4 children will need to learn all times tables from 2 - 12.

The Year 4 children will take part in a mandatory Multiplication Tables Check in the summer term. It is essential that children learn all their tables. We have a subscription for children in Years 1 - 6 for Numbots/TTRockstars a programme that helps children to learn their times tables off by heart in a fun way.

Fluent-in-Five

1. $3.43 \times 100 =$
2. $1.32 \times 3 =$
3. $3/7$ of $28 =$
4. $43 \times 21 =$
5. $1,664 + 2,349 =$

Reasoning:

The children are presented with a challenge/problem/question to attempt and solve before explaining their decisions. In all stages in school aspects of reasoning are used to develop children's understanding of maths - Why? How do you know?

In both KS1 and KS2, reasoning challenges are set twice weekly for the children to attempt before discussions take place regarding the children's responses and decisions.


Missing numbers

What numbers are in the red boxes?

[illegible]

Which Answer?

Ninety thousand and two $\begin{cases} \rightarrow 90002 \\ \rightarrow 900002 \end{cases}$

2000 500  **Two thousand five hundred**
Two million five hundred

Five hundred thousand and ten $\begin{cases} \rightarrow 500\,000\,10 \\ \rightarrow 500\,010 \end{cases}$

6 000 004 

Six million and four

Six hundred thousand and four

Learning our
Times Tables is
possible!



The image shows a 10x10 multiplication table. The first row and first column are labeled with numbers 1 through 10. The cells are color-coded: the first row and column are red, the first column is blue, and the rest of the table is yellow. A blue arrow points from the cell containing '2' in the second row, sixth column to the cell containing '6' in the sixth row, second column. The text 'The Same!' is written in blue across the middle of the table.

×	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

<https://www.mathsisfun.com/tables.html>

Developing vocabulary and reasoning.

What is 5
times 4?

What is
5 multiplied
by 4?

Five times 4
equals?

At home...

- Accessing Numbots (Reception-Year 2) and TT Rockstars
- Help with shopping - money, percentages, discounts, addition, budgeting....
- Cooking - weighing/measuring, fractions, ratio, temperatures...
- Time - digital and analogue clocks, using a timer, calendars, seasons...
- Problem-solving - using mathematical knowledge, notice and discuss maths around us e.g. number plates, bus stops, house numbers...
- Complete homework and talk about their learning in school.
- Play games - card games, board games, track games, sudoku...



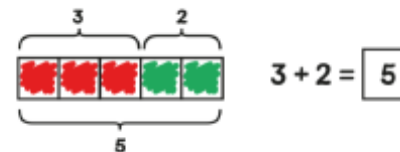
Ways to extend pupil's reasoning

#explainit



- Can you talk to your partner to explain how you worked out the answer?
- Can you write a sentence explaining what you did and why you did it?

#drawit



- Can you use manipulatives to help you draw what you did to work out your answer?
- Can you use a pictorial representation (a bar model/apart part whole model) to represent what you needed to do?

#storyit



- Can you come up with a word problem which could go with your calculation?
- Can you come up with a word problem which doesn't represent your calculation?

#ruleit



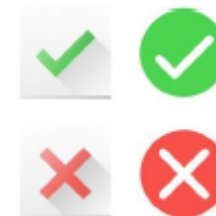
- Can you talk to your partner about the rule for working out the question?
- Can you write the rule for this calculation using words?

#proveit



- Can you work out the calculation in a different way to prove that your answer is correct?
- Can you convince someone using words that your answer is correct?

#correctit



- Can you check the calculations and work out which ones which are correct or incorrect?
- Can you correct the ones which are incorrect based on what you know about the answers?

Calculation Policy

Maths is continually changing and methods you as parents may have used to solve problems may not be used by your children. Our School Calculation policy is available to look at on our website. <https://www.deanshangerprimary.co.uk/page/?title=Maths&pid=127>

- Dice games using two dice so that children need to find totals encourage talk about more/ fewer
- Children will manipulate number cards and 'washing line' numbers and quantities, e.g. bags holding 1, 2, 3, 4, 5 items
- Numicon shapes will be introduced and will be used to identify 1 more/less, combine pieces to add, find number bonds, add without counting. Children can record this by printing or drawing around Numicon pieces.

1

2

3

4

5

6

7

8

9

10

- Children will be encouraged to represent their ideas and workings in a variety of ways including: pictures, with objects, using their fingers, with a number line etc.

5 + 1 = 6

123456

- Children will be encouraged to solve simple problems using manipulatives including their fingers and number tracks, to count up, on and to find one/more...

Multiplication		
Learning Objectives (Early Learning goals identified in bold blue type)	Activities	Key Vocabulary
<ul style="list-style-type: none">• Count aloud in ones, twos, fives and tens• Count repeated groups of the same size• Describe solutions to practical problems, drawing on experience, talking about own ideas, methods and choices• Use developing mathematical ideas and methods to solve practical problems	<ul style="list-style-type: none">• Introduce counting in groups, e.g. pairs of socks, squares of chocolate (broken into rows) • Practise grouping items into same-size groups and explore quick ways to count them e.g. coins • Use numeral dice with 2, 4 and 6 to encourage children to take items in pairs• Practise calculating and learning doubles by manipulating real objects, e.g. two rows of 4 bananas, socks etc. and by using domino pairs etc. • Practise counting aloud in 10's, 5's and 2's, looking at number squares and lines to notice number patterns.	lots of groups of times multiply multiple of once twice three times...ten times ...times as (big, long, wide...and so on) repeated addition double

Objective & Strategy	Concrete	Pictorial	Abstract
Adding multiples of ten	50= 30 + 20 Model using dimes and bead strings	 3 tens + 5 tens = _____ tens 30 + 50 = _____ Use representations for base ten.	20 + 30 = 50 70 = 50 + 20 40 + □ = 60
Use known number facts Part/part/whole	 Children explore ways of making numbers within 20 using a variety of manipulatives.		□ + 1 = 16 16 - 1 = □ 1 + □ = 16 16 - □ = 1
Using known facts	 □ + □ = □ □ + □ = □		3 + 4 = 7 13 + 4 = 17 3 + 14 = 17 23 + 4 = 27

Any questions?

*Thank you for attending this session.
Your continued support is much
appreciated*

