# Year 4 Autumn term 2022



Dear parents,

The Year 4 team have provided you with the following booklet for your attention. They have put together the booklet that contains information about the autumn term and it provides you with details on what the children will be covering in the following subjects:

- > English
- Maths
- > Science
- World Studies

We hope that this will provide you with an accurate picture on what your children will be studying in the first term of this academic year.

Thank you

The Year 4 team

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#### **English in Year 4**

English in the Autumn term for Year 4 will be covering the following:

- ▶ Dilemma Story and Information text- This unit uses the contemporary story Lost or Stolen? By Narinder Dhami to explore the themes of relationships, suspicion and trust. Opportunities for writing involve using a story "roller coaster" to plan and write a new chapter for the story. The non-fiction week looks at information texts presented in a variety of styles, in a magazine feature format. Where appropriate, the children will be encouraged to develop an awareness of audience and purpose in relation to the fiction and non-fiction texts they are reading and writing.
- Poetry and Journalistic recounts- in these unit, children explore the poems "The Balloons" by Oscar Wilde, "My Sari" by Debjani Chatterjee and "At the End of a School Day" by Wes Magee. The emphasis is on enjoyment of the poets' use of language to create images and emotions. The texts focus on moments to remember: everyday moments observed, recalled and shaped into poems. Children are encouraged to experiment with language and form to create a poem of their own in free verse. The non-fiction section explores recounts and journalistic texts. Where appropriate, the children will be encouraged to develop an awareness of audience and purpose in relation to the fiction and non-fiction texts they are reading and writing.

## **Years 4 programme of study**

# Reading – word reading

# **Statutory requirements**

Pupils should be taught to:

- apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) both to read aloud and to understand the meaning of new words they meet
- read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word

# **Reading – comprehension**

#### **Statutory requirements**

- develop positive attitudes to reading, and an understanding of what they read,
   by:
  - listening to and discussing a wide range of fiction, poetry, plays, nonfiction and reference books or textbooks
  - reading books that are structured in different ways and reading for a range of purposes
  - o using dictionaries to check the meaning of words that they have read
  - increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
  - identifying themes and conventions in a wide range of books
  - preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
  - discussing words and phrases that capture the reader's interest and imagination
  - recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read, in books they can read independently, by:
  - checking that the text makes sense to them, discussing their understanding, and explaining the meaning of words in context
  - asking questions to improve their understanding of a text
  - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
  - predicting what might happen from details stated and implied
  - identifying main ideas drawn from more than 1 paragraph and summarising these
  - identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- participate in discussion about both books that are read to them and those they
   can read for themselves, taking turns and listening to what others say

# Writing - transcription

#### **Statutory requirements**

#### **Spelling**

Pupils should be taught to:

- use further prefixes and suffixes and understand how to add spell further homophones
- spell words that are often misspelt
- place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
- use the first 2 or 3 letters of a word to check its spelling in a dictionary
- write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far

# Writing – handwriting and presentation

#### **Statutory requirements**

- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting, [for example, by ensuring that the downstrokes of letters are parallel and equidistant, and that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch]

# **Writing – composition**

#### **Statutory requirements**

- 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 <u>English appendix 2</u>
  - organising paragraphs around a theme
  - o in narratives, creating settings, characters and plot
  - in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- evaluate and edit by:
  - assessing the effectiveness of their own and others' writing and suggesting improvements
  - proposing changes to grammar and vocabulary to improve consistency,
     including the accurate use of pronouns in sentences
- proofread for spelling and punctuation errors
- read their own writing aloud to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear

#### Writing - vocabulary, grammar and punctuation

#### **Statutory requirements**

- develop their understanding of the concepts set out in by:
  - extending the range of sentences with more than one clause by using a wider range of conjunctions, including: when, if, because, although
  - using the present perfect form of verbs in contrast to the past tense
  - choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition
  - using conjunctions, adverbs and prepositions to express time and cause
  - using fronted adverbials
  - learning the grammar for years 3 and 4 in [English appendix
     2]/government/uploads/system/uploads/attachment\_data/file/335190/English\_Appendix\_2\_-\_Vocabulary\_grammar\_and\_punctuation.pdf)
- indicate grammatical and other features by:
  - using commas after fronted adverbials
  - o indicating possession by using the possessive apostrophe with plural nouns
  - using and punctuating direct speech
- use and understand the grammatical terminology in accurately and appropriately when discussing their writing and reading

#### **Maths in the Autumn term**

Maths in the autumn term is when the children are exposed to different aspects of Maths. The topics that the children will be learning will be used as their prior knowledge of topics and basis to their learning. The autumn term will see the following topic being taught:

- Mental addition and subtraction
- > Number and place value
- Mental multiplication and division
- Problem solving and reasoning
- Written multiplication and division
- > Fractions, ratio and proportion
- > Time
- > Decimals, percentages and their equivalence to fractions
- Measurements

The following is a copy of the midterm plan that includes a detailed breakdown of the subjects covered in the autumn. The plan provides topics week by week so that you are aware of what is being covered on a weekly basis from the start of the autumn term until the end of the term.

# Maths Autumn Term (1) Plan 2022/23

Wk	Weekly Summary	Strands	Objectives
1	, ,	Mental addition and subtraction (MAS)	MAS.36 Know number bonds to 100  MAS.43 Add to the next multiple of 100 by counting up from any 2-digit or 3-digit number  MAS.47 Quickly work out or recall bonds to 100 and to the next 100  MAS.44 Subtract a 3-digit from a 3-digit number (with a difference < 50) by counting up  MAS.48 Add mentally several 1-digit numbers, multiples of 10 or 100  PRA.51 Organise work in a logical way
		solving, reasoning and algebra (PRA)	PRA.57 Check that all solutions have been found
2	Read, write 4- digit numbers and know what each digit represents; compare 4-digit numbers using < and > and place on a number line; add 2-digit numbers mentally; subtract 2-digit and 3-digit numbers	Number and place value (NPV)	NPV.45 Understand place value in 4-digit numbers by creating 4-digit numbers, placing them on a number line and solving place value additions and subtractions  NPV.46 Order and compare 4-digit numbers and say a number between
		Mental addition and subtraction (MAS)	MAS.31 Add pairs of 2-digit numbers with a total ≤ 198  MAS.30 Add pairs of 2-digit numbers using partitioning (totals < 100)  MAS.33 Subtract 2-digit from 2-digit numbers by counting up  MAS.44 Subtract a 3-digit from a 3-digit number (with a difference < 50) by counting up
3	Learn × and ÷ facts for the 6 and 9 times-table and identify patterns; multiply multiples of 10 by single-digit numbers; multiply 2-digit numbers by single-digit numbers (the grid method); find fractions of amounts	Mental multiplication and division (MMD)	MMD.46 Count in 6s and recall multiplication and division facts for the ×6 table  MMD.47 Count in 9s and recall multiplication and division facts for the ×9 table  MMD.42 Multiply multiples of 10 by 1-digit numbers  MMD.43 Multiply mentally 2-digit by 1-digit numbers using partitioning
		Problem solving, reasoning and algebra (PRA)	PRA.52 Describe, predict and explain patterns
		Written multiplication and division (WMD)	<b>WMD.43</b> Use known tables and place value to multiply 2-digit by 1-digit numbers with the grid method
		Fractions, ratio and	<b>FRP.37</b> Find unit fractions of amounts and relate to division

		proportion (FRP)	
4	Tell and write the time to the minute on analogue and digital clocks; calculate time intervals; measure in metres, centimetres and millimetres; convert lengths between units; record using decimal notation	Measurement (MEA)	MEA.54 Write and tell the time to the nearest minute using analogue and digital clocks  MEA.52 Compare durations of events to calculate the time taken by particular events or tasks  MEA.58 Begin to convert between different units of measure  MEA.42 Measure, compare, add and subtract lengths or heights using m/cm/mm
		Mental addition and subtraction (MAS)	MAS.30 Add pairs of 2-digit numbers using partitioning (totals < 100)
		Decimals, percentages and their equivalence to fractions (DPE)	<b>DPE.58</b> Understand 2-place decimals in the context of money and length, recognise and write decimal equivalents to 1/4; 1/2; 3/4 <b>DPE.57</b> Relate 1-place decimals to 2-place decimals in the context of length (m and cm)
5	Add two 3-digit numbers using column addition; subtract a 3-digit number from a 3-digit number using an expanded column method (decomposing only in one column)	Written addition and subtraction (WAS)	WAS.43 Use compact column addition to add pairs of 3-digit numbers with a total < 1000 WAS.44 Use column addition to add three 3-digit numbers with a total < 1000 WAS.48 Use expanded decomposition to subtract 3-digit from 3-digit numbers

# Maths Autumn Term (2) Plan 2022/23.

Wk	Weekly Summary	Strands	Objectives
6	Double 3-digit numbers and halve even 3-digit numbers; revise unit fractions; identify equivalent fractions; reduce a fraction to its simplest form; count in fractions (each fraction in its simplest form)	Mental multiplication and division (MMD)	MMD.49 Double and halve 3-digit numbers by partitioning
		Problem solving, reasoning and algebra (PRA)	PRA.52 Describe, predict and explain patterns
		Fractions, ratio and proportion	FRP.37 Find unit fractions of amounts and relate to division FRP.34 Begin to understand equivalence by placing
		(FRP)	fractions on a number line
			<b>FRP.46</b> Develop an understanding of equivalence in fractions 1/2s, 1/3s, 1/4s, 1/5s, 1/6s, 1/8s, 1/10s
			<b>FRP.52</b> Identify the equivalent fraction for any given fraction
			<b>FRP.54</b> Use equivalence to reduce fractions to their simplest form
			<b>FRP.28</b> Count in 1/4s beyond 1 to 10, saying equivalent fractions
			<b>FRP.48</b> Count in fractions, including equivalents
7	Look at place value in decimals and the relationship between tenths and decimals; add two 4-digit numbers; practise written and mental addition methods; use vertical addition to investigate patterns	Decimals, percentages and their equivalence to fractions (DPE)	DPE.48 Match 1-place decimals to 1/10s DPE.50 Locate and write 1-place decimals on a number line and match to 1/10s DPE.53 Divide integers by 10, 100 and 1000 to get 1-place decimal answers
		Number and place value (NPV)	NPV.47 Divide 2-digit numbers by 10 to get 1-place decimal answers
		Written addition and subtraction (WAS)	<b>WAS.52</b> Use column addition to add two 4-digit numbers with a total ≤ 10000
			<b>WAS.54</b> Use column addition to add two 4-digit numbers with answers > 10000
8	Convert multiples of 100 g into kilograms; convert multiples of	Decimals, percentages and their equivalence to fractions (DPE)	<b>DPE.48</b> Match 1-place decimals to 1/10s

	100 ml into litres; read scales to the nearest 100 ml; estimate capacities; draw bar charts, record and interpret information	Measurement (MEA)  Statistics (STA)	MEA.37 Read relevant scales to the nearest numbered unit  MEA.43 Measure, compare, add and subtract weights (masses) using kg/g  MEA.58 Begin to convert between different units of measure  MEA.44 Measure, compare, add and subtract capacities or volumes using I/mI  STA.52 Draw and interpret bar charts where 1 division represents 100 units  STA.49 Interpret and present data in bar charts where 1 division represents 2 units  STA.55 Draw and interpret bar charts where 1 division represents 5 or 10 units  STA.57 Interpret and present discrete data using bar charts, using an appropriate scale
		Problem solving, reasoning and algebra (PRA)	PRA.53 Use, explain and justify mathematical reasoning PRA.58 Solve simple measure and money problems involving fractions and decimals up to 2 decimal places
9	Round 4-digit numbers to the nearest: 10, 100 and 1000; subtract 3-digit numbers using the expanded written version and the counting up mental strategy and decide which to use	Number and place value (NPV) Written addition and subtraction (WAS) Mental	NPV.49 Round 4-digit numbers up or down to the nearest 10, 100 or 1000  WAS.48 Use expanded decomposition to subtract 3-digit from 3-digit numbers  MAS.49 Count up to subtract any 3-digit from 3-digit
		addition and subtraction (MAS)	number
10	Use the grid method to multiply 3-digit by single-digit numbers and introduce the vertical algorithm; begin to estimate products; divide numbers (up to 2 digits) by single-digit numbers with no remainder, then with a remainder	Mental multiplication and division (MMD)	MMD.48 Multiply mentally multiples of 100 by 1-digit numbers
		Written multiplication and division (WMD)	<ul> <li>WMD.48 Multiply 3-digit by 1-digit numbers using the grid method</li> <li>WMD.49 Multiply 2- and 3-digit by 1-digit numbers using the ladder method</li> <li>WMD.45 Divide numbers just beyond the tables by subtracting the multiple of 10</li> <li>WMD.46 Divide numbers just beyond the tables, with integer remainders</li> </ul>
		Problem solving, reasoning and algebra (PRA)	PRA.52 Describe, predict and explain patterns

# Year 4 programme of study

# Number – number and place value

# **Statutory requirements**

- Pupils should be taught to:
- count in multiples of 6, 7, 9, 25 and 1,000
- find 1,000 more or less than a given number
- count backwards through 0 to include negative numbers
- recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)
- order and compare numbers beyond 1,000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10, 100 or 1,000
- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value.

#### **Number – addition and subtraction**

#### **Statutory requirements**

Pupils should be taught to:

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

#### Number – multiplication and division

#### **Statutory requirements**

- recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers
- recognise and use factor pairs and commutativity in mental calculations
- multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

# Number – fractions (including decimals and percentages)

#### **Statutory requirements**

- recognise and show, using diagrams, families of common equivalent fractions
- count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10
- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- add and subtract fractions with the same denominator
- recognise and write decimal equivalents of any number of tenths or hundreds
- recognise and write decimal equivalents to  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$
- find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- round decimals with 1 decimal place to the nearest whole number
- compare numbers with the same number of decimal places up to 2 decimal places
- solve simple measure and money problems involving fractions and decimals to 2 decimal places

#### Measurement

#### **Statutory requirements**

Pupils should be taught to:

- convert between different units of measure [for example, kilometre to metre; hour to minute]
- measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- find the area of rectilinear shapes by counting squares
- estimate, compare and calculate different measures, including money in pounds and pence
- read, write and convert time between analogue and digital 12- and 24-hour clocks
- solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days

#### **Geometry – properties of shapes**

#### **Statutory requirements**

- compare and classify geometric shapes, including quadrilaterals and triangles,
   based on their properties and sizes
- identify acute and obtuse angles and compare and order angles up to 2 right angles by size
- identify lines of symmetry in 2-D shapes presented in different orientations
- complete a simple symmetric figure with respect to a specific line of symmetry

# **Geometry – position and direction**

# **Statutory requirements**

Pupils should be taught to:

- describe positions on a 2-D grid as coordinates in the first quadrant
- describe movements between positions as translations of a given unit to the left/right and up/down
- plot specified points and draw sides to complete a given polygon

#### **Statistics**

#### **Statutory requirements**

- interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

#### Science in the autumn term

The children will be learning about many topics this academic year. The topics that they will be studying during the autumn term are as follows:

- ➤ **Grouping living things** this topic teaches the children to recognise that living things can be grouped in a variety of ways. They will explore and use keys to identify a name a variety of living things. Finally, they will look at how changes to habitats can pose dangers to living things.
- Sound in this topic the children will encounter how sounds are made on a variety of instruments and how they can be changed in volume, pitch and over distance. They will explore making sounds on a range of objects that aren't instruments, in order to investigate how sounds are created to make music.

#### Lower key stage 2 programme of study

# Working scientifically

#### **Statutory requirements**

During year 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations,
   displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values,
   suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

# **Grouping living things**

#### **Statutory requirements**

Pupils should be taught to:

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- recognise that environments can change and that this can sometimes pose dangers to living things

#### Sound

#### **Statutory requirements**

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases

#### **World Studies** in the autumn term

The children will be learning about many topics this academic year. The topics that they will be studying during the autumn term are as follows:

- ➤ History: Ancient Egypt this topic considers the starting point to be the unification of Upper and Lower Egypt in the late part of the fourth millennium BCE. The vast period of time is broken up into three main periods known as the Old, Middle and New Kingdoms. Each of these periods was dominated by different ruling pharaohs and their dynasties who introduced different elements to the culture.
- ➤ **Geography: What's in the News and Life in India** in this topic the children will be introduced to the internal structure of the earth and the significance of the Earths's tectonic plates. Children will learn about the landscape, climate and economy of India. They will also explore the life in the Indian countryside. They will research the basic geographical facts about India.