

Michael Hall
a Steiner Waldorf School

**Numeracy and Literacy
Framework**

Writing - Class 1

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Understand that writing is speaking on paper ● Use crayon sticks or coloured pencils with correct pencil hold ● Understand the three directions of space in books: up/down, left/right, front/back ● Write their own name ● Recognise sounds, shapes and names of all vowels and consonants in capital and lower case letters ● Write high frequency words is, a, the, I, for, of, are, was, all, to, and, but ● Use their phonic knowledge to write simple regular words ● Make phonetically plausible attempts at more complex words and sentences (emergent writing) ● Begin to sequence sentences to form simple narratives ● Begin to demarcate sentences with capital letters and full stops ● Recreate stories in self-created illustrated 'book' 	<ul style="list-style-type: none"> ● Demonstrate grapheme/ phoneme correspondence through imaginative oral stories and images drawn from those stories ● Develop phonological awareness through daily singing, rhymes, choral speaking, finger games ● Use clapping, finger tapping, stamping games to emphasise syllable demarcation ● Teach children to say out loud what they are going to write ● Make time for short daily practise exercises ● Use alliterative tongue twisters to draw attention to initial sounds ● Help children to label their work with their name ● Model correct posture and pencil-hold for writing ● Encourage children to develop good posture for writing, differentiated for l and r handers. ● Encourage children to use their knowledge of phonics to write words themselves. ● Model sentences for children to copy ● Encourage retelling of stories in simple written sentences ● Teach and practice correct formation of letters ● Practice running forms to cultivate fluid handwriting 	<ul style="list-style-type: none"> ● Use a phonics programme (such as Sounds Write) to structure phonic learning ● Provide opportunities for fine motor development, e.g. Weaving, finger knitting, cutting, modelling with wax, recorder playing, crafts ● Use skipping rhymes and recurring, rhythmical verses to extend sound blends ● Display the alphabet prominently in the classroom ● Provide name labels on desks and pegs ● Provide developmentally-appropriate drawing and writing implements ● Make word walls to display irregular words and refer to them frequently

Reading - Class 1

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Recognise the sounds of all the vowels and consonants ● Read all vowels and consonants sounds in capital and lower case letters ● Read the high frequency words is, a, the, I, for, of, are, was, all, to, and, but ● Read and understand their own writing and classroom displays 	<ul style="list-style-type: none"> ● Help children to learn Phoneme-Grapheme Correspondence a wide variety of activities ● Use songs, stories, games, rhythmic work to focus on different letters and sound blends ● Listen regularly to each child’s reading of letters and sounds ● Identify obstacles to hearing and pronouncing sounds/ sound blends, e.g. ‘th’ ‘y’ ● Read aloud books matching the child’s developing phonic knowledge ● Use repetition of stories and rhymes to consolidate learning 	<ul style="list-style-type: none"> ● Display the letters of the alphabet in the classroom prominently ● Label the names of objects in the surroundings ● Provide access to a rich and varied classroom library ● Develop a progressive reading programme for emerging readers

Speaking and Listening - Class 1

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Identify separate spoken sounds in words ● Seek support by asking questions ● Recite in chorus (morning verse, rhymes, poems, class plays) ● Retell the sequence of events in teacher-presented stories ● Enact with peers simple scenes from stories ● Listen to teachers and other children, maintaining focus in groups and as part of the whole class ● Share news with the class ● Interact with others and respect turn-taking in conversations ● Listen and respond to simple instructions ● Experience grammatical elements embedded in rich oral language environment of classroom 	<ul style="list-style-type: none"> ● Provide a diverse range of poems, chants, rhymes and songs from traditional British and global sources ● Stimulate imaginative picturing by using rich vocabulary in oral storytelling ● Choose appropriate poems and rhymes for children to learn by heart ● Use a wide range of vocabulary in daily storytelling ● Use pictorial clues/gestures to support meaning ● Provide accompanying narratives that supply context & continuity ● Use rhyme and rhythm to aid memory and provide experience of form in literature ● Model clarity of pronunciation ● Model use of intonation (pitch, dynamics, cadence) ● Use recall of stories to reinforce knowledge and strengthen memory ● Vary pace of instruction to create a balance between speaking and listening ● Model individual eye contact and personal interaction ● Give clear, systematic instructions for tasks 	<ul style="list-style-type: none"> ● Create a daily opportunity for individual children to share experience verbally ● Create a daily time and space for children to collectively share ● Provide opportunities through plays and festivals to strengthen connection to the seasons and the natural world ● Provide materials that support self-directed collaboration ● Work closely with parents to ensure consistency in developing listening and speaking skills

Writing - Class 2

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Write in cursive script ● Write digraphs sh, th, ch, wh, ph, gh ee, oo, ei, ea, ai ow, ew, aw y as vowel and consonant (extended code) ● Write and spell correctly days of week, months, numbers and other familiar topics ● Write high frequency words as was, were, are, said, their/ there, have ● Hear when a sentence starts and stops ● Use capital letters and full stops when writing simple sentences ● Begin to use question marks with some accuracy ● Illustrate with simple text some direct experiences or scenes from stories ● Begin to date their work ● Recognise the basic structure of literature - beginning, middle, end 	<ul style="list-style-type: none"> ● Practise form drawing (running forms) as precursor to cursive. ● Introduce consonant and vowel digraphs on the blackboard and on cards. ● Always display the day’s date and day of the week to familiarise children with spellings ● Draw attention to word wall or other display of high frequency and tricky words daily. ● Model use of capitals, full stops, question marks and how to recognise a sentence through voice modulation, games and oral quizzes ● Encourage habit of self-editing by children reading their sentences to check for capitals and full stops ● Provide extension work for more fluent writers ● Model clarity of pronunciation when talking to help children hear sounds accurately 	<ul style="list-style-type: none"> ● Provide regular opportunities for practising running forms leading to cursive writing. ● Provide writing practice of current-focus digraphs through exercises drawn from the day’s story. ● Reinforce spellings of days of the week, months etc. through regular handwriting practise ● Plan opportunities for free writing that will include use of high frequency words. ● Provide opportunities to note/highlight capitals and full stops and where they occur.

Reading - Class 2

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> • Read digraphs sh, th, ch, wh, ph, gh ee, oo, ei, ea, ai ow, ew, aw y as vowel and consonant • Read steadily, showing familiarity with sound blends • Recognise days of week, months, numbers in written form • Read high frequency words such as was, were, are, said, their/ there, have • To pause at full stops. • Read questions using correct intonation • Recognise difference between naming and doing words • Recognise and spell common phonic patterns. • Recognise and spell increasing bank of sight words 	<ul style="list-style-type: none"> • Provide cards and other visuals to show context of different sounds. • Allot time in school day for individual reading • Listen to each child read regularly • Draw attention to the date on the blackboard daily. • Read high frequency words and play games using the word wall and other visuals daily • Stimulate delight in language using songs, poems, skipping rhymes with repetition and lengthening lists of items. • Help children to hear punctuation and understand meaning through expressive reading aloud • Choose carefully graded reading material for each child 	<ul style="list-style-type: none"> • Provide readers and other visuals to reinforce familiarity with common consonant and vowel digraphs • Encourage a library system with children taking books home. • Begin class and individual reading programmes • Maintain close working relationship with parents to promote daily reading practice. • Encourage and guide a variety of reading matter. Avoid censorship of reading material. • Provide a 'cosy corner' where quiet reading can take place • Discuss with your SEND colleague any children who face challenges and provide appropriate support

Speaking and Listening - Class 2

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> • Recite aloud short verses alone (e.g. Birthday verse) and recite some lines of a poem alone • Perform short plays in chorus • Speak simple speech exercises and tongue twisters in chorus • Recite the alphabet accurately forwards and backwards • Listen to and follow verbal instructions given by teachers in all subjects • Recall main points of a story told by the teacher • Retell narratives in the correct sequence, drawing on the language patterns of stories (once upon a time, who, where, what, why, how) • Recognise the basic structure of literature - beginning, middle, end • Experience form in literature through reciting rhythmic and rhyming verses 	<ul style="list-style-type: none"> • Write a personal verse for each child to recite weekly. • Plan various short plays according to festivals throughout the year. • Regularly practise speaking verses and tongue-twisters in unison daily • Listen to, respond and discuss areas of concern among children • Stimulate comprehension with questions about content and aspects of language in stories • Use an increasingly wide range of vocabulary in oral narratives 	<p>The class perform plays together at least 3 times in the year</p> <ul style="list-style-type: none"> • The class speak verses and tongue twisters in rhythmic time daily. • The class play games like “What letter comes before or what letter comes next”? • Children are given regular opportunities to engage verbally with the teacher. The teacher models and encourages good listening skills. • Children recall the story from the previous day orally as well as using materials such as wax etc. which they can then explain verbally. • Children can recall stories in their own writing.

Writing - Class 3

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Identify and use verbs, nouns, adjectives and adverbs ● Write in well-formed cursive script ● Understand and use more technical vocabulary connected to curriculum focus, eg farming, trades, ecology ● Write short descriptions/accounts of recent events or stories ● Write about an event in the correct sequence ● Write down short dictated passages ● Become familiar with book format: author, title, chapters, headings and uses these in class work ● Write a simple outline of a chosen book ● Understand that commas indicate pauses ● Use commas to separate items in lists ● Answer simple comprehension questions in full sentences ● To re-read and self-correct own writing 	<ul style="list-style-type: none"> ● Continue to reinforce correct pencil grip ● Provide regular letter/number formation and cursive writing practice ● Provide regular feedback ● Practise various ways of marking work: by teacher/by peer/ by self ● Show difference between formal/informal writing, model letter writing ● Use movement activities and games to consolidate grammar ● Encourage creative writing: seasonal poems, holidays, colours, moods ● Encourage fluency of expression; highlight only certain mistakes each time ● Differentiate learning: provide sentence starters for some, extended work for able ● Encourage personal spelling notebooks for high frequency and irregular words ● Begin diary writing ● Create simple comprehensions using passages from class readers or passages from Main Lesson topics 	<ul style="list-style-type: none"> ● Provide opportunities for written retelling of stories heard in main lesson ● Provide opportunities for writing book reviews ● Regularly practice letter and number formation ● Providing opportunities for writing personal letters to family and friends ● Vary work modes: individual, small group, whole class ● Encourage collaborative work in groups ● Provide a diary for each child ● Provide draft books for creative writing

Reading - Class 3

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> • Recognise common homophones • Read with increasing fluency • Use appropriate expression when reading • Read silently and aloud • Give an oral report on a book to peers • Begin to read unfamiliar texts by using contextual, semantic, grammatical and phonetic knowledge and clues • Use strategies of re-reading and self-correcting when reading aloud • Recognise and spell common phonic patterns • Recognise and spell increasing bank of sight words • Understand silent letters, digraphs, long vowels in spelling patterns • Begin to develop empathy through connecting to characters and events in chosen texts 	<ul style="list-style-type: none"> • Regularly listen to each child reading • Encourage reading aloud expressively to adult to assess understanding • Maintain habit of reading aloud to class • Model reading with appropriate expression • Use verbal, written and pictorial recall • Establish reading groups • Support oral book reviews providing sentence starters: 'It's about...', 'I liked it because...' • Use word searches and crosswords to develop observation and vocabulary • Use regular spelling tests to practise specific sound blends and groups • Provide opportunities for pupil feedback 	<ul style="list-style-type: none"> • Use class readers in differentiated reading groups • Maintain a class library with a wide range of genres and levels • Guide reading matter individually to ensure effective progress

Speaking and Listening - Class 3

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Give a clear explanation of what they are doing to an inquirer ● Recall more complex events and stories, using language appropriate to the genre ● Listen and respond to specific instructions ● Is able to accurately repeat back an instruction 	<ul style="list-style-type: none"> ● Reciting poems from diverse cultures ● Practise tongue-twisters, riddles, alliterative verses and encourage children to create their own ● Involve children in creating short plays ● Introduce short individual speaking roles in dramas ● Divide recitations into individual parts ● Involve children in organising cultural festivals: Divali, Chinese New Year ● Have regular assemblies where each class shares a topic ● Encourage listening and turn-taking in resolving social upsets ● Guide class discussions on sensitive issues ● Demonstrate a non-judgmental atmosphere for sharing news 	<ul style="list-style-type: none"> ● Provide opportunities for daily recitation ● Provide opportunities for news sharing ● Encourage class discussions around topical subjects ● Explore sayings and idioms from different cultures

Writing - Class 4

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Write with an ink pen ● Know how to use a dictionary ● Recognise and work with typical features of texts and books: alphabetical order, chapters, index, glossary ● Spell irregular plurals ● Use more irregular families of spellings accurately ● Use commas, exclamation and question marks and knows that speech is separated by quotation marks ● Write an accurate account of events or stories heard in class ● Recognise and begin to use types of sentences: statement, command, question, exclamation ● Begin to write direct speech in retelling stories ● Show understanding of texts through comprehension exercises ● Plan, research, and write text to accompany individual projects ● Is able to read out own handwritten work to the class ● Understand that writing styles vary according to subject matter 	<ul style="list-style-type: none"> ● Model use of fountain pen, clear handwriting ● Practise letter formation and cursive script regularly ● Teach the children how to use dictionaries ● Use accurate names of parts of speech. ● Consolidate grammar, spelling, parts of speech using games and oral exercises ● Develop writing skills by encouraging pupils to draft, re-read and correct own writing ● Give formative feedback in marking work ● Encourage regular pupil self-assessment, e.g. at end of Main Lesson blocks and project work 	<ul style="list-style-type: none"> ● Foster pen-pals in other schools to develop letter writing. ● Ensure there are dictionaries available in the classroom, such as the ACE spelling dictionary. ● Provide spelling lists with structured, sequential spelling patterns such as Alpha to Omega. ● Provide opportunities for individual writing activities, individual research projects, letter writing ● Display children’s work in the classrooms as learning aids in the room. ● Provide and highlight visual materials to reinforce learning ● Provide notebooks to create individual dictionaries ● Provide stationery and materials to develop drafting, self- editing, spell checking, sentence structure

Reading - Class 4

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Make a reasonable attempt at unknown words in a text using a variety of clues ● Read simple chapter books confidently and independently ● Begin to use dictionaries to explore word meanings ● Understand words of degree ● Write a simple first-person account of a historical or mythological incident ● Begin to be aware that books can provide imaginative experiences of different cultural and historical events ● Understand different genres as well as fact and fiction 	<ul style="list-style-type: none"> ● Model reading, including chunking unfamiliar words. ● Use more complex vocabulary in speech to class to expand vocabulary. ● Introduce reading and writing in a foreign language in other subject lessons ● Guide and encourage factual research which requires organisation and reading skills ● Provide clear expectations and guidelines for presentation of projects, reports and best work ● Expect all work to be dated, titled and attributed 	<ul style="list-style-type: none"> ● Create graded reading lists ● Have a class reader in which each child reads parts out loud. ● Work with a developed reading scheme. ● Cultivate appreciation of language and cultural variety by studying at least one other foreign language ● Encourage reading of factual and fiction books

Speaking and Listening - Class 4

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Hold some individual lines or part in a short drama ● Understand and respond to various levels of formality in interactions inside and outside the classroom ● Present a book report to peers, reading from own writing and making some eye contact with audience ● Present a book report to peers, with description of main character and events: ‘I liked it because...’ ● Listen respectfully to another point of view in collaborative work ● Create own verses derived from lesson content 	<ul style="list-style-type: none"> ● Model good speech, risk taking, performing in front of the school community, how to be part of an audience ● Encourage children to formulate questions in response to individual projects and book reports ● Introduce a wide variety of texts and poetry to develop sensitivity to language 	<ul style="list-style-type: none"> ● Provide the class with opportunities to take part in a class play, both on stage and off stage, including aspects of the production. ● Create the opportunities to perform at community events. ● Provide opportunities for the children to share their work to peers, other classes and parent communities. ● Maintain expectation for the children to recite poetry by heart

Writing - Class 5

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Use a dictionary and thesaurus independently to find unfamiliar words for spelling and meaning ● Use common suffixes and prefixes ● Use a thesaurus to explore synonyms and antonyms ● Understand the purpose and use appropriate punctuation: semi-colon, colon, hyphen, brackets ● Use speech marks for direct speech ● Use the apostrophe correctly ● Characterise and use all major parts of speech: nouns, verbs, adjectives, adverbs, prepositions (time and space), articles, conjunctions, interjections ● Use simple and continuous verb forms in all tenses, including present ● Take down a dictation on a known subject with reasonable accuracy ● Be confident to write a summary of a book, highlighting description of main characters and events ● Write in different styles or moods ● Edit their own text ● Recognise and understand the use of paragraphs ● Use appropriate organisation or heading ● Write from own or a different point of view ● Write from own research on a given main lesson topic ● Identify and use metaphors and similes ● Order the steps of an instruction correctly 	<ul style="list-style-type: none"> ● Provide games and exercises for children ● Regularly highlight words from class readers/text ● Link words to word origin/history to reinforce dictionary work and cultural influences ● Teach grammar rules for direct speech by children to create a conversation based on story material ● Teach reported speech by challenging children to create a journal or newspaper article based on story material ● Work alongside children with their drafts/planning, thinking out loud and modelling how to improve work ● Demonstrate different methods of story planning, e.g. bullet points, keywords, story mountains, mind maps, etc ● Provide varied creative writing tasks , e.g. write from the viewpoint of a minor character ● Develop comprehension strategies to build understanding of meaning including context, language features and text structure ● Use opportunities from Main Lessons for differentiated dictation exercises 	<ul style="list-style-type: none"> ● Provide a dictionary and thesaurus for each child ● Give text where children can add quotation/speech marks ● Give text where children can add their own adjectives/adverbs ● Provide a word origin dictionary ● Provide examples of different writing styles ● Give opportunities for writing in groups ● Give opportunities for free writing, diary entries, reminders, notes to self ● Use opportunities from Main Lessons for differentiated dictation exercises

Reading - Class 5

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Read chapter books confidently and independently ● Read aloud with expression and awareness of punctuation including direct speech ● Use a dictionary and thesaurus to find the meaning of unfamiliar words ● Read confidently from their main lesson book ● Read books with a range of styles and content ● Give a verbal summary of a book's contents ● Read different types of text for enjoyment, research, instructions ● Understand that authors use language, plot and character to engage readers 	<ul style="list-style-type: none"> ● Read both class readers and individual books ● Read/share drafts and other text from their main lesson to inspire and help one another ● Write/perform a summary of books ● Use information that they found from individual research to support their reading 	<ul style="list-style-type: none"> ● Provide space, time and a library of books for reading ● Talk about different types of reading material, books, comics, magazines, graphic novels, guide books, bringing examples of each to share ● Arrange a visit to a local library if possible

Speaking and Listening - Class 5

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Take an individual role in a class drama ● Recreate and perform literary texts imaginatively ● Is able to perform on stage before the school community ● Plan, rehearse and deliver presentations on a range of information ● Give a more in- depth presentation in front of the class using notes ● Give constructive feedback based on listening to their peers ● Articulate in-depth questions and enter into lively discussions on a wide range of topics ● Speak audibly and fluently, using Standard English 	<ul style="list-style-type: none"> ● Whole class in chorus, then allot different lines to small groups and individuals ● Support pupils’ own script writing by providing a structure ● Task pupils with writing to external bodies to gain information for their project work ● Provide clear expectations and guidelines for presentation of projects ● Encourage development of self-evaluation among pupils by providing regular formative feedback 	<ul style="list-style-type: none"> ● Provide time to rehearse and experiment ● To timetable a play ● Provide opportunities to take ownership of the play through costume, set design and make posters ● Encourage pupil involvement in choreographing dramas ● Provide books (library) to have information for their project. ● During Ancient Greek ML, set up an agora in classroom for children to speak spontaneously on a chosen topic

Writing - Class 6

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Use present perfect tense in simple and continuous forms (e.g. simple form ‘I have walked’ and continuous form ‘I have been walking’) ● Use direct and reported speech correctly ● Understand the correct use of comma, semi-colon and colon ● Understand the main parts of a sentence: subject, predicate, direct and indirect objects. ● Understand different meanings of modal verbs: can, may, should, ought, would ● Write a formal letter (business / complaint/ enquiry) ● Write in the style of a personal diary or blog (for example an account of a school trip) ● Make notes summarising a spoken presentation, following a recall session ● Write an accurate account of a practical task(e.g. science demonstration) ● Write down a cookery recipe and method in clear steps ● Write in the style of another person (e.g. historical character) ● Develop understanding of explicit and inferred meaning in text through comprehension exercises 	<ul style="list-style-type: none"> ● Model the use of tenses through shared writing opportunities ● Draw attention to a writer’s choice of tense when reading a shared text ● Choose narrative material from the main lesson content to illustrate grammatical points ● Demonstrate direct and reported speech through dialogue and drama ● Help children to identify the correct grammar and punctuation for direct and reported speech through editing exercises ● Revise previous work on punctuation before teaching about the comma, colon and semi-colon ● Provide practice work for punctuation –e.g. fill in the gaps, edit a piece of writing ● Teach the different meanings of modal verbs through drama activities, text scanning, and creative writing opportunities ● Model the correct way to write a formal letter within a real context (e.g. a request for information to support an independent project or a letter of thanks following a class trip) ● Draw attention to the style of a personal diary through shared reading of relevant literature ● Allow children the chance to write a diary during or following a class trip ● Model and teach the structure of a story in the context of the student’s own experience ● Model how to take notes during a presentation, drawing attention to and explaining techniques such as mind mapping and flow diagrams 	<ul style="list-style-type: none"> ● Display children’s work (e.g. poems or creative writing) on the classroom wall ● Provide appropriate books and texts to demonstrate the grammatical points being taught ● Allow time in the main lesson for practising grammatical skills ● Use the main lesson narrative material to exemplify grammatical skills wherever possible ● Plan drama activities to enliven the experience and understanding of grammar ● Use examples from literary texts (including poetry) to demonstrate how to use the comma, colon, and semi-colon ● Provide opportunity for the students to write a formal letter in a real context ● Create opportunities during teacher presentations or peer presentations of projects for the students to take notes which they will then use for later work ● Create a class book of stories (for example following a holiday or a shared experience) ● Provide opportunity for in-depth research and presentation of a range of topics (independent projects)

Reading - Class 6

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Understand and describe how a writer appeals to different types of reader or audience ● Use a thesaurus ● Use books as reference resource for independent study ● Extract the information that is needed - e.g. skim reading to identify what is required ● Read books in a range of styles and can give a verbal summary of the main content ● Use direct and inferred understanding of the text when reading ● Use a range of sources when reading; recognise the difference between untrustworthy and trustworthy sources 	<ul style="list-style-type: none"> ● Have an ongoing text that is read to the children, with opportunities to talk about the choices that the author has made ● Teach the children how to reflect on a character or plot in a book; to be able to explain key literary devices ● Set projects such as writing book reviews and presenting these to the class ● Encourage and model how to use a thesaurus ● Teach the children how to use a reference book for independent study (how to use the contents page and the index) ● Teach students how to extract information (e.g. skimming) ● Inform children about plagiarism ● Direct children to useful and appropriate websites and ensure that they know how to be safe online; discuss the reliability of sources ● Have a class display of books being read, with recommendations from the children ● Check that the children are experiencing reading different genres ● Lead discussions about the books that the children are reading 	<ul style="list-style-type: none"> ● Provide a class library with a range of appropriately levelled books, of different genres ● Ensure that the classroom has a selection of dictionaries and thesauruses ● During each main lesson, display a selection of relevant reference books for the children's use. ● Invite an author in to talk about their books ● Have a sponsored read and fundraise for a charity ● Provide opportunities for both quiet reading and reading aloud ● Encourage children to run a book club ● A range of biographies of inspiring individuals ● Make connections with outside literary events or festivals - reaching out beyond the classroom ● Engineer a situation where more than one contradicting source is presented for discussion ● Read to and listen to readers in younger classes ● Participate in World Book Day

Speaking and Listening - Class 6

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Debate a chosen theme as part of a group ● Listen to the contribution of other speakers as part of a debate ● Give a short talk on a prepared topic using notes only as a prompt ● Recite a poem aloud on their own ● Perform an individual role in a class play ● Contribute with confidence to class discussion during recall ● Listen to a teacher or peer presentation and formulate questions that demonstrate independent thinking ● Give constructive feedback after listening to peers or observing peers 	<ul style="list-style-type: none"> ● Model the different roles taken in a debate ● Continue learning poems by heart as a class ● Teach the process and skills of debating ● Create opportunities for children to complete independent projects with verbal presentations to the class ● Teach the children how to take notes from a variety of sources: a reference book or website; a teacher presentation; their own written work ● Explain and use skills such as how to summarise, how to abbreviate, and how to create mind maps or flow diagrams ● Use ballads to teach narrative shortcuts, use of imagery, symbolism, rhythm and rhyme ● Encourage creative writing using ballad form ● Demonstrate how to give feedback that is constructive 	<ul style="list-style-type: none"> ● Provide opportunities for lessons in debating ● Encourage active and respectful listening in the classroom at all times ● Create drama games and activities to strengthen confidence ● A chance to speak in front of different audiences (e.g. other classes, assembly, parents) ● Daily practice in recitation and constructive listening

Writing - Class 7

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Understand noun, adverbial and prepositional phrases ● Understand subordinate and relative clauses ● Use an etymological dictionary ● Use verb moods incl. indicative, imperative, interrogative, subjunctive and conditional ● Compose a poem with a specified structure, using rhythm, rhyme and metre ● Write a descriptive story from imagination ● Write a fictional story which is believable ● Create and write about a character in depth ● Begin using essay structure in writing a response to a specified topic ● Recognise essay structure as a tool to organise thoughts ● Take down notes from teacher’s and classmates’ presentations ● Make summaries of peer presentations ● Write up clear, organised, step- by-step science experiments ● Understand and use various styles of writing and their applications 	<ul style="list-style-type: none"> ● Explain about types of clauses, main, subordinate (independent and dependent) and relative clauses ● Explain noun, adverbial and prepositional clauses ● Revise knowledge about verbs, both common and auxiliary verbs through discussions, worksheets and Q&A exercises ● Revise conjugation of verbs through classroom discussions, worksheets and Q&A exercises. ● Use a variety of practical activities to emphasise rhythm and metre in poetry ● Demonstrate rhythm and metre with examples from poems in English and World literature ● Introduce the structure of essay writing, including introduction, development and conclusion using separate paragraphs ● Consolidate the understanding and use of paragraphs to contain and develop single ideas ● Teach fictional writing development skills, e.g. . opening/concluding sentences, character development, scene-setting, drafting and editing ● Use worksheets for grammar revision ● Encourage peer marking and constructive evaluation ● Compare and evaluate use of language in text messages, emails and printed text 	<ul style="list-style-type: none"> ● Offer opportunities for students to create own rhythms, playing with words and moods to practise rhythms and meters. ● Give sheets / descriptors and examples ● Provide opportunities for children to write poems, using free style or different metered/rhythmic structures and with different subjects ● Use Main Lesson topics as a trigger for writing imaginative stories, based on historical periods, different cultures, life in different continents, etc. ● Set essays on a variety of topics related to main lesson material ● Provide consistent, formative feedback to students on a whole class and individual basis to develop their essay writing skills ● Provide opportunities for games and paired/team work around character and scene development ● Provide opportunities for collaborative work on creating scripts

Reading - Class 7

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> • Understand the writer’s use of poetic structures: rhythm, rhyme and metre • Become familiar with use and meaning of figurative devices; alliteration, onomatopoeia, assonance • Understand and describe how a writer focuses on character and mood • Explain why a particular book is liked or chosen in a book review, oral and written • Understand and use some literary terminology and the vocabulary of poetic techniques 	<ul style="list-style-type: none"> • Study texts to identify meaning, and understand the writer’s use of character and mood • Give examples of particular literary structures from well-chosen texts • Explain figurative and literary devices • Provide opportunities for students to experiment with different styles of writing • Encourage responses in a variety of media 	<ul style="list-style-type: none"> • Provide texts to work with identifying writers’ style, depiction of character and mood. • Give examples of figurative and literary devices and ask students to provide their own examples from lyrics, books, poems and imagination • Make available a wide variety of different reading material in the classroom

Speaking and Listening - Class 7

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Use own research and writing as basis of a class debate on a chosen subject ● Understand and use persuasion and a clear argument in class discussion ● Explain and begin to analyse some motives and causes of historical events ● Participate in small group collaborative work and report findings to class clearly and succinctly ● Can work in pairs constructively within a given time scale and present outcome ● Participate sensitively in resolving social friction ● Perform independently in class plays ● Can deliver a presentation to peers and teachers using eye contact with audience and answering questions in some depth ● Prepare short speeches on given topics 	<ul style="list-style-type: none"> ● Provide opportunities for students to read essays to the class and receive peer and teacher feedback ● Present essays which can be the subject of debates ● Encourage solo and choral recitation and singing ● Present shorter research tasks ● Guiding more formal class discussions ● Debating agreed topical subjects ● Encourage class presentations in assemblies, creating a collaborative script ● Recall daily - questions and discussions ● Observational feedback and questions to classmates ● Peer/paired and group work 	<ul style="list-style-type: none"> ● Provide opportunities for developing debating / speaking skills through presentations of projects and at assemblies ● Provide visual material in classroom to stimulate discussion of topical subjects ● Provide information on issues relevant to teenagers ● Provide opportunities to give and receive feedback on presentations ● Provide opportunities for debating and speaking games, such as class team debates ● Planning assemblies and festivals ● Give responsibility to class members for planning and carrying out fund-raising events

Writing - Class 8

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Accurately observe and record scientific phenomena ● Understand and use their knowledge of literary and rhetorical devices to enhance the impact of their writing ● Use the essay structure in a variety of different writing tasks ● Write character studies revealing temperament and disposition as well as physical traits ● To support statements in written work with evidence ● Write in a variety of styles and from different perspectives ● Summarise, take notes and begin to analyse character, motivation and authorial voice in written responses ● Plan, record and self-evaluate achievement in preparing an extended, self-chosen project 	<ul style="list-style-type: none"> ● Encourage stylistic exercises contrasting formal speech and current jargon ● Explore current jargon and give examples of how language has changed and is changing using a variety of media ● Provide regular opportunities to practise comprehension, using newspapers, travel guides, music magazines, reviews and so on ● Teach a variety of ways of planning and organising written responses; notes, brainstorming, key words, paragraph starters, mind maps, spider diagrams ● Expect pupils to perform without a written prompt ● Continue regular practice of written comprehension, vocabulary specific to different subjects and spelling ● Use ballads to teach narrative shortcuts, use of imagery, symbolism, rhythm and rhyme ● Encourage creative writing using ballad form 	<ul style="list-style-type: none"> ● Organise poster-making for chosen causes and charities, combining word and image ● Display information about topical national issues ● Create a regular time for individual support and formative feedback ● Encourage individual interests by directing and sourcing information for and with pupils ● Help pupils to understand how reading can help to understand emotions, cultures, ways of life different from their own ● Choose books to display in the classroom which will stimulate and broaden intellectual, spiritual and practical development

Reading - Class 8

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Become familiar with use and meaning of figurative devices: proverb, idiom and aphorism, paradox, analogy and antithesis ● Distinguish between formal language, idiom, slang, jargon ● Recognise and discuss poetic style e.g. characterise lyric, epic, dramatic poetry ● Read and understand some key elements of a classic literary fiction or drama: theme, plot, protagonist, recurring imagery ● Answer questions about their reading, using quotations and explanations to evidence points made ● Choose and read a wide range of books independently for challenge, interest and enjoyment ● Make critical comparisons between chosen texts ● Understand bias, inference, emotive and objective writing in the media 	<ul style="list-style-type: none"> ● Encourage discussion about the literature being read and encourage a diverse range of genres ● Use short stories, biographies of notable people and icons to stimulate understanding of personal development ● Choose specific themes for pupils to respond to, bringing examples from their reading to discuss ● Encourage discussion of different media interpretations of texts, evaluating and contrasting responses 	<ul style="list-style-type: none"> ● Provide and direct pupils to a wide range of reading matter, encouraging them to access literature from the past and present ● Help pupils to diversify across the range of reading materials available ● Provide newspapers to stimulate critical awareness of writing style and intention

Speaking and Listening - Class 8

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Respond to questions and challenges for clarification after presenting an essay from own research as part of a debate ● Inhabit a different role through acting in a full-length play over a period of time ● Work in collaboration with all classmates in improvised drama ● Project the voice confidently and expressively in a full-length drama ● Present an extended project to a wide audience using research material and explaining the process towards creating the physical object. ● Answer searching questions about the chosen project from the audience ● Articulate complex ideas and thoughts in an organised and clear manner ● Improvise, rehearse and perform play scripts and poetry with confidence ● Recite and meaningfully enliven classical and humorous pieces e.g. extracts from Shakespeare 	<ul style="list-style-type: none"> ● Give pupils responsibility for planning, collating and performing literary extracts, poems and music around specific themes ● Encourage informal and formal debates on topics of concern ● Explore the use of language in different contexts ● Provide opportunities for individual points of view to be expressed ● Help pupils to listen with respect to different and opposing points of view ● Talk about the difference between spoken and written language, the use of formal and informal registers ● Explore and give examples of Standard English, dialects and accents 	<ul style="list-style-type: none"> ● Plan fund-raising activities with pupils giving promotional talks to each class ● Provide regular opportunities for pupils to elaborate and explain clearly their understanding and ideas ● Encourage pupil to develop constructive and positive self-evaluation of their speaking and presentation skills ● Draw attention to the need for developing discipline and control in the use of language ● Talk about respectful listening, particularly in discussion and debate where opposing views are aired

Number - Class 1

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Read numbers up to 20 ● Write down numbers up to 20 ● Continue simple number sequences ● Count from 1 to 120 ● Know number bonds up to 10 ● Identify examples of numbers in the world around them, e.g. one individual, two eyes, five fingers etc. ● Organise counting aids (beads, buttons, pebbles, shells) into groups ● Continue simple number patterns e.g. 2, 4, 6... ● Recognise Roman numerals 1-X and Arabic numerals 1-120 ● Understand difference between odd and even numbers ● Have working knowledge of four processes and their symbols + -x ÷ ● Add groups of up to ten in a horizontal line ● Subtract groups of up to ten in a horizontal line ● Understand that dividing is sharing ● Divide using concrete objects ● Divide groups of objects into 2,5,10 ● Understand the different ways of naming the processes; subtract, minus, take away; add, plus, and; divide, share, multiply, times ● Understand the meaning and use of the = sign ● Begin to recognise that multiplication is a faster method of 	<ul style="list-style-type: none"> ● Model that quantity is immutable ● Model counting, both forwards and backward, to 120 ● Provide daily number practise in counting games, skipping rhymes, clapping ● Use movement activities to reinforce number groups - pairs, threes, fours, etc ● Choose stories and fairy tales that contain number quality and symbolism ● Rehearse the correct formation of numbers in sand trays, beeswax, foot movements ● Provide images that illustrate both the quality and quantity of number ● Uses rhythmic games and exercises that strengthen recall of number through repetition ● Use daily tasks and classroom routines that require counting and 	<ul style="list-style-type: none"> ● Use a variety of objects that illustrate the immutability of number (1 to 1 correspondence) ● Display numbers (Roman and Arabic) in a prominent frieze around classroom ● Display pictures and provide access to materials that encourage counting ● Provide physical counting aids, such as shells, pine cones, gems ● Organise class materials and routines in groups of known quantities ● Regularly use rhythmic activities that support counting and grouping by number ● Display changing representations of number relationships (board drawings that develop over time) ● Resource materials and activities that meet the individual needs of each child ● Provide opportunities to engage with festivals that celebrate the turning of the year (24 hours, 7 days, 12 months, etc) ● Provide opportunities for the

<p>adding; dividing is a faster way to subtract</p> <ul style="list-style-type: none">• Do one-step oral word problems using counting aids• Count in 3s from zero• Appreciate archetypal number qualities 1 - 12• Sequence simple time-scales: before, after, yesterday, today, tomorrow• Become familiar with number of days in week, weeks in months, months in years	<p>ordering; distributing crayons, laying the table</p> <ul style="list-style-type: none">• Note different abilities and challenges and liaise with SEND for strategies and support	<p>children to count both alone and in groups</p> <ul style="list-style-type: none">• Use daily tasks and classroom routines that require counting and ordering; distributing crayons, laying the table,• Provide daily tasks and routines that require the children to choose and use the appropriate operation• Display visual examples of odd and even numbers
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Space and Measure - Class 1

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Move the 6 dimensions of space ● Draw straight lines, curves and simple linear shapes ● Give examples of straight lines, curves and basic geometric shapes in the natural environment ● Understand the different directions of straight lines and hears the names horizontal, vertical, diagonal ● Become familiar with basic shape names ● Recognise circles, squares, triangles, rectangles, star ● To draw circle, square, triangle freehand ● Draw a five-pointed star/pentagram freehand ● Draw freehand symmetrical reflections on both horizontal and vertical axes 	<ul style="list-style-type: none"> ● Model the use of straight line, curves and linear forms through guided form drawing ● Encourage children to provide their own examples of shapes in nature ● Draw attention to specific shapes and forms in nature ● Plan rhythmic activities that involve spirals, circles, squares, triangles ● Plan activities that encourage children to see and understand orientation in space ● Provide activities that all children to use their knowledge of length and height ● Practice activities that require forming specific forms and patterns, as whole class and individually ● Strengthen the child’s chronological awareness by using phrases of time in storytelling ● Encourage the use of phrases indicating time in children’s recall, e.g. long ago, once upon a time, recently, yesterday, today, tomorrow 	<ul style="list-style-type: none"> ● Provide high quality materials for form drawing ● Model space and measure exercises for children to imitate ● Use the classroom in ways that allow children to experience straight lines, curves and linear forms ● Display the terminology of space and measure where appropriate ● Provide time and space for children to recall the events of a story in both sequential and chronological order

Number - Class 2

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Read and write numbers up to 20 ● Count in tens ● Know number bonds up to 20 ● Know the patterns in 2,5 and 10 times tables ● Know the pattern of 11 times table ● Recite tables 1 - 12 in chorus ● Recall and use 2 and 5 times tables ● Count rhythmically in 3s up to 100 ● Read and write numerals up to 100 ● Understand place value to four places ● Understand various forms of naming the four processes ● Apply simple mental arithmetic in narrative form (number story) building on skills ● Use the 4 processes in horizontal layout in units, tens and hundreds ● Understand the terms half and quarter informally ● Count and count on silently ● Count to 20 forwards and back from 10 ● Solve simple multiplication sums using pictures ● Solve simple division sums using 	<ul style="list-style-type: none"> ● Use body percussion to rhythmically practise 2x,3x,4,5x,10x tables ● Choose songs with recurring numbers and lists to reinforce sequencing ● Use songs, beanbags, skipping to practise times tables and number patterns ● Introduce place value (Th, H, T,U) through a pictorial story ● Use a range of vocabulary to describe the 4 processes so children are familiar and flexible with maths terminology ● Allow time for short daily practice of simple sums and mental arithmetic ● Regularly ask word questions ● Choose familiar and well-liked subjects for simple mental and written calculations, e.g. food, animals, toys, money ● Play number memory games regularly ● Choose clapping and skipping rhymes which reinforce use of number patterns ● Regularly demonstrate the commutative nature of addition and multiplication ● Use rhythmic time measurement in recorder playing, percussion and movement ● Demonstrate vertical layout of addition and subtraction 	<ul style="list-style-type: none"> ● Provide counting aids to consolidate number patterns and visualise them concretely ● Provide a page of 100 squares that the children can shade in. Encourage children to use abaci and other manipulatives as necessary ● Extend counting, grouping, patterning, ordering activities to other subjects, such as Gardening, Handwork, Games to strengthen familiarity ● Devise short counting games using objects in the classroom ● Demonstrate the different patterns made by counting in 3s, 4s, 5s etc. using string within a 10- or 12- pointed shape ● Create visuals and/or a narrative to reinforce understanding of place value ● Encourage working in pairs to group and regroup collections of counters

<p>pictures/diagrams</p> <ul style="list-style-type: none">• Represent vertical layout for addition and subtraction in narrative and pictorial form• Solve simple sums through mental arithmetic is daily practice• Recognise coins to one pound• Become familiar with rhythms and lengths of time: seconds, minutes, hours, days, weeks		
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Space and Measure - Class 2

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Draw forms with vertical symmetry ● Draw forms with horizontal symmetry ● Draw spirals, lemniscates and ribbon forms in addition to Class 1 forms. ● Recognise coins to £1 ● Measure length, weight and capacity informally in craft, cooking and play ● Create and solve measurement explorations in knitting and sewing patterns ● Use rhythmic time measurement in recorder playing, percussion and movement ● Metamorphose straight to curved forms ● Metamorphose drawn ribbon forms 	<ul style="list-style-type: none"> ● Model form drawing on the board and use the body or other instruments to experience symmetry physically. ● Teach times tables through exploration in circle form, creating stars, squares, lines and polygons ● Practice form drawing and fluid formation of shapes and number regularly 	<ul style="list-style-type: none"> ● Provide form drawing opportunities as part of weekly practice. ● Encourage sense of harmony, symmetry, beauty and order of forms through personal organisation, presentation and care of surroundings

Number - Class 3

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Recognise and use of <i>half, quarter</i> in practical measurement eg in farming, building, time, pie charts ● Use decimals in money problems ● Understand practical experience of measurement in recipes and cookery ● Experience and understand barter ● Recognise, order and count the value of British coins and notes ● Recognise, model, read, write and sequence numbers to 10,000 ● Rhythmically count in 7s, 8s, 9s,11s, 12s ● Rhythmically count by 1s, 5s and 10s to 1000. ● Recite tables up to 10 ● Use the 12x tables and number bonds for 12 ● Recall multiplication and division facts of 2, 3, 5, 10 ● Represent the tables relationships between 2,4,8,12 & 3, 6, 9 & 5,10 ● Read, write and order numbers to 1000 ● Identify place value ● Explore and use efficient strategies for division 	<ul style="list-style-type: none"> ● Regularly revise earlier knowledge to consolidate understanding, using mental and written exercises ● Encourage mental arithmetic agility using daily practice ● Continue number games ● Recite number patterns ● Beanbag and skipping using larger number patterns ● Practice missing numbers in sums - morning maths using worksheets ● Use a classroom ‘shop’ to develop skills, giving change from simple transactions ● Practice rounding off numbers using amounts of money ● Set simple written money problems to familiarise use of a decimal point ● Create visual pattern of times tables with pupils using coloured string or ribbon (standing in a circle, holding string in 3s,4s,5s,6s,) 	<ul style="list-style-type: none"> ● Choose stories that can help in grasping the concepts ● Show the different relationships of the four processes ● Provide plenty of opportunities for measuring areas in classroom, school playground, hall ● Provide measuring tapes for pupils to record and compare individual heights, head circumference, limb length ● Use language that supports the teaching of the four processes i.e. sharing ● Organise differentiated groups for mental maths work

<ul style="list-style-type: none">• Understand short division sums up to 100, using carrying and remainders• Represent vertical layout for addition and subtraction in narrative, pictorial and written form and solve problems• Round off numbers• Complete simple number sequences• Solve a range of sums including those with measurement through daily mental arithmetic practice		
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Space and Measure - Class 3

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Understand, illustrate, describe the history of measurement through body-based and standardised systems ● Estimate, measure, compare and record length in m, cm and mm; weight in kg and g and capacity in litres and ml ● Calculate simple conversions ● Use a ruler, balance and scales ● Read analogue time ● Read and interpret calendars ● Develop pictorial representations of layouts in buildings and farming ● Read and record information such as height, weight, capacity in non-standard (eg body) measurements and imperial measurements ● Recognise coins and notes and can combine to make different amounts ● Tell time using hours, half hours, quarter hours on 12 hour clock ● Draw mirrored forms on diagonal axis ● Calculate simple practical sums, e.g. how many milk bottles in a crate holding six by six, bricks in a wall, floor boards, etc (ie leading to area) ● Draw increasingly accurate freehand 	<ul style="list-style-type: none"> ● Conscious measurement in main lesson block ● Create opportunities to make time measurement relevant and practical ● Provide jungle gym to further develop spatial awareness ● Stories in games ● Measuring using own body ● Use comparison sums for measuring whole class heights ● Encourage a fundraising project as opportunity to manage money ● learning to count change and calculate ● Plan class trips to develop teaching of measurement and shape, for example. counting eggs ● Plan a building project as an opportunity to measure and create space ● Choose to set practical sums as far as possible ● Provide materials for class to make individual rulers ● Plan baking with children, using different measuring systems and writing up recipes ● Use measurement lessons to encourage 	<ul style="list-style-type: none"> ● Form drawings ● Trust the children with real money ● Demonstrate and help children to weigh different items ● Make a class sundial ● Provide materials to make personal clocks ● Establish a daily routine of individual children telling the time, date, month, year and writing these on the board ● Provide a timetable template for children to fill in ● Make own calendars showing months and days ● Help to plan a class shop, learning to count change and calculate ● Plan Main Lesson blocks to maximise seasonal relevance to subject ● Plan trips to farms, ● Research and visit building site/ historical site to observe plan of foundations

<p>geometric forms such as circle, square, rectangle as preparation for building layout</p> <ul style="list-style-type: none">• Draw forms with four-fold symmetry• Draw and read simple building plans• Gather data, draw and record with simple charts and tables information for farming and building• Begin to understand and represent musical forms in notation	<p>estimation of weight, length, capacity</p> <ul style="list-style-type: none">• Ask children to draw a plan of their home with all rooms• Play games to reinforce points of the compass - North, South, East, West and sub-divisions	
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Number - Class 4

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Read and understands numbers up to six figures ● Have working knowledge of the multiplication tables 1-12 ● Know the multiplication tables up to 12 out of sequence ● Carry out long multiplication with numbers up to 122 as multiplier ● Solve multiplication to 1,000 ● Solve simple division to 1,000 ● Find factors of a given number ● Identify prime numbers less than 100 ● Carry out all four processes of number confidently ● Understand what a fraction is ● Understand and identify equivalent fractions ● Learn to check own answers using the reverse process ● Become increasingly familiar with the process of long division ● Find factors, lowest common multipliers, highest common factors ● Recognise, write and use $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, 	<ul style="list-style-type: none"> ● Revise skills acquired in Class 3 using short daily exercises ● Teach children how to set out sums and encourage clarity of presentation ● Continue practising regular, legible formation of numerals ● Use appropriately-sized squared exercise books and expect these to be used properly ● Explain the importance of writing down the working out of problems ● Teach the children how to use a long multiplication method ● Teach the place of number in the world - connect real problems with real numbers ● Teach factors, prime numbers, fractions ● Teach different strategies to complete the four processes. ● Use writing to develop the skill of solving narrative number problems ● Ensure skills are developed across the various mathematical disciplines by consistent marking and formative assessment ● Explore and model a method of long division ● Demonstrate and explain some simple 	<ul style="list-style-type: none"> ● Provide times for daily practise of number skills ● Develop skills in mental maths using a variety of rapid calculations and word problems ● Use posters and resources in the classroom to reinforce factions, fractions, multiplication tables, prime numbers. ● Provide opportunities for cross curricular skill development such as handwork, cross stitch, cooking and their relationship to number, fractions, division, etc ● Provide opportunities for flexible thinking ● Ask pupils to create own sums and problems ● Provide workbooks or maths schemes such as Pebble Maths, Jamie York, Numicon, Schofield and Sims ● Make use of graded online practice worksheets for reinforcing skills

<p>1/10 and their multiples</p> <ul style="list-style-type: none">• Represent problems involving fractions in drawing, using pie charts, tables, pictures• Simplify fractions• Convert improper and mixed fractions• Understand and identify equivalent fractions• Solve simple fraction problems with the same or related denominator using the 4 operations• Become familiar with gathering data, drawing and recording information using table, bar and pie graphs	<p>graphs and charts recording interesting statistics for children to model</p>	
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Space and Measure - Class 4

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Draw Celtic intertwining forms, repeating band forms and plaiting with increasing confidence ● Draw freehand rosettes ● Draw more accurate freehand geometric forms using circle divisions ● Draw mandalas 	<ul style="list-style-type: none"> ● Demonstrate using money. ● Talk about the cost of real world things when baking or working on projects. ● Recall measuring with the body, hands, feet etc ● Teach the skills needed to create complex form drawings; knot work and intertwining forms ● Reinforce spatial understanding by practising Celtic dance formations in physical space ● Develop spatial awareness by setting projects to draw maps of home to school journey, local area maps ● Talk about different viewpoints - bird's eye view, view from hilltop and valley ● Model map legends, accurate measurement, labelling and informal scale 	<ul style="list-style-type: none"> ● Provide opportunities to use money, in real and role play settings, such as shops. ● Provide opportunities to bake and use measuring skills, number skills and fractions. ● Provide opportunities for movement of the children as a whole group. ● Ensure there is space and time in the school week to develop form drawing skills ● Display beautiful examples of knot work and Celtic forms in classroom

Number - Class 5

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Revise more complex tables forwards and back and in division form ● Recognise, model, read, write and sequence numbers to 10,000 and recognise and read place value to thousandths ● Distinguish significant and non-significant zeros ● Apply more complex problem solving strategies, use shortcuts, find averages ● Solve a range of sums including those with measurement, fractions and decimals through mental arithmetic strategies in daily practice ● Practice the use of long multiplication to solve problems ● Practice division strategies for larger numbers including long division ● Use estimation and rounding to solve problems ● Use factors and multiples in solving problems ● Answer increasingly complex mental arithmetic questions using a mix of processes ,e.g. calculating train journeys arriving early & late 	<ul style="list-style-type: none"> ● Recall and consolidate Class Four skills in morning practice exercises ● Play number games; what’s your number, factors/times tables games ● Practice sheets ● Homework ● Explore and teach use of decimal point in Main lesson block ● Explore the decimal point in the real world, ● Explain how the decimal point relates to fractions ● Use games in Lessons to reinforce learning and for collaborative practice, e.g. 12-sided dice, quizzes, puzzles, card games, word problems ● Children devising own problems to distribute to the class demonstrating understanding 	<ul style="list-style-type: none"> ● Use practice worksheets ● Provide dice and cards and games ● Choose appropriate board games to develop skills in counting and transacting ● Provide diverse materials to stimulate curiosity: puzzles, Sudoku ● Introduce social concentration games with mental maths focus

Shape, Space and Measure - Class 5

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Draw freehand archetypal geometric shapes: different kinds of triangle, rectangle, quadrilaterals, polygons and circles ● Work with metric measurement including estimation ● Work with aspects of time including 24 hour clock ● Understand and work with perimeter and area ● Make simple free-hand nets of cubes and pyramids (Egypt) ● Use a 3,4,5 knotted rope to explore right-angled triangles 	<ul style="list-style-type: none"> ● Teach historical origins of geometry ● Cross-reference to Class 5 Olympics practice to explore balance, symmetry and poise in the human being ● Observe symmetry and geometrical shapes in the real world ● Teach technique of how to draw a line ● Guide the drawing process ● Give children the responsibility of planning timings on their camping trip ● Explore building methods in different Ancient cultures ● Discuss the building of the pyramids: how? Invite suggestions and theories ● Provide a rope for pupils to explore different kinds of triangle 	<ul style="list-style-type: none"> ● Use ideas from books on Geometry such as String, Straight line and Shadow ● Provide large-size Main Lesson books or large (A3) sheets of paper for specific geometry work ● Demonstrate difference that good tools make to accurate constructions: pencil sharpeners, sharp pencils ● Invite pupils to construct on blackboard using chalk ● Use a distance- measuring wheel ● Make use of a length of rope to demonstrate methods of measurement and perfect circles ● Digital time tied to timetable ● Create own compass ● Display artwork posters from Ancient Greece to show balance and symmetry in architecture and sculpture

Number - Class 6

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Read, write and understand place value to eight figures ● Know square numbers up to $15 \times 15 = 225$ and their square roots ● Estimate results by rounding off numbers ● Calculate confidently all four processes including decimals, using written methods ● Convert percentages to fractions and decimal fractions and vice versa ● Understand percentages and their application to business ● Work out simple percentages of a no. using combinations of 1% and 10% ● Develop a working knowledge of business maths: profit, loss, discount, commission, VAT, bank accounts ● Begin to use problems related to ratio and scale ● Begin to use letters in algebraic expressions e.g. area of a square ● Begin to use formula by means of calculating simple interest ● Solve logic puzzles using trial, improvement and existing knowledge 	<ul style="list-style-type: none"> ● Revise Teach rounding up using place value chart ● Explain, in context, why rounding numbers can help when working with large numbers ● Model using the strategy of rounding and estimating before calculating, in different contexts, including real life scenarios such as measuring or accounting. ● Review work on fractions and decimals from Class 5 using regular practice and homework exercises ● Introduce percentages in the context of the business or economics main lesson ● Model using letters in formula through the concrete example of Simple Interest ● Create problem solving scenarios involving proportional reasoning ● Provide real-life situations to work with, using transport, banking, comparison of services 	<ul style="list-style-type: none"> ● Visual resources such as place value flip chart ● Help pupils strengthen skills by differentiating practice work as appropriate for the students ● Provide visual resources for fraction and decimal work ● During skills lessons, ensure practice time is given to percentages and business maths skills, as well as ongoing number understanding ● If possible, set up a class business to create real life opportunities for working with money, decimals, percentages, profit and loss, discount, VAT, bookkeeping and bank accounts ● Encourage group- work simulating real life scenarios, problem solving

Space and Measure - Class 6

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Estimate angles in all shapes and knows the names of different angles (right angle, obtuse, acute, reflex) ● Make precise use of compasses and ruler to draw constructions of major geometric figures ● Use a compass accurately to bisect lines and angles ● Understand degrees as rotation or part of a rotation ● Know, understand and use vocabulary for all properties of common shapes ● Draw translations, reflections, rotations ● Read, understand and present information via pictograms: use pie charts, bar charts, linear graphs (foreign currency exchange) ● Make time and speed calculations ● Identify and name further properties of a circle including chord ● Measure, construct and name angles ● Provide geometrical proof of sums of angles of triangle; using cut-outs, protractors ● Construct increasingly complex patterns based on the four, six, eight, twelve, sixteen and twenty four divisions of the circle, and 	<ul style="list-style-type: none"> ● Teach geometrical drawing, in a progressive manner, following on from freehand geometry in Class 5 ● Model how to use a compass correctly ● Teach the children how to use a protractor correctly by modelling it first ● Explore data handling in context - for example using a classroom or school survey to provide the data for the charts and graphs ● Relate time and speed calculations to the children’s own experiences wherever possible ● Help and assist pupils to sustain accuracy and beauty in their geometrical constructions ● Revise methods of shading in colour to enhance constructions ● Encourage individual experimentation with the division of the circle, creating personal shading and patterns ● Use knowledge from the Botany Main Lesson to explore patterns in nature 	<ul style="list-style-type: none"> ● Ensure that each child has a good quality set of geometrical drawing tools ● Following on from a geometry main lesson block, provide regular opportunities for the children to practice accurate use of the compass, set square, ruler and protractor. ● Provide real life opportunities for meaningful data handling, such as market research for a class business; or profit and loss analysis ● Display a wall of geometry in art and architecture: Roman mosaics, tiling, Islamic geometric repeating patterns in tiling ● Ask pupils to find and display examples of geometry in natural and animal structures

<p>the stellar polygons of five, six, eight, ten and more sides.</p> <ul style="list-style-type: none">• Measure perimeter and calculate area of squares, rectangles and triangles• Develop formulae for area and perimeter by construction and measurement, and apply to a range of problems.• Solve problems involving the measurement and calculation of lengths and areas, including taking scale into account when working from maps.• Investigate the metamorphosis of form through the rotations, reflections and symmetry employed in the construction of geometric patterns• Observe, draw and artistically highlight the geometric forms of astronomical movement• Draw forms arising from geological structures• Investigate, construct and measure angles round a point, angles on a straight line, triangles and polygons.• Bisect a line and an angle• Draw tessellation (tiling) with accurate construction of parallel lines		
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Number - Class 7

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Understand and use negative and positive whole numbers ● Use the four processes with negative numbers ● Understand basic book-keeping ● know how to work with square roots ● Apply the Rule of Three (if, then, therefore) to practical problems ● Develop flexibility with different perspectives (eg. multiply 25 by 15 in multiple ways). ● Calculate percentages - including simple and compound interest ● Convert between fractions and decimals and associating the fraction as a division problem ● Understand and use basic statistics mean / median / mode averages ● Use calculators ● Understand recurring decimals and the value of π 	<ul style="list-style-type: none"> ● Revise basic skills regularly with short regular exercises using calculations, fractions and decimals ● Use regular problem solving exercises ● Use a mix of individual, group and whole class work ● Promote discussion and mistake making ● Explore incorrect answers for strengthening logic ● Demonstrate a range of methods for problem-solving ● Teach the history of algebra ● Use practical examples of problem-solving 	<ul style="list-style-type: none"> ● Record pupils' aptitudes and ensure graded work is set ● Relate the use of calculation and mathematical skills to real life ● Provide different examples of situations where they are used -positive and negative ● Provide different graded worksheets for practice ● Finding examples of practical applications and where they are used ● Set regular homework ● Encourage students to devise questions for each other

<p>Algebra</p> <ul style="list-style-type: none">• Understand the origins of algebra• Understand the practical application of algebra to solving problems• Solve simple equations, including using brackets, fractions and negative numbers• Apply BIDMAS and BODMAS to algebraic problems• Use algebra as a solution to specific problems• Use algebraic graphs	<p>using algebra</p>	
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Space and Measure - Class 7

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Draw translations, reflections, rotations ● Know properties of triangles, parallel lines and intersecting lines ● Apply Pythagoras' Theorem ● Understand the Golden Section ● Understand the Fibonacci sequence and find examples ● Know and can apply formulae for perimeter and area of regular geometric forms, including triangle, circle and parallelogram ● Finding the unknown lengths of shapes, using perimeter ● Calculate the area of irregular forms ● Make use of freehand perspective and use instruments to draw linear perspective ● Work out ratio and scale ● Makes time and speed calculations and know how speed, distance and time are related ● Convert between different non-linear units of measurement ● Calculate and recognise the volumes of simple shapes e.g. cubes and cuboids ● Make precise use of compasses, ruler, set squares to draw detailed constructions ● Divide circles into 6, 12, 16, 20 parts ● Find area of a circle and use this to calculate value of π by cutting circle into pieces ● Knows the correct terms for different parts of a circle 	<ul style="list-style-type: none"> ● Use historical context and biographies to enliven curiosity in pupils ● Cross-reference to other relevant disciplines - development of perspective in Renaissance, circular dome, the arch, crystal formation, etc ● Break up lessons into individual, group and whole class workgroups ● Promote discussion and analyse mistakes and inaccuracies ● Use kinaesthetic methods, e.g. cutting and arranging card and paper ● Introduce and give practice in perspective drawing using a variety of media ● Provide practical map-reading tasks in local environment and on class trips ● Plan individual project on the Fibonacci Sequence, including drawn construction of spirals and actual, photographed and drawn examples from natural world 	<ul style="list-style-type: none"> ● Provide different graded worksheets for practice ● Work closely with SEND to accurately target, support and challenge all needs and abilities ● Find examples of practical applications and where they are used ● Display pictures of art, sculpture, architecture to extend knowledge of perspective, anatomy, engineering ● Draw attention to connection between anatomy, architecture, natural structures and physics

<ul style="list-style-type: none">• Understand and describe angles using terms: acute, obtuse, reflex• Use protractor to measure angles• That the interior angles of a triangle add up to 180 degrees• Know that the four interior angles of a quadrilateral add to 360 degrees• Draw translations, reflections, rotations of shapes• Read simple 4 figure co-ordinates (e.g. for map reading)• Experience and calculate perimeter and area of squares, rectangles, triangles, parallelograms• Calculate volume of cubes and cuboids• Make use of freehand perspective when drawing cubes, boxes, pyramids accurately		
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Number - Class 8

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> ● Calculate compound interest, mortgage rates, income tax ● Use percentage calculations for interest, growth and decay, and compound calculations ● Draw and interpret time graphs ● Add, subtract, divide and multiply fractions including mixed numbers ● Calculate powers of 10 ● Use standard form in calculations ● Expand and factorise algebraic expressions using single brackets ● Expand and factorise expressions with 2 or more brackets ● Factorise quadratic expressions ● Collect data and draw scatter graphs ● Use frequency and grouped frequency tables to calculate averages ● Draw cumulative frequency diagram ● Use tree diagrams to calculate probability ● Multiply and divide decimals ● Round to decimal places and significant figures ● Identify prime numbers ● Determine HCF and LCM ● Calculate using negative numbers ● Calculate fractions and percentages of a quantity ● Simplify ratios, express ratios as a fraction ● Solves best buy problems ● Reverse percentage ● Use the rules for multiplying and dividing 	<ul style="list-style-type: none"> ● Revise fractions, squares and roots, equations, practical problems ● Demonstrate a range of methods for problem-solving ● Encourage pupils to demonstrate solution of problems to class ● Give volunteer pupils responsibility of explaining processes to their peers from front of class 	<ul style="list-style-type: none"> ● Work with graded textbooks and worksheets in practice lessons

<p>indices</p> <ul style="list-style-type: none">• Use negative and fractional powers		
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Space and Measure - Class 8

Each child learns to:	Possible Teaching Strategies	Examples of Resources
<ul style="list-style-type: none"> • Calculates areas of irregular forms • Draw translations, reflections and rotations • Draw linear graphs from equations • Solve simultaneous equations graphically • Generate linear sequences • Generate non-linear sequences • Calculate interior and exterior angles of polygons • Use geometric reasoning to solve spatial puzzles • Use Pythagoras' Theorem to solve problems in right angle triangles • Calculates surface area and volume of simple 3D shapes • Understand properties of and can construct 5 Platonic solids • Use trigonometric ratios with right angle 	<ul style="list-style-type: none"> • Expect careful and precise use of compasses, ruler, set squares • Ensure best use of good quality materials: sharpened lead pencils, cartridge paper, use of shading to denote angles and perspective • Encourage experimentation with 3D drawing and complex line form drawing 	<ul style="list-style-type: none"> • Extend 3D and spatial awareness, collaboration, creativity and imagination by construction challenges using newspaper, card or other materials, working in groups • Organise groups to design, plan and draw shelters and buildings for specific purposes • Show and display artists' experimentations with perspective e.g. M.C. Escher

Useful reference books for teaching Maths are:

A Teacher's Source Book for Mathematics in Classes 1 - 5: Jamie York, Nettie Fabrie, Wim Gottenbos, pub. By Floris Books

A Student's Workbook series: Jamie York pub. By Floris Books

Making Math Meaningful series: Jamie York Press, Inc.

Teaching Mathematics in Rudolf Steiner Schools for Classes 1 - 8: Ron Jarman, pub. By Hawthorne Press

Mathematics in Nature, Space and Time: John Blackwood, pub. By Waldorf Education Resources

Creative Form Drawing, Workbooks 1,2,3,: Rudolf Kutzli, pub. By Hawthorn Press

