

THE DOVE-SHELL FEDERATION

East Crompton St James' CE (VA) Primary School

St Thomas' Moorside CE (VA) Primary School



MATHEMATICS POLICY

Isiah 43:19

*"Look! I'm doing a new thing; now it sprouts up; don't you recognise it?
I'm making a way in the desert, paths in the wilderness."*

Date of Policy / Reviews	Author(s)	Approved by Gov. Body	Signed	Date for review
November 2017	Donna Warburton			
February 2024	Donna Warburton & Jack Skeldon	23 rd May 2024		May 2027

Mathematics Policy

Aims

Mathematics teaching in The Dove Shell Federation must ensure pupils become fluent in the fundamentals of mathematics through varied and frequent practice with increasingly complex problems over time. Our aim is that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

Pupils must be able to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations. Furthermore, pupils must be able to develop an argument, justification or proof using mathematical language.

Our approach must ensure pupils can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solution.

Planning and Delivery

Early Years (See 'Foundation Stage' policy)

The development of mathematical thought is an important experience for children in Early Years. Short / focused carpet sessions promote the crucial skills of problem solving and reasoning. Learning in mathematics within adult led and child-initiated activities should be primarily experiential and active, bearing in mind the requirements of the aspects of the Early Years Foundation Stage curriculum:

- ❖ Number (including calculation)
- ❖ Shape, space and measures

Nursery and Reception are taught using medium term planning derived from Numicon 'Firm Foundations.'

Once assessment data has been submitted in the Summer term, Reception should begin to access Inspire Maths Year One, Unit One during Numeracy carpet sessions. This however is dependent on the general ability of the cohort to access a new approach to learning. Pupils must not be given the textbooks at this stage and should instead be taught using images from the textbooks displayed on the Smartboard, elements of teaching sequences and through use of the activities and games prescribed. Accessing this unit at the end of Reception will serve as consolidation of previous teaching and ease the transition into Year One Mathematics teaching.

Key Stages One and Two

Approximately one third of the time that pupils are in school is spent on mathematical activities. These activities are concerned with fulfilling and extending the requirements of the National Curriculum for Mathematics.

Years One, Three, Four and Five are taught using the Inspire Maths approach. Years Two and Six are taught using the Maths-No Problem! scheme. Maths-No Problem! will be fully implemented in September 2024.

Maths-No Problem! supports a structured approach to learning through exploration and discussion, which enables children to have a wider understanding of mathematical concepts and how they apply to their everyday lives.

Books Used in Inspire Maths

- ❖ Teachers Guides (A and B) provide medium term plans and teaching sequences for units of work that contain copies of pupil text book pages

- ❖ Pupil Textbooks introduce concepts and skills and provide links to practice books
- ❖ Practice Books build fluency to mastery
- ❖ School Maths journals are where pupils record all formal learning that is not completed in practice books such as learning directed from text books, part whole models, bar models or written explanations/reasoning (see 'Presentation of Work').

These high-quality Pupil Textbooks introduce concepts in a cumulative and highly scaffolded way, enabling all children to become confident mathematicians. The series ensures teachers provide pupils with plenty of opportunities to explore Mathematics practically using a variety of resources. The concrete – pictorial (part whole and bar model) – abstract approach ensures depth of understanding of mathematical concepts with problem solving embedded throughout.

Inspire Maths advocates beginning units of work with concrete activity and using it throughout units to enhance learning. However, Teachers Guides generally do not provide suggestions for such. As a result, teachers must supplement teaching sequences outlined in their Teachers Guide's with additional concrete activity derived from in-service training (Inspire Maths, Inspire Maths enhancement and Numicon).

Teacher and Pupil Input

- ❖ Pupils should be grouped in mixed ability groupings. There is an expectation that the class is taught together, with no preconceived ideas about ability before pupils are taught a new concept and skill. All pupils are to work on the same concept and they are given intervention support as and when required. It is the role of the Teaching Assistant to paraphrase and re-model teaching provided by the teacher during teacher input to pupils as and when required.
- ❖ To accelerate learning teachers may choose to have one group of significantly lower attaining pupils to enable targeted support. However, this grouping should be reviewed half termly once assessments have taken place. Once pupils have made sufficient progress they should resume a position in a mixed ability group.
- ❖ Pupils must be taught together and the rapid graspers must be given tasks or questions to go deeper, rather than accelerating some pupils into new content. The challenging practice and problem solving tasks in the Practice Books provide ideal material for this.
- ❖ There is no set structure for a Maths lesson as each lesson's structure is based on how units of work have been divided up by teachers. For example, the first lesson in a unit should have a concrete nature yet later lessons may begin with little teacher input and go straight into practice book work.
- ❖ Although there is no set structure teacher modelling of all concrete, pictorial and abstract activities must take place and textbooks should be the basis for partner/group discussion.

Points to Consider

- ❖ Inspire Maths is not a scheme of work and must not be treated as such.
- ❖ Gradual implementation of Inspire Maths textbooks may be needed for pupils in Year One with a view to the full complement of textbooks being used by the end of the Autumn term. For example, teachers may feel the need to photocopy certain activities/pages to be stuck in Maths journals.
- ❖ Teachers need to be mindful of how to divide units up into lessons. Medium term plans at the start of units in Teachers Guides outline how many weeks should be spent on units but the units themselves are not divided into individual lessons. Teaching sequences within units need to be examined carefully and thought given as to how much can realistically be fitted into each lesson. Learning Objectives are clearly stated at the start of each unit. It

may therefore be the case that a sequence of lessons have the same Learning Objective. However, the Success Criteria for each lesson is likely to need changing more frequently depending on how the teaching sequence has been divided up. Success Criteria can also be found bulleted at the beginning of each unit under 'Pupils will be able to:'

- ❖ Learning objectives on lesson plans and success criteria slips need to be worded as 'To ____' and Success Criteria should be 'I can ____' statements.
- ❖ Inspire Maths follows the mathematical progression of the Singapore curriculum which is not the National Curriculum for England. It is an aspirational curriculum with higher expectations than the National Curriculum. Therefore, sometimes topics are introduced earlier in Inspire Maths than in the National Curriculum. Owing to these differences, teachers should follow the federation's long term plan (see Appendix A) for Inspire Maths which has been developed and re-ordered to ensure that National Curriculum year group content that matches the Singapore curriculum is taught first along with any additional Programmes of Study which Inspire Maths might not cater for. Additional Inspire Maths units are then taught towards the end of the year in preparation for learning further up school.
- ❖ When teaching units of work teachers must consider whether or not the full unit needs to be taught. If unit content is identified that is taught further up school then the unit must still be taught in its entirety. The spiral progression of the approach relies on building mathematical understanding year by year so leaving content out could impact on the success of this. Furthermore, teaching that is evenly distributed allows for extra time to be spent on end of key stage SAT's revision in Year Six.
- ❖ However, in Key Stage Two content which cannot be worked on without the use of a calculator can be left out as the English curriculum and end of Key Stage SAT's no longer allow the use of a calculator.
- ❖ Pupil Textbooks must be not be written in as these resources are kept year on year.
- ❖ Teachers can choose to distribute textbooks to each pupil during lessons or project pages using a tool such as a visualiser or like i-pad app.

Maths Meetings

Maths Meetings are to take place during the first ten minutes of every Maths lesson with the exception of Year Two and Year Six, who are following the Maths-No Problem! approach. They are an opportunity for teachers to ensure previously taught Programmes of Study can be recalled with fluency.

Maths Meetings concepts and activities should be planned against the weekly plan included in Appendix B.

Whilst the Maths Meeting is taking place it is the role of the Teaching Assistant to address misconceptions from the main part of the previous Maths lesson to any children that need it. This should be done away from the rest of the class. This will enable all children to be at the same starting point for the main part of the days Maths lesson.

Maths-No Problem!

Books Used in Maths-No Problem!

- ❖ Teachers Guides (A and B) provide long term plans and short term plans for units of work. Each lesson plan has a link to workbook pages. Lessons can be toggled to allow for assessment opportunities and differentiation to be considered.
- ❖ Workbooks build fluency to mastery
- ❖ School Maths journals are where pupils record all formal learning that is not completed in workbooks such as guided practice (see 'Presentation of Work').

Teacher and Pupil Input

- ❖ The Maths — No Problem! Teacher Hub is a series of online tools that aid teachers to plan and deliver effective mathematics lessons. The Hub is where teachers will find the Teacher Guides for those using the Maths — No Problem! series in their classroom. Academy video training courses can also be found in the Teacher Hub. They are for any teacher looking to improve their subject and pedagogical knowledge.
- ❖ Maths-No Problem! follows a regular structured approach to a lesson:
 - Explore: During the explore task, pupils discuss a problem, which they can find in their textbooks. The Class Teacher may wish to display the problem using their login to the online portal. At this stage, it is the Class Teacher's role to listen and assess while the pupils have time to explore the problem using a variety of concrete, pictorial or abstract representations.
 - Discuss: At this stage, it is the Class Teacher's role to facilitate a discussion around how to solve the problem introduced in the Explore stage. The Class Teacher must use their observations during the Explore to inform their questioning and allow pupils to identify effective methods and highlight any misconceptions.
 - Master: Once effective methods and misconceptions have been considered, the pupils then refer to the Master section in their textbooks. The Master allows the children to consolidate their understanding of a mathematical concept by exploring a variety of effective methods in concrete, pictorial and abstract representations. At this stage, the Class Teacher must use their judgement when deciding how much of the content to model so the pupils feel confident enough with the concept but have also had the opportunity to develop some of the mathematical understanding themselves.
 - Guided Practice: During the Guided Practice, pupils work through the questions in their textbook with a talk partner and demonstrate their methods in their Maths Journals. The Class Teacher can have a more active role to support and question the pupils as they work. As well as supporting, the Class Teacher must continue to assess the pupils and identify a target group for support when needed. There is no set amount of questions the pupils must work through until they are ready for their Independent Practice but the teacher must judge what the pupils need to achieve in their Guided Practice before the start of the lesson. When appropriate, the Class Teacher may wish to have the pupils self-assess their work at the end of this stage.
 - Independent Practice: This is the final stage of a Maths-No Problem! lesson. Pupils will work independently in their own practice books to consolidate their learning. Any pupils who were identified as a targeted support group will then be supported by the Class Teacher. Teaching assistants can then assess the pupils completing their Independent Practice.
- ❖ Lessons should follow this structure but will be dependent on the Class Teacher's judgement during their short term planning or on some occasions, their live assessment of a lesson. For example, pupils may benefit on focussing on the Explore task for a larger proportion of a lesson to develop the concrete which will underpin the rest of the learning.

Points to Consider

- ❖ Some lessons are key lessons and must be taught as part of the unit. The other lessons may be taught if time allows or as part of a combined lesson. However, these lessons are dependent on the judgement of the Class Teacher and whether they will benefit the pupils' learning.

- ❖ Maths-No Problem! encourages the use of concrete, pictorial and abstract representations – CPA approach – at the beginning and throughout units. All resources for a unit can be found on the teacher's online portal and should be accessible for the pupils throughout.
- ❖ Maths-No Problem! requires pupils to be grouped in mixed ability groups to encourage effective mathematical discussions. These groups must be chosen carefully by the Class Teacher so the gap in attainment between two pupils is not too wide that it does not have the desired impact. Target groups need to be decided in lesson using live assessment and not at the beginning.
- ❖ When referring to pupils' methods from the explore, the Class Teacher must not refer to individual pupils they have made observations on. All pupils and their methods must be referred to a 'My friend did...'. This will help to avoid mathematical anxiety and build pupils' confidence in lessons.

Pupils with Additional Educational Needs

- ❖ Teachers must identify on short term planning teaching and learning opportunities that allow for the inclusion of visual, auditory and kinaesthetic learners.
- ❖ Differentiation must allow for pupils in Early Years with AEN to learn at their own mathematical stage of development.
- ❖ Pupils in Years One to Six who are working below age related expectations/who cannot be assessed as 'Beginning' for their year group should not be taught using Inspire Maths. Instead, they should be assessed using the PIVATS (Performance Indicators for Valued Assessment and Targeted Learning) scale and a bespoke curriculum should be provided for them based on this.
- ❖ Education and Healthcare Plans should be a basis for planning a bespoke mathematics curriculum for pupils in receipt of such a plan.

Plenaries

- ❖ Mini plenaries should take place at pertinent points in lessons to prove/demonstrate that learning and progress are taking place.
- ❖ In Early Years each carpet session will end with a plenary in which: Success Criteria are emphasised through a short activity / targeted questioning (allowing staff to draw on learning); misconceptions dealt with; vocabulary revised and; links to future learning are made.
- ❖ As there is no set structure for a Maths lesson it might occur that one lesson has to flow into the next therefore end of lesson plenaries aren't necessary. These plenaries should take place when lessons end at the end of a teaching sequence.
- ❖ All Inspire Maths lessons should include a reasoning question which allows children to explain and apply the mathematical concept they have been focussing on.

Classroom Organisation

Classroom organisation for mathematics will be such that pupils are encouraged to show independence in choosing the resources/materials needed for a task and to promote self-motivation/organisation. Concrete resources must be available to pupils during tasks. Appendix C lists recommended equipment for each year group and contains photographs of what this might look like when made available in classrooms.

Classroom Display

The following classroom prompts should be on display in classrooms. The table below sets out permanent features of learning walls that should be referred to support teaching and learning. However, learning walls should be adapted once a new unit of work is introduced and display

example tasks, strategies and vocabulary for the new unit. Appendix D contains photographs of what learning walls might look like in classrooms.

<u>Permanent Prompts</u>			
<u>Year One</u>	<u>Year Two</u>	<u>Years Three and Four</u>	<u>Years Five and Six</u>
• Numerals and words to 20 • Number lines for multiples – 2's, 5's and 10's • Vocabulary relating to four number operations • Numicon clock	• Multiples of 10 in words and numbers • Multiplication tables – 2's, 3's, 5's and 10's • Examples of columnar addition and subtraction • Numicon clock	• Place value 0.001 – 100000 • Multiplication tables as appropriate	• Place value - 0.001 - 10000000 • Place value – multiplying and dividing by 10, 100 and 1000 • Equivalent fractions, decimals and percentages • Converted units of metric measure
<u>Learning Wall Adaptations</u>			
<u>Key Stage One</u>		<u>Key Stage Two</u>	
Example tasks, strategies (including part whole and bar model pictures) and vocabulary for new units of work. Inspire Maths online includes digital Let's Learn! Textbook sections which can be capitalised on for learning wall preparation. The Federative Mathematics Leader is responsible for ensuring all teachers are sent registration emails for access to Inspire Maths online. Teachers are responsible for setting their own log in details.			

Presentation of Work

Pupils in Early years use plain white paper if they wish to record any numeracy activities. Independent and child initiated pieces are then kept as evidence in the child's Learning Journey. This work is dated and has the learning challenge attached. All work is linked to the Early Learning Goals or Development Matter stage that the evidence is in line with. As most activities are practical activities, photographs and short observations are also placed in the child's Learning Journey.

In Key Stages One and Two all work must be recorded in A4 exercise books referred to as 'Maths Journals' containing squared paper. All work in 'Maths Journals' must be completed in pencil. See 'Teaching and Learning Including Marking' policy for all expectations regarding presentation.

Where there is simply the date, Learning Objective and Success Criteria recorded in Maths journals then:

- ❖ Marking should briefly detail the concrete work completed or partner/group discussion that has taken place. Teachers should choose to use photographs of evidence of concrete work – this is to be documented in floorbooks.
- ❖ Success Criteria comment strips should make reference to any practice or assessment book pages completed.
- ❖ Where Maths-No Problem! is being taught, the date and learning objective must be recorded at the beginning of each lesson – there are no Success Criteria to stick in. Key stage One should stick the learning objective in whilst Key Stage Two should write it.

Assessment and Recording

In addition to Assessment, Recording and Reporting Arrangements outlined in the ARRA policy, teachers in Key Stages One and Two must also identify on all other short term planning opportunities to assess children's application of the transferable skills taught during Mathematics lessons. Such assessments must then be recorded on Sonar.

The Role of the Federative Maths Leader

The Federative Maths Leader must:

- ❖ Lead by example in own classroom
- ❖ Prepare policy documents
- ❖ Contribute to and organise the in-service training of staff
- ❖ Collect and maintain resources, ensuring accessibility based on audits. This includes ensuring all teachers are sent registration emails for access to Inspire Maths online.
- ❖ Keep up to date with developments and initiatives concerning the teaching and learning of Mathematics
- ❖ Monitor teaching and learning in accordance with the monitoring policy
- ❖ Liaise with Oxford University Press colleagues (including consultants) regarding in-service training and advocate federation status

Appendix A – Inspire Maths Long Term Plan

Appendix B – Maths Meetings Weekly Overview

Appendix C – Recommended equipment

Appendix D – Photographs of learning walls

Appendix A



Year 1 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 1 – Unit 2 Number Bonds	Book 1 – Unit 2 Number Bonds	Book 1 – Unit 3 Addition within 10	Book 1 – Unit 3 Addition within 10	Book 1 – Unit 4 Subtraction within 10	Book 1 – Unit 4 Subtraction within 10	Book 1 – Unit 6 Ordinal Numbers	Book 1 – Unit 7 Numbers to 20	Book 1 – Unit 7 Numbers to 20	Book 1 – Unit 8 Addition and subtraction within 20	Book 1 – Unit 8 Addition and subtraction within 20	Book 1 – Unit 8 Addition and subtraction within 20	Book 1 – Unit 5 Shapes and Patterns	Book 1 – Unit 5 Shapes and Patterns
Maths Meeting: Number recognition	Maths Meeting: Number words	Maths Meeting: 1 more and 1 less	Maths Meeting: Book 1 Unit 2 re-cap	Maths Meeting: Number sequences	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations	Maths Meeting: Number sequences/ Counting in 2s and 5s	Maths Meeting: Book 1 Unit 3 re-cap	Maths Meeting: Book 1 Unit 4 re-cap	Maths Meeting: Book 1 Unit 7 re-cap	Maths Meeting: 2D shapes	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations

Year 2 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 1 – Unit 17 Numbers to 100.	Book 1 – Unit 17 Numbers to 100.	Book 1 – Unit 17 Numbers to 100.	Book 1 – Unit 17 Numbers to 100.	Book 1 - Unit 18 Money 1	Book 1 – Units 18 & 19 Money 1 & 2	Book 1 - Unit 19 Money 2	Book 2 – Unit 17 shape and pattern	Book 2 – Unit 17 shape and pattern	Discrete National Curriculum – quarter past and quarter to Unit 13 Time (3 weeks)	Discrete National Curriculum – quarter past and quarter to Unit 13 Time (3 weeks)	Discrete National Curriculum – quarter past and quarter to Unit 13 Time (3 weeks)	Book 1 - Unit 11 Pictographs (ECSJ) Unit 15 – Graphs	Book 1 – Unit 15 Graphs
Maths Meeting: Subtraction within 40 with regrouping	Maths Meeting: Place value within 40	Maths Meeting: Comparing numbers within 40	Maths Meeting: Counting in 2s, 5s and 10s	Maths Meeting: Time – o'clock and half past	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations	Maths Meeting: Book 1 Unit 17 re-cap	Maths Meeting: Book 1 Unit 17 re-cap	Maths Meeting: Book 1 Unit 17 re-cap	Maths Meeting: Book 1 Unit 18 re-cap	Maths Meeting: Book 1 Unit 19 re-cap	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations

Year 3 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 2 - Unit 1 Numbers to 1000	Book 2 -Unit 1 Numbers to 1000	Book 2 - Unit 2 Calculation within 1000	Book 2 - Unit 2 Calculation within 1000	Book 3 - Unit 1 Numbers to 10 000	Book 3 - Unit 1 Numbers to 10 000.	Book 3 – Unit 2 Addition of numbers within 10 000	Book 3 – Unit 2 Addition of numbers within 10 000	Book 3 – Unit 2 Addition of numbers within 10 000	Book 3 – Unit 3 Subtraction of numbers within 10 000	Book 3 – Unit 3 Subtraction of numbers within 10 000	Book 3 – Unit 16 Angles	Book 3 – Unit 13 Bar Graphs	Book 3 – Unit 13 Bar Graphs
Maths Meeting: Multiplication tables	Maths Meeting: Multiplication tables	Maths Meeting: Book 2 Unit 1 re- cap	Maths Meeting: Book 2 Unit 1 re- cap	Maths Meeting: Addition and subtraction of numbers within 1000	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Book 3 Unit 2 re- cap	Maths Meeting: Book 3 Unit 2 re- cap	Maths Meeting: Book 3 Unit 3 re-cap	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations

Year 4 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 4 – Unit 1 Whole Numbers	Book 4 – Unit 1 Whole Numbers	Book 4 – Unit 2 Whole Numbers	Book 4 – Unit 2 Whole Numbers	Book 4 – Unit 2 Whole Numbers	Book 3 – Unit 15 Time (re-cap for ECSJ)	Book 3 – Unit 15 Time (re-cap for ECSJ)	Book 4 – Unit 6 Angles	Book 4 – Unit 6 Angles	DISCRETE NATIONAL CURRICULUM TEACHING Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	DISCRETE NATIONAL CURRICULUM TEACHING Count backwards through zero to include negative numbers.	Book 4 – Unit 4 Tables and Line Graphs	Book 4 – Unit 4 Tables and Line Graphs	Book 4 – Unit 4 Tables and Line Graphs
Maths Meeting: Multiplication tables	Maths Meeting: Multiplication tables	Maths Meeting: Comparing numbers to 10 000	Maths Meeting: Addition within 10 000	Maths Meeting: Subtraction within 10 000	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Book 4 Unit 1 re-cap	Maths Meeting: Re-cap Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	Maths Meeting: Re-cap Count backwards through zero to include negative numbers.	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations

Year 5 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 5 - Unit 1 Whole Numbers	Book 5 - Unit 1 Whole Numbers	Book 5 – Unit 2 Whole Numbers	Book 5 – Unit 2 Whole Numbers	Book 5 – Unit 8 Measurement	Book 5 – Unit 8 Measurement	<u>DISCRETE NATIONAL CURRICULUM TEACHING</u> Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Book 5 – Unit 3 Fractions	Book 5 – Unit 3 Fractions	Book 5 – Unit 3 Fractions	<u>DISCRETE NATIONAL CURRICULUM TEACHING</u> Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	<u>DISCRETE NATIONAL CURRICULUM TEACHING</u> Add and subtract numbers mentally with increasingly large numbers.	Book 4 – Unit 13 Symmetry	Book 4 – Unit 13 Symmetry
Maths Meeting Rounding to the nearest 10	Maths Meeting: Rounding to the nearest 10 000	Maths Meeting: Rounding to the nearest 100 000	Maths Meeting: Factors	Maths Meeting: Factors	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations	Maths Meeting: Book 5 Unit 1 re-cap	Maths Meeting: Book 5 Unit 2 re-cap	Maths Meeting: Book 5 Unit 8 re-cap	Maths Meeting: Book 5 Unit 3 re-cap	Maths Meeting: Book 5 Unit 3 re-cap	Maths Meeting: Mental calculations	Maths Meeting: Mental calculations

Year 6 Autumn													
Autumn 1							Autumn 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 5 – Unit 1 Whole Numbers (re-cap)	Book 5 – Unit 2 Whole Numbers (re-cap)	Year 5 non- negotiables	Year 5 non- negotiables	Year 6 non- negotiables	DISCRETE NATIONAL CURRICULUM TEACHING Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Book 5 - Unit 13 Geometrical construction	Book 5 - Unit 13 Geometrical construction	DISCRETE NATIONAL CURRICULUM TEACHING Multiplication 4 digit by two-digit including decimals.	DISCRETE NATIONAL CURRICULUM TEACHING Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.	Book 6 – Unit 4 Fractions	Book 6 – Unit 4 Fractions	Book 6 Unit 2 – Angles in shapes and diagrams	Book 6 – Unit 3 Nets	Book 6- Unit 9 Pie Charts
Maths Meeting: Multiplication tables and division facts	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Prime numbers, prime factors and composite numbers	Maths Meeting: Square numbers and cube numbers	Maths Meeting: Equivalences between metric units	Maths Meeting: Fractions, decimals, percentages	Maths Meeting: Fractions, decimals, percentages	Maths Meeting: Mean	Maths Meeting: Re-cap Multiplication 4 digit by two-digit including decimals.	Maths Meeting: Re-cap Long division Whole number remainders	Maths Meeting: Re-cap Long division Fraction remainders	Maths Meeting: Book 6 Unit 4 re-cap	Maths Meeting: Book 6 Unit 2 re-cap	Maths Meeting: Book 6 Unit 2 re-cap

Year 1 Spring											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6

Book 1 – Unit 12 Numbers to 40 (focus on subtraction)	Book 1 – Unit 12 Numbers to 40 (focus on subtraction)	Book 1 – Unit 12 Numbers to 40(focus on subtraction)	Book 1 – Unit 12 Numbers to 40(focus on subtraction)	Book 1 – Unit 9 Length	Book 1 – Unit 9 Length	Book 1 – Unit 10 Mass	Book 1 – Unit 10 Mass -include capacity.	Book 1– Unit 14 Multiplication	Book 1 – Unit 14 Multiplication NC: Count in multiples including 2s, 5s and 10s.		
Maths Meeting: Counting forwards and backwards/ up and down	Maths Meeting: Mental calculation (see non negotiables)	Maths Meeting: Mental calculation (see non negotiables)	Maths Meeting: Vocabulary - subtraction	Maths Meeting: Vocabulary – Length and comparison e.g. /longer/ shorter	Maths Meeting: Vocabulary – Length and comparison e.g. /longer/ shorter	Maths Meeting: Vocabulary – Mass and comparison e.g. Heavier/ Lighter	Maths Meeting: Vocabulary – Mass and comparison e.g. Heavier/ Lighter	Maths Meeting: Mental calculation (see non negotiables)	Maths Meeting: Mental calculation (see non negotiables)		

Year 2 Spring											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
NC: Compare and order numbers from 0 to 100: use <, > and =. Recall and use addition and	Book 2 - Unit 3 Using Models: Addition and Subtraction Inc. NC: Recognise and use the inverse relationship	Book 2 – Units 5 and 6 Multiplying by 2, 5 and 10	Book 2 – Units 5 and 6 Multiplying by 2, 5 and 10	Book 2 – Units 5 and 6 Multiplying by 2, 5 and 10 NC: Show that multiplication of two numbers can be done in any order (commutative)	Book 2 – Unit 12 Fractions Inc. NC Write simple fractions for example, $\frac{1}{2}$ of 6=3 and recognise the	Book 2 – Unit 12 Fractions Inc. NC Write simple fractions for example, $\frac{1}{2}$ of 6=3 and recognise the	Book 2 – Unit 12 Fractions Inc. NC Write simple fractions for example, $\frac{1}{2}$ of 6=3 and recognise	Book 2 – Unit 11 Money	Book 2 – Unit 11 Money		

subtraction facts to 20 fluently and derive and use related facts up to 100.	between addition and subtraction and use this to check calculations.			and division of one number by another number cannot. Count in steps of 2,3 and 5 from 0 and in tens from any number – forwards and backwards.	equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.	the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. NC: Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or a quantity.				
Maths Meeting: Identifying 2D shapes – include irregular shapes	Maths Meeting: Properties of 2D shapes – include irregular shapes Vocabulary – inc. straight and curved	Maths Meeting: Identifying 3D shapes – include cuboids, prisms, pyramids and cones	Maths Meeting: Properties of 3D shapes – include cuboids, prisms, pyramids and cones	Maths Meeting: Counting in 2s, 5s and 10s – different ways of saying/showing (not just skip counting) E.g. There is one 2 in two, two 2's in four etc.	Maths Meeting: Counting in 2s, 5s and 10s – different ways of saying/showing (not just skip counting) E.g. There is one 2 in two, two 2's in four etc.	Maths Meeting: Read and write numbers to at least 100 in numbers and words	Maths Meeting: Recognise the place value of each digit in a two digit number.	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)		

Year 3 Autumn											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6

NC: Multiplying by 3 and 4	NC: Multiplying by 3 and 4	Book 3 – Unit 5 Multiplying by 6,7,8 and 9	Book 3 – Unit 5 Multiplying by 6,7,8 and 9	Book 3 – Unit 6 Multiplication	Book 3 – Unit 6 Multiplication	NC: Identify, represent and estimate numbers in different representations. Read and write numbers to 1000 in numerals and words.	Book 3 – Unit 7 Division	Book 3 – Unit 7 Division	Book 3 – Unit 11 Length, Mass and Volume	Book 3 – Unit 11 Length, Mass and Volume	Book 3 – Unit 11 Length, Mass and Volume
Maths Meeting: Comparing and ordering fractions	Maths Meeting: Adding like fractions	Maths Meeting: Subtracting like fractions	Maths Meeting: Time – reading and writing quarter past/to	Maths Meeting: Time – reading and writing the time in intervals of five minutes	Maths Meeting: Time – am/pm	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Multiplication tables	Maths Meeting: Word problems – multiplication and division Discuss strategy without solving	Maths Meeting: Word problems – multiplication and division

Year 4 Spring											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6

Book 4 - Unit 3 Whole numbers (3)	Book 4 - Unit 3 Whole numbers)	Book 4 - Unit 3 Whole numbers (3)	Book 4 – Unit 5 Fractions	Book 4 – Unit 5 Fractions	Book 4 – Unit 5 Fractions NC: Recognise and show, using diagrams, families of common equivalent fractions.	NC: Count backwards through zero to include negative numbers. Book 4 – Unit 9 Decimals (1)	Book 4 – Unit 9 Decimals (1)	Book 4 – Unit 9 Decimals (1)	Book 4 – Unit 10 Decimals (2)	Book 4 – Unit 10 Decimals (2) NC: Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.	Book 4 – Unit 10 Decimals (2) NC: Find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths.
Maths Meeting: Multiplication tables	Maths Meeting: Multiplication tables	Maths Meeting: Multiplication tables	Maths Meeting: Equivalent fractions	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Multiplication tables and division facts	Maths Meeting: Book 4 Unit 3 re-cap	Maths Meeting: Book 4 Unit 5 re-cap	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)

Year 5 Spring											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6

Book 5 – Unit 4 Fractions (2)	Book 5 – Unit 4 Fractions (2)	Book 5 – Unit 4 Fractions (2) NC: Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Compare and order fractions whose denominators are all multiples of the same number.	Book 5 – Unit 7 Decimals	Book 5 – Unit 7 Decimals	NC: Draw and translate simple shapes on the coordinate plane and reflect them in the axes. Describe positions on the full coordinate grid (all four quadrants).	Book 5 – Unit 9 Mean (average)	Book 5 – Unit 12 Properties of Triangles and 4 sided shapes Inc. NC Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Book 5 – Unit 12 Properties of Triangles and 4 sided shapes Inc. NC Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Book 5 – Unit 5 Area of a Triangle	Book 5 – Unit 5 Area of a Triangle	Book 5 – Unit 11 Angles
Maths Meeting Round any number to the nearest 10, 100 or 1 000.	Maths Meeting: Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000.	Maths Meeting: Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000.	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Angles – turns and right angles	Maths Meeting: Product of proper fractions	Maths Meeting: Product of an improper fraction and a proper or improper fraction	Maths Meeting: Product of a mixed number and a whole number	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Mental calculations (see non negotiables)	Maths Meeting: Dividing a fraction by a whole number

Year 6 Spring											
Spring 1						Spring 2					
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
NC: Use negative numbers in context and calculate intervals across zero. Book 6 – Unit 5 Ratio	Book 6 – Unit 5 Ratio NC: Solve problems involving similar shapes where the scale factor is known or can be found.	NC: Compare and order fractions including fractions >1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Book 6 – Unit 6 Percentages	Book 6 – Unit 6 Percentages	Book 6 – Unit 6 Percentages NC: Multiply 1-digit numbers with up to two decimal places by whole numbers.	Book 6 – Unit 8 Circles	NC: Use knowledge of the order of operations to carry out calculations involving four operations. Book 6 – Unit 1 Algebra	Book 6 – Unit 1 Algebra NC: Find pairs of numbers that satisfy an equation with two unknowns. Enumerate all possibilities of combination of two variables.	Book 6 – Unit 10 Area and Perimeter	Book 6 – Unit 10 Area and Perimeter	Book 6 – Unit 11 Volume of solids and liquids	Book 6 – Unit 11 Volume of solids and liquids
Maths Meeting: Count backwards through zero to include negative numbers.	Maths Meeting: Count in multiples of 6, 7, 9, 25 and 1000.	Maths Meeting: Find 1000 more or less than a given number.	Maths Meeting: Order and compare numbers beyond 1000.	Maths Meeting: Identify, represent and estimate numbers using different representations.	Maths Meeting: Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	Maths Meeting: Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).	Maths Meeting: Round any number to the nearest 10, 100 or 1 000.	Maths Meeting: Count forwards or backwards in steps of powers of 10 for any given number up to 1000 000.	Maths Meeting: Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.	Maths Meeting: Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	Maths Meeting: Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000.

Year 1 Summer												
Summer 1						Summer 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 1 – Unit 15 Division	Book 1 – Unit 15 Division	<u>Discrete National Curriculum</u> Recognise, find and name a half as one of two equal parts of an object, shape or quantity.	<u>Discrete National Curriculum</u> Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	Book 1 – Unit 16 Time	Book 1 – Unit 16 Time	<u>Discrete National Curriculum</u> Sequence events in chronological order using language.	<u>Discrete National Curriculum</u> Recognise and use language relating to dates, incl days of the week, weeks, months, years.	Book 1 – Unit 13 Mental Calculations	Book 1 – Unit 13 Mental Calculations	<u>Discrete National Curriculum</u> Describe position, direction and movement, incl half, quarter and three quarter turns.		
Maths Meetings: Focus on NFER gap analysis and Spring LTP post teaching.												

Year 2 Summer													
Summer 1						Summer 2							
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8

Book 2 – Unit 8 Length	Book 2 – Unit 9 Mass	Book 2 – Unit 14 Volume	Book 2 – Unit 14 Volume	KS1 SATS	KS1 SATS	Book 2 – Unit 7 Using Models: Multiplication and Division	Book 2 – Unit 10 Mental calculations	Book 2 – Unit 16 Lines and Surfaces	Book 2 – Unit 16 Lines and Surfaces	<u>Discrete National Curriculum</u> Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise).	<u>Discrete National Curriculum</u> Interpret and construct simple block diagrams and simple tables.	
Maths Meetings: <u>Discrete National Curriculum</u> Identify and describe the properties of 2D shapes, incl the number of sides and lines of symmetry in a vertical line. Identify and describe the properties of 3D shapes, incl the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes. Compare and sort 2D and 3D shapes and everyday objects.						Maths Meetings: Adding three 1-digit numbers. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems. Focus on TAF gap analysis and Spring LTP post teaching.						

Year 3 Summer												
Summer 1						Summer 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 3 – Unit 4 Solving Word Problems 1: Addition and Subtraction <u>Discrete National Curriculum</u> Estimate the answer to a calculation and use the inverse operations to check answers.	Book 3 – Unit 8 Solving Word Problems 2: Multiplication and Division	Book 3 – Unit 8 Solving Word Problems 2: Multiplication and Division <u>Discrete National Curriculum</u> Estimate the answer to a calculation and use the inverse operations to check answers.	Book 3 – Unit 10: Money	Book 3 – Unit 10: Money <u>Discrete National Curriculum</u> Add and subtract amounts of money to give change, using both £ and p in practical contexts.	Book 3 – Unit 14: Fractions	Book 3 – Unit 14: Fractions <u>Discrete National Curriculum</u> Recognise, find and write fractions or a discrete set of objects: Unit fractions and non-unit fractions with small denominators. Recognise and use fractions as numbers: Unit fractions and non-unit fractions with small denominators. Count up and down in tenths; Recognise that tenths arise from dividing an object into 10 equal parts and dividing 1-digit numbers or quantities by 10.		Book 3 – Unit 17: Perpendicular and Parallel Lines	Book 3 – Unit 17: Perpendicular and Parallel Lines <u>Discrete National Curriculum</u> Draw 2-D shapes and make 3-D shapes using modelling materials; Recognise 3-D shapes in different orientations and describe them.	Book 3 - Unit 18: Area and Perimeter (Perimeter only)	<u>Discrete National Curriculum</u> Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events [for example, to calculate the time taken by particular events or tasks].	
Maths Meetings: Count in multiples of 4,8,50 and 100. Focus on NFER gap analysis and Spring LTP post teaching.												

Year 4 Summer												
Summer 1						Summer 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 4 – Unit 7: Parallel and Perpendicular Lines	Book 4 – Unit 7: Parallel and Perpendicular Lines	Book 4 – Unit 8: Squares and Rectangles <u>Discrete National Curriculum</u> Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	Book 4 – Unit 11: Time	Book 4 – Unit 12: Area and Perimeter Front end with Area from Book 3: Unit 18 <u>Discrete National Curriculum</u> Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Book 4 – Unit 12: Area and Perimeter	<u>Discrete National Curriculum</u> Count in multiples of 6, 7, 9, 25 and 100. Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.	<u>Discrete National Curriculum</u> 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.	<u>Discrete National Curriculum</u> Convert between different units of measure [for example, kilometre to metre; hour to minute]. Estimate, compare and calculate different measures, including money in pounds and pence.	<u>Discrete National Curriculum</u> 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.	<u>Discrete National Curriculum</u> 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.	<u>Discrete National Curriculum</u> 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.	<u>Discrete National Curriculum</u> Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
Maths Meetings: Identify acute and obtuse angles and compare and order angles up to 2 right angles by size. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. Focus on NFER gap analysis and Spring LTP post teaching.												

Year 5 Summer												
Summer 1						Summer 2						
Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Book 5 – Unit 6: Ratio	Book 5 – Unit 6: Ratio	Book 5 – Unit 10: Percentage	Book 5 – Unit 10: Percentage	Book 5 – Unit 14: Volume of Cubes and Cuboids	Book 5 – Unit 14: Volume of Cubes and Cuboids	Discrete Curriculum National Curriculum Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0.	Discrete Curriculum National Curriculum Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³).	Discrete Curriculum National Curriculum Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally, drawing upon known facts. Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.	Discrete Curriculum National Curriculum Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre]. Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Discrete Curriculum National Curriculum Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes.	Discrete Curriculum National Curriculum Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Identify: -angles at a point and 1 whole turn (total 360°) -angles at a point on a straight line and half a turn (total 180°) -other multiples of 90°. Draw given angles, and measure them in degrees (°).	
Maths Meetings: Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, including timetables. Focus on NFER gap analysis and Spring LTP post teaching.												



THE DOVE SHELL FEDERATION MATHS MEETINGS WEEKLY OVERVIEW

<u>MONDAY</u>	Counting	Arithmetic - Addition	Measurement – general Y3, Y4, Y5 and Y6 to also choose from area and perimeter	Measurement – capacity and volume
<u>TUESDAY</u>	Counting	Arithmetic – Subtraction	Measurement - money	Measurement – temperature Y1, Y2 – length/height Y2 – extend to temperature once taught
<u>WEDNESDAY</u>	Counting	Arithmetic – Multiplication Y1, Y2 – addition Y2 – extend to multiplication once taught	Measurement - time	Geometry – properties of shape
<u>THURSDAY</u>	Counting	Arithmetic – Division Y1, Y2 – subtraction Y2 – extend to division once taught	Measurement – height/length	Geometry – position and direction
<u>FRIDAY</u>	Counting	Other number revision – choose from number, place value, fractions, ratio and proportion and algebra.	Measurement – mass/weight	Statistics Y1 – properties of shapes

Appendix C

Recommended equipment

Year 1

- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 15 × sets of Numicon Extra 1 shapes (20 shapes per set)
- ☐ 15 × sets of Numicon Extra 10 shapes (10 shapes per set)
- ☐ 5 × Pan balance (1 per table)
- ☐ 5 × Feely bags (1 per table)
- ☐ 5 × Number track or number line (to 40; 1 per pair)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 3 × bags of Counters (40 per pair)
- ☐ Interlocking cubes (40 per pair)
- ☐ Standard dice (1 per pair)
- ☐ Number balance (1 per table)

Year 2

- ☐ 3 × bags of Counters (40 per pair)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 5 × Feely bags (1 per table)
- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 10 × sets of Spinners (2 per table)
- ☐ 5 × Number track or number line (to 100; 1 per pair)
- ☐ Interlocking cubes (40 per pair)
- ☐ 15 × Dice (1 per pair)
- ☐ 15 × 10-sided dice (1 per pair)

Year 3

- ☐ 3 × bags of Counters (40 per pair)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 5 × Feely bags (1 per table)
- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 3 × sets of 0-9 Number cards (1 set per pupil)
- ☐ 10 × sets of Spinners (2 per table)
- ☐ 12 × sets of 0-100 Number cards (2 sets per table)
- ☐ 5 × Pan balance (1 per table)
- ☐ 5 × Number track or number line (to 100; 1 per pair)
- ☐ Interlocking cubes (50 per group)
- ☐ 15 × Dice (1 per pair)
- ☐ 15 × 10-sided dice (1 per pair)
- ☐ 15 × sets of Geoboards (2 sets per table, or 1 set per pair)

Year 4

- ☐ 3 × bags of Counters (40 per pair)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 5 × Feely bags (1 per table)
- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 3 × sets of 0-9 Number cards (1 set per pupil)
- ☐ 10 × sets of Spinners (2 per table)
- ☐ 12 × sets of 0-100 Number cards (2 sets per table)
- ☐ 5 × Pan balance (1 per table)
- ☐ 5 × Number track or number line (to 100; 1 per pair)
- ☐ Interlocking cubes (50 per group)
- ☐ 15 × Dice (1 per pair)
- ☐ 15 × 10-sided dice (1 per pair)
- ☐ 15 × sets of Geoboards (2 sets per table, or 1 set per pair)

Year 5

- ☐ 1 × bag of Counters (for games / activities)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 3 × sets of 0-9 Number cards (1 set per pupil)
- ☐ 10 × Decimal number line (1 per group)
- ☐ 10 × Fraction number line (1 per group)
- ☐ 5 × Number rod tracks (1 per table)
- ☐ Scientific calculators (1 each, or 1 between two)
- ☐ 15 × 10-sided dice (1 per pair)
- ☐ 15 × sets of Geoboards (2 sets per table, or 1 set per pair)
- ☐ 15 × Fraction discs (1 per pair word doc said Number discs - is this the same?)
- ☐ 15 × Fraction strips / bars (1 per pair) ☐ Protractor (1 class set, or 1 between two)
- ☐ Pair of compasses (1 class set, or 1 between two)
- ☐ Interlocking cubes

Year 6

- ☐ 1 × bag of Counters (for games / activities said 10 per group on word doc)
- ☐ 5 × sets of Number rods (1 set per table)
- ☐ 5 × boxes of Numicon Shapes (80 shapes per box; 1 box per table)
- ☐ 3 × sets of 0-9 Number cards (1 set per pupil said 4 sets per group on word doc)
- ☐ 10 × Decimal number line (1 per group)
- ☐ 10 × Fraction number line (1 per group)

- 5 × Number rod tracks (1 per table)
- Scientific calculators (1 each, or 1 between two)
- 15 × 10-sided dice (1 per pair)
- 15 × sets of Geoboards (2 sets per table, or 1 set per pair)
- 15 × Fraction discs (1 per pair)
- 15 × Fraction strips / bars (1 per pair)
- Protractor (1 class set, or 1 between two)
- Compass (1 class set, or 1 between two)
- Interlocking Cubes

Appendix D

