<u>Aims:</u>

In line with the National Curriculum (2014), the teaching of maths within the academy should aim for children to:

- Become fluent in the fundamentals of mathematics, including practice at increasingly complex problems, so that children can use and apply their knowledge practically.
- Reason mathematically by following a line of enquiry, establishing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into smaller steps and persevering.

In addition, at QPA we aim to ensure that all pupils develop:

- Conceptual understanding of number, measurement, geometry and statistics;
- A wide range of written and mental methods that they can use to answer questions and solve problems;
- A broad range of skills which can be applied both within the academy (across a range of curriculum areas) and within their everyday lives;
- A deep and lasting interest in mathematics.

Classroom Provision:

- All pupils are entitled to a broad mathematics curriculum in which their learning needs and preferred learning styles are identified and met.
- The delivery of the mathematics curriculum should provide the children with the opportunity to engage in practical activities, maths games and problem solving.
- Maths activities can be completed individually, in small groups, or as a whole class.
- Opportunities to use ICT should be provided.
- Mathematical talk is essential to conceptual understanding; classrooms should be rich in pupil-to-pupil discussion as well as between teacher and pupils.

Problem Solving and Reasoning:

There is a focus on including problem solving and reasoning opportunities in every lesson for all pupils to ensure that pupils are able to use and apply their knowledge throughout. This application of skills shows a deeper understanding of the concepts being taught.

<u>Calculation Policy:</u> - see QPA Calculation Policy

This clearly shows the progression of skills for each strand, across the year groups, and can be found on the server or in hard copy. Professional judgement should be used to ensure that children are working on and using appropriate methods for their current attainment. For consistency, only the methods set out in the Calculation Policy should be taught. Any questions regarding the teaching of the methods within the Calculation Policy need to be addressed to the Mathematics Leader of Learning.

Mathematics in the Foundation Stage:

- In the Foundation Stage, maths activities should be provided for the children to access independently, in order for them to practise their skills, or through an adult led activity, in order for the children's understanding to be strengthened.
- Discrete, ability set 'number time' sessions are provided daily. These sessions are taught for 20-25 minutes and provide adults with additional time to target children's basic number skills.

Mathematics in Key Stages 1 and 2:

The Daily Mathematics Lesson:

The pupils in each year group in KS1 and KS2 are taught in mixed ability classes and are provided with activities adapted as needed to meet individual needs. The mathematics lesson is taught for 1 hour per day in KS1 and KS2, following a learning journey approach and developing the use of the Teaching for Mastery Five Big Ideas (NCETM Teaching for Mastery Embedding Work Group, 2023-24). Each mathematics lesson should include the following (Years 1-6):

- Flashback 4 a 5-minute daily task using the principles of spaced learning (one question linked to yesterday's learning, one question linked to last week's learning and two questions related to concepts covered at least one month ago).
- A short mental/oral starter an opportunity to practise basic facts and skills (this may occur at another point during the school day, as appropriate).
- The main teaching (developing a mastery approach)
 - Put into an appropriate context/problem to encourage mathematical discussion and deepen the understanding of concepts being taught (White Rose 'True or False' problem or similar).
 - Small steps learning journey carefully planned for all pupils, considering the Five Big Ideas (Representation & Structure, Mathematical Thinking, Variation, Fluency and Coherence). NOTE: This will be the focus of Maths CPD 2023-24 with the aim of all Five Big Ideas being used to support Teaching for Mastery to be embedded across the Academy by the end of the academic year 2024,

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- Focus on meaningful talk throughout (using sentence stems, key vocabulary and making connections).
- Plenary / mini-plenaries, as appropriate.
- Years 2-6: One main teaching session per week should focus on arithmetic (taught session, using PiXL resources).

The Daily 4 Ops Session:

In addition to the 1-hour maths lesson, pupils in KS2 also take part in a 15-minute 4 Ops Session:

- Each class has a 15-minute daily timetabled slot to focus on the 4 Operations.
- It is expected that one operation be focused on per day, with one weekly session used for PiXL PrimaryWise 3 in 3 (KS2).
- This time is designed for children to focus on calculation strategies, both mental and written forms, and should be used as an opportunity for them to continually work on and refine these skills.
- It is important that teachers are using this time effectively; planning and working with small groups during these sessions should ensure that children are secure with skills and are progressing.
- The development of skills which should be covered in these sessions is clearly outlined in the calculation policy (see QPA Calculation Policy).
- All pupil work completed during the 4 Ops session should be recorded in 4 Ops exercise books under the short date.

Mastering Number (F2-Y2)

Each class has an additional 15-minute daily timetabled slot* to focus on developing fluency in calculation and number sense (4 days). It is important that teachers are using this time effectively and following the NCETM planning, guidance and training for 2022-23. One session per week will be used for Mental Maths.

*Foundation Stage can be flexible in the way this daily session is delivered and it may be taught within 'number time'.

Mental Maths: - see QPA Mental Maths Policy

- A programme of basic facts and times tables learning is in place in each year group.
- Times Table Rockstars (TTRS) provides a personalised learning programme for pupils to develop their multiplication skills (Y2-6): weekly TTRS sessions are timetabled for each class and pupils are encouraged to play the TTRS games regularly at home.

- NumBots provides a personalised learning programme for pupils to develop their addition and subtraction skills (Y1-3): Regular NumBots sessions are timetabled for each class (at least 2 x per week) and pupils are encouraged to play the NumBots games regularly at home.
- Other opportunities for developing mental strategy skills will be planned and taught during maths lessons, Mastering Number / 40ps sessions and other points in the school day.

Presentation of Mathematics Work: - see QPA Handwriting & Presentation Policy

- All pupils in KS1 and KS2 use a pencil for mathematical calculations and squared exercise books to aid setting out of calculations.
- The date is recorded in figures.
- All work should be presented in-line with QPA's Handwriting and Presentation Policy.
- Pupils in the Foundation Stage use a variety of media but much of the work is practical. In the final part of the summer term children in F2 begin to record their work in squared exercise books.

Review and Feedback: - see QPA Marking & Feedback Policy

- Children are to be actively encouraged to be involved in the reviewing of their work, either through self- or peer-marking, using purple polishing pens.
- Teachers are to ensure that feedback is kept up-to-date to ensure that the pupils receive prompt feedback after the work that they have completed.
- Feedback should make clear the next steps in the pupil's mathematical learning.
- Children should be encouraged to respond to the teacher's comments in their feedback using purple polishing pens, to show open dialogue to help improve and move learning on.
- All work should be marked in-line with QPA's Marking and Feedback Policy.

<u>Planning:</u>

Planning in the Foundation Stage:

- 'Development Matters in the Early Years Foundation Stage' and 'EYFS Framework' are the main documents used to inform planning within the EYFS.
- Medium- and short-term planning is informed by these documents which provide progressive development statements within age/stage bands. These statements suggest a child's typical range of mathematical development.

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• Daily 'number time' plans are separate to any other form of planning and are based upon a child's/group's immediate, number themed next step.

Planning in Key Stages 1 & 2:

- Planning is based on the material provided in the National Curriculum 2014, NCETM/DfE Ready to Progress (RtP) Criteria and White Rose Materials for each year-group.
- Medium- and long-term planning is informed by these documents which map out the mathematics curriculum for each year group. Weekly plans, which give specific detail of daily learning objectives and appropriate differentiated activities, should then be developed from this.
- The QPA Calculation Policy should be referred to and followed at the planning stage.
- NCETM Materials may also provide additional support and resources in the planning process.

Assessment:

- All teachers will make on-going assessments and respond appropriately to pupils during 'day-to-day' teaching. These 'immediate' responses are either verbal or recorded, depending on the nature of the task.
- All teachers will adjust planning and teaching within mathematics topics in response to pupils' performance.
- Teachers in the Foundation Stage will assess their pupils using 'EYFS Framework'. A final judgement is made using the 'Early Years Foundation Stage Profile' at the end of F2.
- Teachers in Years 1 to 6 will assess their pupils informally (the QPA Maths Assessment Criteria for each year-group, based on the Ready to Progress Criteria) as an on-going process throughout the year.
- Years 2 to 6 will be formally assessed termly, using the year appropriate termly PiXL arithmetic and reasoning mathematics tests.
- Year 2 and year 6 will undertake the mathematics tests as part of their SAT assessments.
- Year 1 and Year 5 will undertake the Year 2 and Year 6 mathematics SAT assessments at the end of the year.
- Year 4 will undertake the Y4 MTC (Multiplication Check) in June.
- Moderation of mathematics for all year-groups will take place both within the academy (internal) and across the Trust and Leicester City DG West (external).

The Learning Environment:

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The maths learning environment in each classroom will reflect age-related expectations (see NC 2014; QPA Maths Assessment Criteria). All classrooms will have at least one display board set up as a maths learning wall.

The Learning Environment Non-Negotiables in the Foundation Stage:

The following are to be evident in each Foundation Stage classroom at all times:

- A clearly defined maths area within each classroom.
- An age-appropriate number line (F2 Numicon number line 0-20; F1 Numicon number line 0-10 then progress to 20).
- 0-20 pedagogs number bunting
- Key maths vocabulary
- Evidence of children's work (updated regularly).
- Maths equipment in other areas of the classroom to prompt the use of core skills in everyday situations, linked to current learning (e.g. tape measure and metre sticks in the construction area; weighing scales in the malleable area; telephones and directories in the role play etc.).
- Maths Mascot to be used in every 'number time' session to promote problem solving (F2 Maths Monkey; F1 Percy Penguin).

The Learning Environment Non-Negotiables in Key Stages 1 & 2:

The following are to be displayed at all times:

- Maths key vocabulary & strategies for all four operations (4 Ops, following calculation policy).
- Mental maths basic facts (appropriate for year-group).
- Problems / links to Greater Depth work to challenge and inspire.
- Key questions (What do you notice? What's the same? What's different?).
- Reasoning prompts (KS1 or KS2).
- Place value headings (appropriate for year-group).
- 100-square / number lines (appropriate for year-group see below).

Year-group specific requirements (non-negotiables):

- F1: Numicon number line 0-10 then progress to 20
- F2: Numicon number line 0-20 and 100 square.
- Year 1: 100-square; number line to 100; counting in 10s/2s/5s; numbers 1-20 in numerals and words; number bonds and related subtraction facts to 20.

- Year 2: 100-square; number line to 100; counting in 3s; numbers to 100 in numerals and words; number bonds and related subtraction facts to 20 and 100, place value headings/chart (hundreds, tens and ones); multiplication and division facts for the 2, 5 and 10 multiplication tables; odd and even numbers.
- Year 3: number line to 100; numbers to 1,000 in numerals and words; place value headings (thousands, hundreds, tens and ones); multiplication and division facts for the 3, 4 and 8 multiplication tables.
- Year 4: numbers to 9,999 in numerals and words; place value headings (thousands, hundreds, tens, ones, tenths and hundredths); multiplication and division facts for multiplication tables up to 12 x 12.
- Year 5: numbers to 1,000,000 in numerals and words; place value headings (millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones, tenths, hundredths and thousandths); multiplication and division facts for multiplication tables up to 12 x 12; prime numbers, prime factors, square and cube numbers (add when introduce).
- Year 6: numbers to 10,000,000 in numerals and words; place value headings (ten millions, millions, hundred thousands, ten thousands, thousands, hundreds, tens, ones, tenths, hundredths and thousandths); multiplication and division facts for the multiplication tables up to 12 x 12 (& divisibility rules); square and cube numbers, prime numbers, prime factors, common factors, common multiples (add when introduce).

The above divisions will be dependent on individual classes and pupil ability within them; they are end of year expectations.

The following will be linked to the current maths topic:

- Focus for the week (age-appropriate, linked to current maths topic see QPA Maths Medium Term Planning).
- Maths key vocabulary for the current maths topic.
- Evidence of modelled work as learning prompts (linked to current maths topic, following calculation policy).
- A challenge area (linked to current maths topic).
- Examples of pupils' independent work (linked to current maths topic).

Resources:

Within the Calculation Policy there is a particular focus on ensuring that lessons are kept as practical as possible. Maths resources to support learning and understanding should be available for children to use within lessons.

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We will judge the success of our mathematics teaching by:

- The motivation and interest displayed by our pupils
- KS1 and KS2 SAT results
- Success in meeting targets
- Data analysis
- Book scrutiny
- Observations of the teaching of mathematics (including learning walks)

The role of the Mathematics Leader of Learning:

The Mathematics Leader of Learning will:

- Lead the development of this policy and all linked polices throughout the academy;
- Work closely with the Principal;
- Provide guidance and support to all academy personnel on the planning, teaching and assessment of mathematics;
- Support staff in preparing children for the end of key stage tests in mathematics;
- Annually report to the Principal on the success of this policy.

Monitoring the effectiveness of the Policy:

The practical application of this policy will be reviewed annually or when the need arises by the Mathematics Leader of Learning, the Principal and other members of the SLT.

Key documents supporting this document include:

- National Curriculum 2014 Mathematics Programme of Study
- QPA Maths Assessment Criteria (Appendix A)
- QPA Mathematics Yearly Overviews (Appendix B)
- QPA Maths Medium Term Planning Documents *currently supported by* White Rose (available in Planning Folder 2023-24 Maths 2023-24).
- QPA Calculation Policy
- EYFS Profile
- EYFS Framework
- Development Matters in the EYFS
- QPA Mental Maths Policy

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- White Rose Materials (schemes of work and premium resources)
- NCETM/DfE Ready to Progress Criteria (in Mathematics Guidance document)
- NCETM RtP Exemplification PowerPoints
- NCETM Curriculum Prioritisation Documents
- NCETM Mastery Documents
- NCETM Professional Development Materials
- PiXL Termly Assessments
- PiXL PrimaryWise 3 in 3
- Academy monitoring documents

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Appendix A - QPA Maths Assessment Criteria:

Year 1 Maths Expectations

	End of Year 1 Expectations (taken from NC Mathematics PoS, 2013)
Number –	• Count to and across 100, forwards and backwards, beginning with 0 or 1, or
Number and	from any given number
Place Value	 Count, read and write numbers to 100 in numerals
	 Count in multiples of twos, fives and tens
	Given a number, identify one more and one less
	 Identify and represent numbers using objects and pictorial representations
	including the number line, and use the language of: equal to, more than, less
	than (fewer), most, least
	• Read and write numbers from 1 to 20 in numerals and words.
Number –	Read, write and interpret mathematical statements involving addition (+),
Addition and	subtraction (–) and equals (=) signs
Subtraction	Represent and use number bonds and related subtraction facts within 20
	 Add and subtract one-digit and two-digit numbers to 20, including zero
	 Solve one-step problems that involve addition and subtraction, using concrete
	objects and pictorial representations, and missing number problems such as 7 =
	? – 9.
	 Use the vocabulary: put together, add, altogether, total, take away, distance
	between, difference between, more than and less than.
Number –	Solve one-step problems involving multiplication and division, by calculating the
Multiplication	answer using concrete objects, pictorial representations and arrays with the
and Division	support of the teacher.
	Make connections between arrays, number patterns, and counting in twos, fives
	and tens.
Number -	• Recognise, find and name a half as one of two equal parts of an object, shape or
Fractions	quantity
	• Recognise, find and name a quarter as one of four equal parts of an object,
	shape or quantity.
Measurement	Compare, describe and solve practical problems for: lengths and heights [for
	example, long/short, longer/shorter, tall/short, double/half]; mass/weight [for
	example, heavy/light, heavier than, lighter than]; capacity and volume [for
	example, full/empty, more than, less than, half, half full, quarter]; and time [for
	example, quicker, slower, earlier, later]
	 Measure and begin to record the following: lengths and heights; mass/weight;
	capacity and volume; and time (hours, minutes, seconds)
	 Recognise and know the value of different denominations of coins and notes
	• Sequence events in chronological order using language [for example, before and
	after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
	 Recognise and use language relating to dates, including days of the week,
	weeks, months and years
	• Tell the time to the hour and half past the hour and draw the hands on a clock
	face to show these times.
Geometry –	Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for
Properties of	example, rectangles (including squares), circles and triangles]; and 3-D shapes
Shapes,	[for example, cuboids (including cubes), pyramids and spheres].
Position and	Describe position, direction and movement, including whole, half, quarter and
Direction	three-quarter turns.

Year 1 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

	Previous experience	Evidence / notes	Year 1 ready-to-	Evidence / notes
	rie nous experience		progress criteria	
N U D e r	Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10.		1NPV–1 Count within 100, forwards and backwards, starting with any number.	
a n d P I a c e V a I u e	Play games that involve moving along a numbered track and understand that larger numbers are further along the track.		1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =.	
N U M b e	Begin to experience partitioning and combining numbers within 10.		1NF–1 Develop fluency in addition and subtraction facts within 10.	
r F a c ts	Distribute items fairly, for example, put 3 marbles in each bag. Recognise when items are distributed unfairly.		1NF-2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.	
A d iti o n a	Understand the cardinal value of number words, for example understanding that 'four' relates to 4 objects. Subitise for up to 5 items. Automatically show a given number using fingers.		1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	
n d S v b tr a c ti	Devise and record number stories, using pictures, numbers and symbols (such as arrows).		1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.	

	1		
0			
n			
G		See, explore and discuss	
е		models of common 2D	
0		and 3D shapes with	
		varied dimensions and	
m		presented in different	
е		orientations (for example,	
tr		triangles not always	
v		presented on their base).	
, ,		Select, rotate and	
		manipulate shapes for a	
		particular purpose, for	
		example rotating a	
		cylinder so it can be used	
		to build a tower or	
		rotating a puzzle piece to	
		fit in its place	

1G–1 Recognise common	
2D and 3D shapes	
presented in different	
orientations, and know	
that rectangles, triangles,	
cuboids and pyramids are	
not always similar to one another.	
1G–2 Compose 2D and	
3D shapes from smaller	
shapes to match an	
example, including	
manipulating shapes to	
place them in particular	
orientations.	

*DfE Guidance: 'Teaching mathematics in primary schools June 2020', can be downloaded in full, or per year group, from this page: www.gov.uk/government/publications/teaching-mathematics-in-primary-schools Summary tables on pages 9-15 (of the full, Years 1-6 document) track criteria across year groups. Within the year group documents, the 'Making connections' blue boxes, detail connections across criteria.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						

Year 2 Maths Expectations

	End of Year 2 Expectations (taken from NC Mathematics PoS, 2013)
Number – Number and Place Value	 Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward Recognise the place value of each digit in a two-digit number (tens, ones)
	 Identify, represent and estimate numbers using different representations, including the number line Compare and order numbers from 0 up to 100; use <, > and = signs
	 Read and write numbers to at least 100 in numerals and in words Use place value and number facts to solve problems.
Number – Addition and Subtraction	 Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
	 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
Number – Multiplication and Division	 Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs Show that multiplication of two numbers can be done in any order
	 (commutative) and division of one number by another cannot Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
Number - Fractions	 Recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity Write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.
Measurement	 Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and =
	 Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
	 Compare and sequence intervals of time Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

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	• Know the number of minutes in an hour and the number of hours in a day.
Geometry –	• Identify and describe the properties of 2-D shapes, including the number of sides
Properties of	and line symmetry in a vertical line
Shapes,	 Identify and describe the properties of 3-D shapes, including the number of
Position and	edges, vertices and faces
Direction	 Identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid]
	 Compare and sort common 2-D and 3-D shapes and everyday objects.
	 Order and arrange combinations of mathematical objects in patterns and sequences
	 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 anticlockwise).

Year 2 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

	Year 2 ready-to-progress criteria	Evidence / notes
Number and Place Value	 2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning. 2NPV-2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10. 	
Number Facts	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice.	
Addition and Subtracti on	 2AS-1 Add and subtract across 10. 2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How 	
	many more?". 2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.	
	2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.	
	2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and	

Multiplica tion and Division	calculating the product, within the 2, 5 and 10 multiplication tables.	
	2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division).	
Geometr y	2G–1 Use precise language to describe the properties of 2D and 3D shapes and compare shapes by reasoning about similarities and differences in properties.	

*DfE Guidance: 'Teaching mathematics in primary schools June 2020', can be downloaded in full, or per year group, from this page: www.gov.uk/government/publications/teaching-mathematics-in-primary-schools</u> Summary tables on pages 9-15 (of the full, Years 1-6 document) track criteria across year groups. Within the year group documents, the 'Making connections' blue boxes, detail connections across criteria.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						

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Year 3 Maths Expectations

	End of Year 3 Expectations (taken from NC Mathematics PoS, 2013)
Number – Number and	• Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
Place Value	 Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
	 Compare and order numbers up to 1000 Identify, represent and estimate numbers using different representations
	 Read and write numbers up to 1000 in numerals and in words
	Solve number problems and practical problems involving these ideas.
Number –	Add and subtract numbers mentally, including: a three-digit number and ones;
Addition and	a three-digit number and tens; a three-digit number and hundreds
Subtraction	 Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
	 Estimate the answer to a calculation and use inverse operations to check
	answers
	• Solve problems, including missing number problems, using number facts,
	place value, and more complex addition and subtraction.
Number –	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication
Multiplication	tables
and Division	Write and calculate mathematical statements for multiplication and division
	using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written
	methods
	Solve problems, including missing number problems, involving multiplication
	and division, including positive integer scaling problems and correspondence
	problems in which n objects are connected to m objects.
Number -	• Count up and down in tenths; recognise that tenths arise from dividing an
Fractions	object into 10 equal parts and in dividing one-digit numbers or quantities by 10
	 Recognise, find and write fractions of 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
	 Recognise and show, using diagrams, equivalent fractions with small denominators
	 Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]
	 Compare and order unit fractions, and fractions with the same denominators Solve problems that involve all of the above.
Measurement	 Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
	Measure the perimeter of simple 2-D shapes
	 Add and subtract amounts of money to give change, using both £ and p in practical contexts
	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, a.m./p.m., morning, afternoon, noon and midnight

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	 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].
Geometry – Properties of Shapes, Position and Direction	 Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them Recognise angles as a property of shape or a description of a turn Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
Statistics	 Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables

Year 3 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

	Year 3 ready-to-progress criteria	Evidence / notes
	3NPV–1 Know that 10 tens are	
	equivalent to 1 hundred, and that 100 is	
	10 times the size of 10; apply this to	
	identify and work out how many 10s	
	there are in other three-digit multiples of 10.	
	10.	
_		
	3NPV-2 Recognise the place value of	
	each digit in three-digit numbers and	
	compose and decompose three-digit	
	numbers using standard and non-	
	standard partitioning. 3NPV–3 Reason about the location of	
	any three-digit number in the linear	
	number system, including identifying the	
	previous and next multiple of 100 and	
	10.	
_		
	3NPV–4 Divide 100 into 2, 4, 5 and 10	
	equal parts, and read scales/number	
	lines marked in multiples of 100 with 2,	
	4, 5 and 10 equal parts.	
	3NF–1 Secure fluency in addition and	
	subtraction facts that bridge 10, through	
l	continued practice.	
	3NF–2 Recall multiplication facts, and	
	corresponding division facts, in the 10, 5,	
	2, 4 and 8 multiplication tables, and	
	recognise products in these multiplication tables as multiples of the	
	corresponding number.	
	3NF–3 Apply place-value knowledge to	
	known additive and multiplicative	
	number facts (scaling facts by 10).	

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Addition	3AS–1 Calculate complements to 100.	
and		
Subtracti	3AS–2 Add and subtract up to three-digit	
on	numbers using columnar methods.	
	3AS–3 Manipulate the additive	
	relationship: Understand the inverse	
	relationship between addition and	
	subtraction, and how both relate to the	
	part-part-whole structure. Understand	
	and use the commutative property of	
	addition and understand the related	
	property for subtraction.	
	3MD–1 Apply known multiplication and	
Multiplic	division facts to solve contextual	
ation and	problems with different structures,	
Division	including quotative and partitive	
	division.	
	3F–1 Interpret and write proper fractions	
Fractions	to represent 1 or several parts of a whole	
	that is divided into equal parts.	
	3F–2 Find unit fractions of quantities	
	using known division facts (multiplication	
	tables fluency).	
	3F–3 Reason about the location of any	
	fraction within 1 in the linear number	
	system.	
	3F–4 Add and subtract fractions with the	
	same denominator, within 1.	
	3G–1 Recognise right angles as a	
Geometr	property of shape or a description of a	
У	turn and identify right angles in 2D	
	shapes presented in different	
	orientations.	
	3G–2 Draw polygons by joining marked	
	points and identify parallel and	
	perpendicular sides.	

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	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						

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Year 4 Maths Expectations

Number – Number and Place Value	• Count in multiples of 6, 7, 9, 25 and 1000
and Place Value	
	Find 1000 more or less than a given number
	 Count backwards through zero to include negative numbers
	 Recognise the place value of each digit in a four-digit number (thousands,
	hundreds, tens, and ones)
	Order and compare numbers beyond 1000
	 Identify, represent and estimate numbers using different representations
	 Round any number to the nearest 10, 100 or 1000
	 Solve number and practical problems that involve all of the above and with
	increasingly large positive numbers
	Read Roman numerals to 100 (I to C) and know that over time, the numeral
	system changed to include the concept of zero and place value.
Number – Addition	 Add and subtract numbers with up to 4 digits using the formal written
and Subtraction	methods of columnar addition and subtraction where appropriate
	 Estimate and use inverse operations to check answers to a calculation
	 Solve addition and subtraction two-step problems in contexts, deciding
	which operations and methods to use and why.
Number –	• Recall multiplication and division facts for multiplication tables up to 12 × 12
Multiplication and	 Use place value, known and derived facts to multiply and divide mentally,
Division	including: multiplying by 0 and 1; dividing by 1; multiplying together three
	numbers
	 Recognise and use factor pairs and commutativity in mental calculations
	 Multiply two-digit and three-digit numbers by a one-digit number using
	formal written layout
	Solve problems involving multiplying and adding, including using the
	distributive law to multiply two-digit numbers by one digit, integer scaling
	problems and harder correspondence problems such as n objects are
	connected to m objects.
Number –	 Recognise and show, using diagrams, families of common equivalent
Fractions	fractions
(including Decimals)	 Count up and down in hundredths; recognise that hundredths arise when
Decimais	dividing an object by one hundred and dividing tenths by ten.
	 Solve problems involving increasingly harder fractions to calculate supprint the supervision of the s
	quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
	 Recognise and write decimal equivalents of any number of tenths or hundredths
	• Recognise and write decimal equivalents to ¼, ½, ¾
	• Find the effect of dividing a one- or two-digit number by 10 and 100,
	identifying the value of the digits in the answer as ones, tenths and hundredths
	 Round decimals with one decimal place to the nearest whole number
	 Compare numbers with the same number of decimal places up to two
	decimal places
	 Solve simple measure and money problems involving fractions and decimals
	to two decimal places.

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Measurement	 Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares Estimate, compare and calculate different measures, including money in pounds and pence Read, write and convert time between analogue and digital 12- and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to
	seconds; years to months; weeks to days.
Geometry – Properties of Shapes, Position and Direction	 Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify acute and obtuse angles and compare and order angles up to two right angles by size Identify lines of symmetry in 2-D shapes presented in different orientations Complete a simple symmetric figure with respect to a specific line of symmetry. Describe positions on a 2-D grid as coordinates in the first quadrant Describe movements between positions as translations of a given unit to the left/right and up/down Plot specified points and draw sides to complete a given polygon.
Statistics	 Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Year 4 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

	Year 4 ready-to-progress criteria	Evidence / notes
	4NPV-1 Know that 10 hundreds are	
Number	equivalent to 1 thousand, and that	
and Place	1,000 is 10 times the size of 100; apply	
Value	this to identify and work out how many	
	100s there are in other four-digit	
	multiples of 100.	
	4NPV–2 Recognise the place value of	
	each digit in four-digit numbers and	
	compose and decompose four-digit	
	numbers using standard and non-	
	standard partitioning.	
	4NPV-3 Reason about the location of	
	any four-digit number in the linear	
	number system, including identifying	
	the previous and next multiple of 1,000	
	and 100, and rounding to the nearest of	
	each.	

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	4NPV–4 Divide 1,000 into 2, 4, 5 and 10	
	equal parts, and read scales/number	
	lines marked in multiples of 1,000 with	
	2, 4, 5 and 10 equal parts.	
Number	4NF-1 Recall multiplication and division	
Number	facts up to and recognise products in	
Facts	multiplication tables as multiples of the	
	corresponding number.	
	4NF–2 Solve division problems, with two-digit dividends and one-digit	
	divisors, that involve remainders, and	
	interpret remainders appropriately	
	according to the context.	
	4NF–3 Apply place-value knowledge to	
	known additive and multiplicative	
	number facts (scaling facts by 100).	
Addition		
and	See previous year group.	
Subtractio	See previous year group.	
n		
Multiplicati	4MD–1 Multiply and divide whole	
on and	numbers by 10 and 100 (keeping to	
Division	whole number quotients); understand	
	this as equivalent to making a number	
	10 or 100 times the size.	
	4MD–2 Manipulate multiplication and	
	division equations and understand and	
	apply the commutative property of	
	multiplication.	
	4MD–3 Understand and apply the	
	distributive property of multiplication.	
Fractions	4F–1 Reason about the location of	
	mixed numbers in the linear number	
	system.	
	4F–2 Convert mixed numbers to	
	improper fractions and vice versa.	
	4F–3 Add and subtract improper and mixed fractions with the same	
	denominator, including bridging whole	
	numbers.	
Geometry	4G–1 Draw polygons, specified by	
	coordinates in the first quadrant, and	
	translate within the first quadrant.	
	4G–2 Identify regular polygons,	
	including equilateral triangles and	
	squares, as those in which the side-	
	lengths are equal, and the angles are	
	equal. Find the perimeter of regular and	
	irregular polygons.	
	4G–3 Identify line symmetry in 2D	
	shapes presented in different	
	orientations. Reflect shapes in a line of	
	symmetry and complete a symmetric figure or pattern with respect to a	
	specified line of symmetry.	
	specified life of synthetry.	

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	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						

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Year 5 Maths Expectations

Number – Number and Place	 Read write order and compare numbers to at least 1,000,000 and determine
Number and Place	 Read, write, order and compare numbers to at least 1 000 000 and determine
	the value of each digit
Value	 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
	 Interpret negative numbers in context, count forwards and backwards with
	positive and negative whole numbers, including through zero
	 Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
	 Solve number problems and practical problems that involve all of the above
	 Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
Number –	Add and subtract whole numbers with more than 4 digits, including using
Addition and	formal written methods (columnar addition and subtraction)
Subtraction	Add and subtract numbers mentally with increasingly large numbers
	• Use rounding to check answers to calculations and determine, in the context
	of a problem, levels of accuracy
	 Solve addition and subtraction multi-step problems in contexts, deciding
	which operations and methods to use and why.
Number –	 Identify multiples and factors, including finding all factor pairs of a number,
Multiplication	and common factors of two numbers
and Division	Know and use the vocabulary of prime numbers, prime factors and composite
	(nonprime) numbers
	 Establish whether a number up to 100 is prime and recall prime numbers up
	to 19
	 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
	 Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
	 Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³)
	 Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
	Solve problems involving addition, subtraction, multiplication and division
	and a combination of these, including understanding the meaning of the equals sign
	 Solve problems involving multiplication and division, including scaling by
	simple fractions and problems involving simple rates.
Number –	Compare and order fractions whose denominators are all multiples of the
Fractions	same number
(including	Identify, name and write equivalent fractions of a given fraction, represented
Decimals and	visually, including tenths and hundredths
Percentages)	Recognise mixed numbers and improper fractions and convert from one form
	to the other and write mathematical statements > 1 as a mixed number [for
	example, 2/5 + 4/5 = 6/5 = 1 1/5]

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	 Add and subtract fractions with the same denominator and denominators that are multiples of the same number
	 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
	 Read and write decimal numbers as fractions [for example, 0.71 = 71/100]
	 Recognise and use thousandths and relate them to tenths, hundredths and
	decimal equivalents
	 Round decimals with two decimal places to the nearest whole number and to
	one decimal place
	 Read, write, order and compare numbers with up to three decimal places
	 Solve problems involving number up to three decimal places
	 Recognise the per cent symbol (%) and understand that per cent relates to
	'number of parts per hundred', and write percentages as a fraction with
	denominator 100, and as a decimal
	 Solve problems which require knowing percentage and decimal equivalents
	of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of
	10 or 25.
Measurement	Convert between different units of metric measure (for example, kilometre
Weasurement	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
	 Measure and calculate the perimeter of composite rectilinear shapes in
	centimetres and metres
	 Calculate and compare the area of rectangles (including squares), and
	including using standard units, square centimetres (cm ²) and square metres
	(m^2) and estimate the area of irregular shapes
	 Estimate volume [for example, using 1 cm³ blocks to build cuboids (including
	cubes)] and capacity [for example, using water]
	 Solve problems involving converting between units of time
	 Use all four operations to solve problems involving measure [for example,
	length, mass, volume, money] using decimal notation, including scaling.
Geometry –	 Identify 3-D shapes, including cubes and other cuboids, from 2-D
Properties of	representations
Shapes, Position	 Know angles are measured in degrees: estimate and compare acute, obtuse
and Direction	and reflex angles
	 Draw given angles, and measure them in degrees (°)
	 Identify: angles at a point and one whole turn (total 360°); angles at a point
	on a straight line and $\frac{1}{2}$ a turn (total 180°); and other multiples of 90°
	• 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.
Statistics	 Solve comparison, sum and difference problems using information presented
	in a line graph
	 Complete, read and interpret information in tables, including timetables.

Year 5 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

	Year 5 ready-to-progress criteria	Evidence / notes
Number	5NPV-1 Know that 10 tenths are	
and Place	equivalent to 1 one, and that 1 is 10	
Value	times the size of 0.1. Know that 100	
	hundredths are equivalent to 1 one, and	
	that 1 is 100 times the size of 0.01. Know	
	that 10 hundredths are equivalent to 1	
	tenth, and that 0.1 is 10 times the size of	
	0.01.	
	5NPV–2 Recognise the place value of	
	each digit in numbers with up to 2	
	decimal places and compose and	
	decompose numbers with up to 2	
	decimal places using standard and non-	
	standard partitioning.	
	5NPV–3 Reason about the location of any	
	number with up to 2 decimal places in	
	the linear number system, including	
	identifying the previous and next	
	multiple of 1 and 0.1 and rounding to the	
	nearest of each.	
	5NPV–4 Divide 1 into 2, 4, 5 and 10 equal	
	parts, and read scales/number lines	
	marked in units of 1 with 2, 4, 5 and 10	
	equal parts.	
	5NPV–5 Convert between units of	
	measure, including using common	
	decimals and fractions.	
Number	5NF–1 Secure fluency in multiplication	
Facts	table facts, and corresponding division	
	facts, through continued practice.	
	5NF-2 Apply place-value knowledge to	
	known additive and multiplicative	
	number facts (scaling facts by 1 tenth or	
	1 hundredth).	
Multiplicatio	5MD–1 Multiply and divide numbers by	
n and	10 and 100; understand this as	
Division	equivalent to making a number 10 or 100	
	times the size, or 1 tenth or 1 hundredth	
	times the size.	
	5MD–2 Find factors and multiples of	
	positive whole numbers, including	
	common factors and common multiples,	
	and express a given number as a product	
	of 2 or 3 factors.	
	5MD–3 Multiply any whole number with	
	up to 4 digits by any one-digit number	
	using a formal written method.	

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	5MD–4 Divide a number with up to 4 digits by a one-digit number using a formal written method and interpret	
	remainders appropriately for the context.	
Fractions	5F–1 Find non-unit fractions of quantities.	
	5F–2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system.	
	5F–3 Recall decimal fraction equivalents for , , and and for multiples of these proper fractions.	
Geometry	5G-1 Compare angles, estimate, and measure angles in degrees (°) and draw angles of a given size.	
	5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units.	

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	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						

Year 6 Maths Expectations

	End of Year 6 Expectations (taken from NC Mathematics PoS, 2013)
Number – Number and Place Value Number – Addition, Subtraction, Multiplication and Division	 Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit Round any whole number to a required degree of accuracy Use negative numbers in context, and calculate intervals across zero Solve number and practical problems that involve all of the above. Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication Divide numbers up to 4 digits by a two-digit whole number 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 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
	 Perform mental calculations, including with mixed operations and large numbers Identify common factors, common multiples and prime numbers Use their knowledge of the order of operations to carry out calculations involving the four operations Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Number –	Use common factors to simplify fractions; use common multiples to express
Fractions (including	fractions in the same denomination
Decimals and	 Compare and order fractions, including fractions > 1 Add and subtract fractions with different denominators and mixed numbers,
Percentages)	using the concept of equivalent fractions
	• Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]
	 Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]
	• Associate a fraction with division and calculate decimal fraction equivalents
	[for example, 0.375] for a simple fraction [for example, 3/8]
	 Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
	 Multiply one-digit numbers with up to two decimal places by whole numbers Use written division methods in cases where the answer has up to two
	 decimal places Solve problems which require answers to be rounded to specified degrees of
	 Solve problems which require answers to be rounded to specified degrees of accuracy
	 Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Ratio and	 Solve problems involving the relative sizes of two quantities where missing
Proportion	 values can be found by using integer multiplication and division facts Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for
	comparison

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	Solve problems involving similar shapes where the scale factor is known or
	can be found
	 Solve problems involving unequal sharing and grouping using knowledge of
	fractions and multiples.
Algebra	Use simple formulae
	 Generate and describe linear number sequences
	 Express missing number problems algebraically
	 Find pairs of numbers that satisfy an equation with two unknowns
	 Enumerate possibilities of combinations of two variables.
Measurement	• Solve problems involving the calculation and conversion of units of measure,
	using decimal notation up to three decimal places where appropriate
	 Use, read, write and convert between standard units, converting
	measurements of length, mass, volume and time from a smaller unit of
	measure to a larger unit, and vice versa, using decimal notation to up to three
	decimal places
	Convert between miles and kilometres
	 Recognise that shapes with the same areas can have different perimeters and
	vice versa
	 Recognise when it is possible to use formulae for area and volume of shapes
	 Calculate the area of parallelograms and triangles
	 Calculate, estimate and compare volume of cubes and cuboids using standard
	units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending
	to other units [for example, mm ³ and km ³].
Geometry –	 Draw 2-D shapes using given dimensions and angles
Properties of	 Recognise, describe and build simple 3-D shapes, including making nets
Shapes, Position	 Compare and classify geometric shapes based on their properties and sizes
and Direction	and find unknown angles in any triangles, quadrilaterals, and regular
	polygons
	 Illustrate and name parts of circles, including radius, diameter and
	circumference and know that the diameter is twice the radius
	 Recognise angles where they meet at a point, are on a straight line, or are
	vertically opposite, and find missing angles.
	 Describe positions on the full coordinate grid (all four quadrants)
	 Draw and translate simple shapes on the coordinate plane, and reflect them
	in the axes.
Statistics	 Interpret and construct pie charts and line graphs and use these to solve
	problems

Year 6 Maths Assessment Criteria

Use the *2020 DfE guidance ready-to-progress criteria, listed in the table below.

Year 6 ready-to-progress criteria Evidence / notes

		1
	6NPV–1 Understand the relationship	
	between powers of 10 from 1	
Number	hundredth to 10 million, and use this	
and Place	to make a given number 10, 100,	
Value	1,000, 1 tenth, 1 hundredth or 1	
	thousandth times the size (multiply	
	and divide by 10, 100 and 1,000).	
	6NPV–2 Recognise the place value of	
	each digit in numbers up to 10 million,	
	including decimal fractions, and	
	compose and decompose numbers	
	up to 10 million using standard and	
	non-standard partitioning. 6NPV-3 Reason about the location of	
	any number up to 10 million, including	
	decimal fractions, in the linear number	
	system, and round numbers, as	
	appropriate, including in contexts.	
	6NPV–4 Divide powers of 10, from 1	
	hundredth to 10 million, into 2, 4, 5	
	and 10 equal parts, and read	
	scales/number lines with labelled	
	intervals divided into 2, 4, 5 and 10	
	equal parts.	
Number	See previous year-groups.	
Facts		
Addition,	6AS/MD-1 Understand that 2	
Subtraction,	numbers can be related additively or	
Multiplicatio	multiplicatively and quantify additive	
n & Division	and multiplicative relationships	
	(multiplicative relationships restricted	
	to multiplication by a whole number).	
	6AS/MD-2 Use a given additive or	
	multiplicative calculation to derive or	
	complete a related calculation, using	
	arithmetic properties, inverse	
	relationships, and place-value	
	understanding.	
	6AS/MD–3 Solve problems involving	
	ratio relationships.	
	6AS/MD-4 Solve problems with 2	
	unknowns.	
	6F-1 Recognise when fractions can	
Fractions	be simplified and use common factors	
	to simplify fractions.	
	6F-2 Express fractions in a common	
	denomination and use this to compare	
	fractions that are similar in value.	
	6F–3 Compare fractions with different	
	denominators, including fractions	
	greater than 1, using reasoning, and	
	choose between reasoning and	

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	common denomination as a comparison strategy.	
Geometry	6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles, and area, and solve related problems.	

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	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
ТА						
Academy Moderation						
Trust Moderation						



Appendix B - QPA Mathematics Yearly Overviews:

Y1 Maths Yearly Overview 2023-24

	Wk1 (4 days)	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk 9	Wk10	Wk11	Wk 12	Wk13 (4 days)	Wk14	Wk15	Wk16 (4 days)
Autumn	Number: Place Value (within 10) Number: Additi (1NPV-1; 1NPV-2 within 10) Subtraction (within 10) (1NF-1; 1AS-1; 1AS-2) Wk1 Wk2 Wk3 Wk4 Wk5 Wk6					otraction ithin 10)	Num Additi Subtr n (wi 10)- c	on & actio thin	Sh	netry: ape .; 1G-2)	Pl	ace Valu	mber: ie (withi 1; 1NPV-2	-	Consolidation	
	Wk:	1	Wk2	Wk3	Wk4	Wk5	Wk6	``	Vk7		Wk8		Wk9	Wk1	LO	
Spring	Number: Place Value (within 20)	- cont.	Add				ithin 20)		(wi	: Place thin 50) 1NPV-2; 1			gth, Hei		nent: ight & Vo AS-1 & 1AS-	
	Wk	1	Wk2	Wk3	Wk4	Wk5 (4 days)	Wk6 Wk7	W	(8	Wk9	Wk10	Wk	11 \	Nk12	Wk1	13
Summer	Γ	Number: Number: Fractions Multiplication & Division (1NF-2) (Link to 1G-1)						Place	lumbo Value 100) PV-1; 1N	(within	Measurement: Money (Link to 1NF-2, 1NPV-1)	Mea (Lir	asurem Time hk to 1NP		Geomo Position direct	n and

Y2 Maths Yearly Overview 2023-24



	Wk1 (4 days)	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7		W 8	(W		Wk 10	Wk11	Wk1 2	Wk13 (4 days)	Wk14	Wk15	Wk16 (4 days)
Autumn		Number: Number: Place Value Addition & Subtraction (2NPV-1; 2NPV-2) (2NF-1; 2AS-1; 2AS-3; 2AS-4)				Number:	Addition & Subtraction	(cont.)	м	lultiplicati	nber: ion & Div I; 2MD-2		1	rties of Sh (2G-1)				
	Wk1	W	/k2	Wk3	W	k4	Wk5	Wk6		w	k7		W	k8		Wk9	Wk10	
Spring	Plac	Number: Place Value NPV-1; 2NPV-2)Number: Addition & Subtraction (2NF-1; 2AS-1; 2AS-3; 2AS-4)Measurement : Money (2NPV-2; 2AS-2; 2AS-4)				: ney 2; 2AS-2;	м	easur Mo (co	ney			Fr	actions 2MD-2)		Time (2MD-1)			
	Wk1	Wk	ر 2	Wk3	Wk4	Wk5 (4 days)	Wk6	Wk7		Wk8		v	Vk9	w	k10	Wk11	Wk12	Wk13
Summer	Wk1: A	(based o ddition ultiplica	& Subtr	action Division		Y2 :	SATS			Ma		Capac Leng	sureme city & Ter (2MD-1) th & Hei (2AS-4)	mperati	ure	Geometry: Position & Direction		istics D-1)

Y3 Maths Yearly Overview 2023-24

V

	Wk1 (4 days)	Wk2	Wk3	Wk4	Wk5	5 Wk6 Wk7		Wk8	Wk 9	Wk 10	Wk11	Wk 12	Wk 13	Wk14	Wk15	Wk16
Autumn	(3NP)	Number: Place Value (3NPV-1; 3NPV-2; 3NPV-3; 3NPV-4) Wk1 Wk2 Wk3 Wk4				Number: n & Subt 3AS-1; 3AS 3)	raction	Ad Sul	dition dition otractio (cont.)	&	Multipli	sion		F	lumber raction: 3F-1; 3F-2	s
20	Nun	nber:	Nur	Wk4	-	Wk6	-	W Num	ber:		Wk8 surement:	w	'k9	Numb	-	
Spring	Number: Fractions (3F-1; 3F-2)		Subt (3NF-1;	i tion & raction 3AS1; 3AS- 3AS-3)		tiplicatio Division 2; 3NF-3; 31		Multij on Divis (co)	sion	Pe (3NP	ength & erimeter V-1; 3NPV-3; V-4; 3NF-1; 3NF-3)			Fractio (3F-3; 3F		
	Wk1	w	k2 Wł	3 Wk	4 Wk5 (4 days		Wk7	Wk	8	Wk9	Wk10	W	k11	Wk1	12	Wk13
ner	Meas	ureme	nt: N	lumber	Geometry:			Mea	surem	ent:	Measu	remei	nt:	S	tatistic	s
Summer		Time 3NF-3)		nsolidatio ased on AfL		erties of (3G-1; 3G- 5-1; 1G-2; 2	2)		Money PV-1; 3A		Mass & (3NF	Capac PV-4)	ity		(3NPV-4)	

Y4 Maths Yearly Overview 2023-24



	Wk1 (4days)	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11	Wk12	Wk13 (4 days)	Wk14	Wk15	Wk16 (4 days)
Autumn	Number: Num Place Value Addit (4NPV-1; 4NPV-2; 4NPV-3; 4NPV-4) Subtra (4N (4N (3AS-2; Link to I Wk1 Wk2 Wk3 Wk4						& on ;-3)	r Ler Perim A	ureme ht: ogth, oeter & rea L; 4G-2)	(4NPV-1			Division		Frac	iber: tions F1)
	Wk1	v	/k2	Wk3	Wk4	Wk5	Wk6	W	/k7	w	'k8		Wk9		Wk	10
Spring	(4NPV	iplicati -1; 4NF-	nber: on & Div 1; 4NF-2; ID-2; 4MD	4NF-3;	F	umbe raction F-2; 4F-3	s	Frac	nber: tions ont.)				Number Decimals MD-1; 4NF	5		
	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	W	k10	W	(11	Wk12	W	(13
Summer	Num Decii (cor		Statistics (4NPV-4) (3NPV-4)	MTC P AfL	Numl Multipli rep., b	cation	on	1	P roperti (4G-2; 4	metry: Geometry: Me es of Shape Position & G-3) (3G-1) Direction & (4G-1) MTC					asuremo Time (4NF-3)	ent:

Y5 Maths Yearly Overview 2023-24

	Wk1 (4 days)	Wk2	Wk3	Wk4	Wk5	Wk6	w	k7	Wk8	Wk9	Wk10	Wk 11	Wk 12	Wk13 (4 days)	Wk14	Wk1	5 Wk16 (4 days)
Autumn	(5NPV-1; !	Numb Place Va 5NPV-2; 9 4)	alue	; 5NPV-	Additi	Numb on & Su (3AS-:	ubtract	tion	-	Number Dication & 5NF-2; 5MI 2)	Division			Numb Fractic (5F-1; 5F-2	ons		Geometry: Symmetry (46-3)
	Wk1	Wk2	w	'k3	Wk4	Wk5	w	k6		Wk7				Wk9		w	k10
Spring	Multiplication & Division (5NF-1; 5NF-2; 5MD-1; 5MD-3; 5MD-4)				ication & Division NF-2; 5MD-1; 5MD-3; 5MD-4) Decimals & Percentages (5NF-2; 5MD-1) (5NPV-1; 5NPV-2; 5NPV-3; 5NPV-5; 5NF-2; 5F-3)							nber: imals NPV-3; 5	NF-2; 5	MD-1)		Measurement:	Perimeter & Area (5G-2)
	Wk1	Wk2	\ \	Nk3	Wk4	Wk5 (4 days)	Wk 6	Wk 7	Wk	B W	/k9	Wk10	V	Vk11	W	12	Wk13
Summer	NumbStatistics (5NPV-4)Geometry: Properties of Shape (5G-1) (3G-1; 3G-2; 4G-2) (based on AfL)						Con	verting Ur PV-5; 5MD- (4MD-1)	nits I	Position	ometi a & Dii -1; 4G-	rection		iber: ative bers	Measurement: Volume (5NPV-5)		

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	Wk1 (4 days)	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk Wk Wk Wk 8 9 10 11				Wk12	Wk13 (4 days)	Wk14	Wk15	Wk16 (4 days)
Autumn	Place (6NPV-1;	umber:Number:ce ValueAddition,V-1; 6NPV-2;Subtraction,V-3; 6NPV-4)Multiplication &Division(6AS/MD-1; 6AS/MD-2)k1Wk2Wk3Wk4		n, on, ion & n	Number: Percentages (5NF-2)	Number: Fractions	(1	Num Fract	ions	3)	Measur Converti (6NP	ng Units	Geometry: Position & Direction (6G-1) (4G-1)			
	Wk1	Wk2	Wk3	w	k4	Wk5	Wk6		WK	7		Wk8	w	k9	W	10
Spring	Algebra Perim (6AS/MD-3; 6AS/MD-4)			easure imeter, Volun (6G-1	Area & ne	Statistics (6NPV-4) (5NPV-4))		umber: D /Consolid (6NPV-1; 6 (5F-3; 5N	dation NPV-2)	;	
	Wk1	Wk2	Wk3	Wk4	Wk5 (4 days)	Wk6	Wk7	Wk8 Wk9				Wk10	Wk11	Wk12	W	(13
Summer	C	Consolic Pre	lation paratio	-		Y6 SATS	Investigations				Co	nsolidatio	n / Trans	ition		