Maths at Upton Heath C of E Primary School

Maths Curriculum Statement

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Intent

At Upton Heath C of E Primary, we take a mastery approach to the teaching and learning of mathematics. We teach the skills to ensure our children are resilient learners who become life-long mathematicians. We aim to deliver an inspiring and engaging mathematics curriculum through high quality teaching. In order to improve our mastery approach and improve the quality of our maths teaching, we have implemented Power Maths this year. Our Maths Lead will support and embed this new approach into school and will also develop their knowledge of maths mastery by attending sessions with the Mastery Maths Hub.

The Power Maths approach enables children to be numerate, creative, independent, inquisitive, enquiring and confident. Children should not be afraid to make mistakes and should fully embrace the fact that mistakes are part of learning! A mastery curriculum promotes a deep, long-term, secure and adaptable understanding of the subject, so that children become fluent in calculations; possess a growing confidence to reason mathematically and hone their problem-solving skills.

The intention of the Maths curriculum at Upton Heath C of E Primary is for children to be excited about maths! Developing a positive attitude to this subject is essential. Teachers promote children's enjoyment of maths and provide opportunities for children to build a conceptual understanding of maths before applying their knowledge to everyday problems and challenges. We ensure that challenge is provided for all children, whatever their understanding. Children are encouraged to be brave and push the boundaries, deepening their understanding further.

We ensure that current learning is linked to previous learning as part of a sequential curriculum, enabling children to achieve the end of year expectations. In line with the national curriculum 2014, the Mathematical curriculum at UHPS aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics
- are able to reason mathematically
- can solve problems by applying their mathematics to a variety of routine and non-routine problems

Implementation

At Upton Heath C of E Primary, we recognise that children need to be confident and fluent across each yearly objective. To ensure consistent coverage, teachers follow the Power Maths scheme of learning to support their planning, where each objective is broken down into small steps. Teachers are further developing their understanding of mastery by working within other schools and the Mastery Maths Hub.

Power Maths, recognised by the DfE, is structured around a whole class interactive teaching model that focuses on helping all children to build a deep understanding of maths concepts and confidence in maths.

Power Maths

For each year group, the curriculum strands are broken down into core concepts. These are taught in blocks of lessons giving sufficient time to develop a deep and sustainable understanding of core maths concepts. Each concept is broken down into lessons. Each lesson and concept builds on prior knowledge to help children build a robust and deep understanding of the concept before moving on. High quality resources are used in conjunction with Power Maths, such as NRich and NCETM to support, stretch and challenge all children within the classroom.

Lesson Structure

Within our maths you will see the children:

Power Up -Each Power Maths lesson starts with a whole-class 'Power Up!' activity, designed to support fluency in all key number facts.

Discover – This is then followed by a Discover task to get children to solve a problem that aims to generate curiosity. During the Discover section children may use manipulatives to help them understand the maths and explain their method.

Share -The next stage encourages children to Share the methods they have tried to solve the problem in Discover.

Think Together - We only learn when we are thinking! In this section Power Maths takes the approach "I do, we do, you do", as children apply the knowledge they have just learned in a series of problems that continue to encourage thinking throughout.

Practice - Children are then ready for some independent Practice.

Reflect - The Reflect question helps the children evaluate whether they have understood the key concept and small step that they have been trying to master in the lesson.

CPA Approach

Our curriculum builds on the concrete, pictorial, abstract approach. By using all three, the children can explore and demonstrate their mathematical learning. Together, these elements help to cement knowledge so children truly understand what they have learnt.

All children when introduced to a new concept for the first time are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols. Throughout Upton Heath C of E you will see these three methods being used:

Concrete – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.

Pictorial – children then build on this concrete approach by using these pictorial representations, which can then be used to reason and solve problems.

Abstract – with the foundations firmly laid by using the concrete and pictorial methods the children can move onto an abstract approach using numbers and key concepts with confidence.

Early Years Foundation Stage

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

ELG: Number

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Key Stage 1

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This will involve working with numerals, words and the 4 operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Lower Key Stage 2

The principal focus of mathematics teaching in lower key stage 2 (Y 3-4) is to ensure that pupils become increasingly fluent with whole numbers and the 4 operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.

At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.

By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work. Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word-reading knowledge and their knowledge of spelling.

Upper Key Stage 2

The principal focus of mathematics teaching in upper key stage 2 (Y5-6) is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of year 6, pupils should be fluent in written methods for all 4 operations, including long multiplication and division, and in working with fractions, decimals and percentages. Pupils should read, spell and pronounce mathematical vocabulary correctly.

The Maths Curriculum

Early Years:

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Reception	Autumn 1	Number to 5	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Maths continuous provision areas for children to access daily. Teacher focused activities daily.	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Sorting and sequences			
		Comparing groups within 5			
	Autumn 2	Number to 5			
		Comparing numbers within 5			
	Spring 1	Bonds within 5			
		Numbers greater than 5 (to 10)			
		Comparing numbers to 10			
	Spring 2	Numbers to 10			
		Space and Shape			
	Summer 1	Composition of numbers to 10			
		Counting on and back			
		Numbers to 20			
	Summer 2	Number patterns			
		Measure			

Year 1-6

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Autumn 1	Numbers to 10	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Part whole within 10			
		Addition and subtraction within 10			
Year 2		Numbers to 100			
		Addition and Subtraction			
Year 3		Place value within 1000			
		Addition & Subtraction			
Year 4		Place Value (4 digit numbers)			

		Addition & Subtraction			
Year 5		Place Value within 100,000			
		Place Value within 1,000,000			
		Addition & Subtraction			
		Graphs & Tables			
Year 6		Place Value within 10,000,000			
		Four Operations			
		Fractions			

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Autumn 2	Addition and subtraction within 10	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		2D and 3D shapes			
		Numbers to 20			
Year 2		Money			
		Multiplication & Division			
Year 3		Multiplication & Division			
Year 4		Measure- Perimeter			
		Multiplication & Division			
Year 5		Multiplication & Division			
		Measure – Area & Perimeter			
Year 6		Fractions			
		Geometry- Position & Direction			

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Spring 1	Addition within 20	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Subtraction within 20			
		Numbers to 50			
Year 2		Multiplication & Division			
		Statistics			
		Length & Height			
		Properties of shape			

Year 3		Multiplication & Division			
		Money			
		Statistics			
		Length			
Year 4		Multiplication & Division			
		Measure – Area			
		Fractions			
Year 5		Multiplication & Division			
		Fractions			
Year 6		Decimals			
		Percentages			
		Algebra			

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Spring 2	Introducing length & height	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Introducing weight & volume			
Year 2		Fractions			
Year 3		Fractions			
Year 4		Decimals			
Year 5		Fractions			
		Decimal & Percentages			
Year 6		Measure – Imperial & Metric Measures			
		Measure – Perimeter, Area & Volume			
		Ratio & Proportion			

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Summer 1	Multiplication	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Division			
		Halves and quarters			
		Position and direction			
Year 2		Numbers to 100			
		Problem Solving & Efficient Methods			
		Time			
Year 3		Fractions			
		Time			

		Angles & properties of Shapes			
Year 4		Decimals			
		Money			
		Time			
		Statistics			
Year 5		Decimals			
		Geometry – Properties of Shape			
		Geometry- Position & Direction			
Year 6		Geometry – Properties of shapes			
		Problem Solving			

Cohort	Half term	Theme / Topic	Intent	Implementation	Impact
Year 1	Summer 2	Time	To develop and build on prior knowledge of these concepts and apply them to solve problems with reasoning.	Daily Maths lessons following Power Maths (1 hour) CPA and mastery approach (see above) Daily fluency sessions to consolidate previous learning (15 minutes)	Children will be more secure in the concepts that have been taught. To apply their knowledge to solve mathematical questions and problems. Teachers will have a secure understanding of where their children are at. They will have identified any misconceptions and any children who require more support/interventions.
		Money			
Year 2		Weight, Volume & Temperature			
Year 3		Mass			
		Capacity			
Year 4		Geometry – Angles & 2D Shapes			
		Geometry – Position & Direction			
Year 5		Measure – Converting Units			
		Measure – Volume & Capacity			
Year 6		Statistics			
		Maths Transition Projects			

Maths Progression of Skills

Click on the links below to follow the progression of skills from Year 1 -6 for each of the following mathematical topics.

Number & Place Value

Addition & Subtraction

Multiplication & Division

Fractions (Decimal and Percentages)

Ration & Proportion

Measurement

Geometry (Properties of shape)

Geometry (Position & Direction)

Statistics

Algebra

Impact

Upton Heath C of E Primary has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. The Power Maths programme addresses these preconceptions by ensuring that all children experience challenge and success in Mathematics by developing a growth mindset. Impact is measured through work in books, lesson observations and pupil interviews which instills that:

• Children show confidence in believing that they will achieve and an 'I can' attitude is fostered throughout school.5

• Children demonstrate a quick recall of facts and procedures. This includes the recollection of the times table.

• Each child achieves objectives (expected standard) for their year group.

• The flexibility and fluidity to move between different contexts and representations of maths is evident.

• The chance to develop the ability to recognise relationships and make connections in maths lessons is evident.

• Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

• Children show a high level of pride in the presentation and understanding of the work

British Values and our Christian Distinctiveness.

Upton Heath C of E primary value the diverse ethnic backgrounds of all pupils and families and are tolerant of the variety of faiths celebrated at school. Where appropriate, teachers tailor curriculum objectives to significant events in the Christian calendar, such as Easter, Advent and Lent. Mathematics enables children to develop skills to help them succeed in life: enterprise, resilience, ambition, cooperation, collaboration and communication.

British Values		
Democracy	**The Rule of Law**	**Individual Liberty**
Ethical issues e.g. business and economics. How data can be manipulated through its presentation to convey different messages This could be linked to elections	Through maths we can encourage an understanding of rules and patterns. Maths is driven by rules, children are encouraged to have an understanding of these. Through mathematical investigations children are encouraged to develop their own rules and to give examples that follow the rule and exceptions to the rule	Opportunities to discuss different ways and approaches to problem solving To become lifelong learners and develop their own methods and strategies
Respect	**Tolerance of those from different faiths**	
Respect or the way other people are working Encouragement of collaborative learning in all subjects	Acceptance of positive criticism Allowing mistakes and building on these. Trying different methods and showing resilience	

Assessment

Assessment for learning is continuous throughout the planning, teaching and learning cycle. Key mathematical knowledge is taught to enable and promote the development of children's mathematical enquiry skills. Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of their class. In addition, we place a strong emphasis on the power of questioning: this enables us both to explore mathematical topics together as a class as well as verbally develop reasoning skills during our lessons. Children are encouraged to take ownership of their learning through self- and peer- assessment. At the end of each lesson, children complete the Reflect question and evaluate whether they have understood the small step studied and whether or not they have mastered it.

Summative assessment takes place at the end of each unit using Power Maths end of unit check and will inform teachers of how well the children have understood the unit and next steps to inform planning. At the end of each term children will be assessed using White Rose end of term assessments which will then be used alongside the teacher's formative assessment to track the progress of children and is recorded on Insight, our assessment tracker. Children's progress and attainment are discussed by teachers and the Head Teacher during progress meetings.

Assessment is supported by the use of the following strategies:

- Observing children at work, individually, in pairs, small groups and in class during whole class teaching.

- Using differentiated, open-ended questions that require children to explain and unpick their understanding.
- The use of Knowledge Organisers in every lesson to enable the children to guide their own learning and use them to quiz the children and to use historical vocabulary appropriately.
- Providing effective feedback to learning, to support learning moving forward and to provide opportunities to self-assess, consolidate and study in-depth.
- Moderation of work and books will be used to inform teacher assessment and reflect on achievements and outcomes against agreed success criteria and learning objectives.

We are committed to providing a teaching and learning environment which ensures that all children are able to progress with their learning, regardless of social class, gender, culture, race, or SEND.

Maths Vocabulary

New maths vocabulary for Year 1							
Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	General/problem solving

Number Zero, one, two, three to twenty, and beyond None Count (on/up/to/from/ down) Before, after More, less, many, few, fewer, least, fewest, smallest, greater, lesser Equal to, the same as Odd, even	Number bonds, number line Add, more, plus, make, sum, total, altogether Inverse Double, near double Half, halve Equals, is the same as (including equals sign) Difference between How many more to make..?, how	Odd, even Count in twos, threes, fives Count in tens (forwards from/backwards from) How many times? Lots of, groups of Once, twice, three times, five times Multiple of, times, multiply, multiply by Repeated addition	Full, half full, empty Holds Container Weigh, weighs, balances Heavy, heavier, heaviest, light, lighter, lightest Scales Time Days of the week: Monday, Tuesday, etc. Seasons: spring, summer, autumn, winter Day, week, month, year, weekend Birthday, holiday Morning, afternoon, evening,	Position Over, under, underneath, above, below, top, bottom, side on, in, outside, inside around, in front, behind Front, back Before, after Beside, next to, Opposite Apart Between, middle, edge, centre Corner	Group, sort Cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square Shape Flat, curved, straight, round Hollow, solid Corner (point, pointed) Face, side, edge Make, build, draw	Whole Equal parts, four equal parts One half, two halves A quarter, two quarters	Listen, join in Say, think, imagine, remember Start from, start with, start at Look at, point to Put, place, fit Arrange, rearrange Change, change over Split, separate Carry on, continue, repeat, what comes next? Find, choose, collect, use, make, build

Pair Units, ones, tens Ten more/less Digit Numeral Figure(s) Compare (In) order/a different order Size Value Between, halfway between Above, below	many more is…than..?, how much more is..? Subtract, take away, minus How many fewer is…than..?, how much less is..?	Array, row, column Double, halve Share, share equally Group in pairs, threes, etc. Equal groups of Divide, divided by, left, left over	night, midnight Bedtime, dinnertime, playtime Today, yesterday, tomorrow Before, after Next, last Now, soon, early, late Quick, quicker, quickest, quickly , fast, faster, fastest, slow, slower, slowest, slowly Old, older, oldest, new, newer, newest Takes longer, takes less time Hour, o'clock, half past Clock, watch, hands How long ago?, how long will it be to…?, how long will it take to…?, how often? Always, never, often, sometimes, usually Once, twice First, second, third, etc. Estimate, close to, about the	Direction Journey Left, right, up, down, forwards, backwards, sideways Across Close, far, near Along, through To, from, towards, away from Movement Slide, roll, turn, whole turn, half turn Stretch, bend			Tell me, describe, pick out, talk about, explain, show me Read, write, record, trace, copy, complete, finish, end Fill in, shade, colour, tick, cross, draw, draw a line between, join (up), ring, arrow Cost Count, work out, answer, check same number(s)/different number(s)/missing number(s) Number facts, number line, number track, number square, number cards Abacus, counters, cubes, blocks, rods, die, dice, dominoes, pegs, peg board Same way, different

			same as, just over, just under Too many, too few, not enough, enough Length, width, height, depth Long, longer, longest, short, shorter shortest, tall, taller, tallest, high, higher, highest Low, wide, narrow, deep, shallow, thick, thin Far, near, close Metre, ruler, metre stick Money, coin, penny, pence, pound, price, cost, buy, sell, spend, spent, pay, change, dear(er), costs more, costs less, cheaper, costs the same as How much?, how many? Total				way, best way, another way In order, in a different order Not all, every, each

New maths vocabulary for Year 2						
Number and place value	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	Data/statistics	General/problem solving
Numbers to one hundred Hundreds Partition, recombine Hundred more/less	Quarter past/to m/km, g/kg, ml/l Temperature (degrees)	Rotation Clockwise, anticlockwise Straight line Ninety degree turn, right angle	Size Bigger, larger, smaller Symmetrical, line of symmetry Fold Match Mirror line, reflection Pattern, repeating pattern	Three quarters, one third, a third Equivalence, equivalent	Count, tally, sort Vote Graph, block graph, pictogram, Represent Group, set, list, table Label, title Most popular, most common, least popular, least common	Predict Describe the pattern, describe the rule Find, find all, find different Investigate

New maths vocabulary for Year 3							
Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	Data/statistics
Numbers to one thousand	Column addition and subtraction	Product Multiples of four, eight, fifty and one hundred Scale up	Leap year Twelve-hour/twenty-four-hour clock Roman numerals I to XIII	Greater/less than ninety degrees Orientation (same orientation, different orientation)	Horizontal, vertical, perpendicular and parallel lines	Numerator, denominator Unit fraction, non-unit fraction Compare and order Tenths	Chart, bar chart, frequency table, Carroll diagram, Venn diagram Axis, axes Diagram

New maths vocabulary for Year 4						
Number and place value	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions and decimals	Data/statistics
Tenths, hundredths Decimal (places) Round (to nearest) Thousand more/less than Negative integers Count through zero Roman numerals (I to C)	Multiplication facts (up to 12x12) Division facts Inverse Derive	Convert	Coordinates Translation Quadrant x-axis, y-axis Perimeter and area	Quadrilaterals Triangles Right angle, acute and obtuse angles	Equivalent decimals and fractions	Continuous data Line graph

New maths vocabulary for Year 5

Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions, decimals and percentages
Powers of 10	Efficient written method	Factor pairs Composite numbers, prime number, prime factors, square number, cubed number Formal written method	Volume Imperial units, metric units	Reflex angle Dimensions	Regular and irregular Polygons	Proper fractions, improper fractions, mixed numbers Percentage Half, quarter, fifth, two fifths, four fifths Ratio, proportion

New maths vocabulary for Year 6

Number and place value	Addition and subtraction	Multiplication and division	Geometry (position and direction)	Geometry (properties of shape)	Fractions, decimals and percentages	Algebra	Data/statistics
Numbers to ten million	Order of operations	Order of operations Common factors, common multiples	Four quadrants (for coordinates)	Vertically opposite (angles) Circumference, radius, diameter	Degree of accuracy Simplify	Linear number sequence Substitute Variables Symbol Known values	Mean Pie chart Construct