Mathematics Curriculum at St James' C of E Infant School

KS1 Mathematics

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Number and place value		Number and place value	
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Fractions, decimals and percentages		Fractions, decimals and percentages	
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Year 1

Number and place value

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

CORE

- Count to 20 forwards and backwards
- Count to 100 and across 100 from any given number
- Count backwards from any given number, including crossing 100

WORKING DEEPER

Answer reasoning questions linked to counting, e.g. if I count backwards from 18, will I say 20?

Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens

CORE

- Count a number of objects to 20
- Order objects using language first, second, first
- Read numbers to 40
- Read numerals to 100
- Write numbers to 100
- Count in 2s
- Count in 10s
- Count in 5s
- Complete missing numbers in a sequence

WORKING DEEPER

Answer reasoning questions about counting, e.g. if I count in 5s from 0, will I say 12?

Answer reasoning questions about place value, e.g. what is the largest number that you can make from these 4 number cards and explain your reasoning?

Given a number, identify one more and one less

CORE

- Identify one more than a given number
- Identify one less than a given number

WORKING DEEPER

Complete missing number sentences such as ? is one more than ? and explain reasoning

Explain reasoning, e.g. what happens in this sequence of numbers: 11, 12, 13

Solve "I think of a number" problems involving 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

CORE

- Use practical equipment to represent a 2 digit number
- Compare two numbers that have been created with practical equipment and explain how they are different
- Position two numbers on a number line and reason as to where they have been positioned

WORKING DEEPER

Answer reasoning questions linked to place value, e.g. which number is the odd one out and why?

Read and write numbers from 1 to 20 in numerals and words

CORE

- Read numbers from 1 – 20 in numerals
- Write numbers from 1 – 20 in numerals
- Read numbers from 1 – 20 in words
- Write numbers from 1 – 20 in words

WORKING DEEPER

Answer problems involving writing numbers, e.g. Chris was writing numbers, he stopped for a rest after writing 20 digits. What number did he stop on?

Addition and Subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

CORE

- Begin to use addition (+), subtraction (-) and equals (=) signs to record their work
- Read the mathematical statements they have recorded
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=)

WORKING DEEPER

Can write related facts about a number using addition and subtraction

Represent and use number bonds and related subtraction facts within 20

CORE

- Using apparatus represent and use number bonds and related subtraction facts up to 5
- Recall and use addition and subtraction facts for all numbers up to 5
- Recall and use addition and subtraction facts for all numbers up to 10 fluently
- Recognise the effect of adding zero
- Using apparatus represent and use number bonds and related subtraction facts up to 20
- Recall and use addition and subtraction facts for all numbers facts to 20 fluently
- Develop the difference between two numbers on a numberline

- Understand the inverse relationship between addition and subtraction
- Solve missing number calculations to 20

WORKING DEEPER

Can solve "I think of a number" problems using addition and subtraction facts to 20

Can explain the effect of adding 0 to a number and reason why

Add and subtract one-digit and two-digit numbers to 20, including zero

CORE

- Add and subtract numbers mentally, using Reordering
- Add and subtract numbers mentally, using Partitioning
- Add and subtract numbers mentally, using Bridging through 10
- Add and subtract numbers mentally, using near doubles
- Use a numberline to support adding 2 digit and 1 digit numbers

WORKING DEEPER

Can explain the most efficient strategy to use in addition and subtraction and why

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems, such as 7 = -9

CORE

- Show that addition can be done in any order (commutative)
- Show that subtraction can't be done in any order
- Understand and use a variety of mathematical language associated with addition and subtraction, e.g. put together, add , altogether, total, take away, distance between, more than and less than
- Solve missing number addition and subtraction problems involving single-digit numbers
- Solve simple 1 step problems with addition and subtraction

WORKING DEEPER

Solve problems that involve more complex reasoning e.g. I know that 6 + 4 is 10 so I can work out 7 + 4 = 11

Multiplication and Division

Solve one-step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

CORE

- Use concrete objects to double numbers to 10
- Use concrete objects to half numbers to 20
- Count in steps of 10
- Count in steps of 2
- Count in steps of 5
- Find a total when counting in groups of 10
- Find a total when counting in groups of 2
- Find a total when counting in groups of 5
- Solve word problems involving multiplication
- Use an array to represent a multiplication fact
- Share objects equally into groups of 2
- Share objects equally into groups of 5
- Share objects equally into groups of 10
- Solve word problems involving division

WORKING DEEPER

Explain why all numbers can be doubled but only some can be halved

Explain whether a number will appear in a sequence or not

Solve open ended problems involving multiplication where there is more than one option as the answer

Use an array to explain the commutative property of multiplication

Solve open ended problems involving division where there is more than one option as the answer, e.g. How many ways can I share 20 toys equally into baskets?

Fractions, decimals and percentages

Recognise, find and name a half as one of two equal parts of an object, shape or quantity

CORE

- Understand fraction as equal parts of a whole
- Understand that to half a shape or object you need two equal parts
- Understand one half as one of two equal parts of a whole

WORKING DEEPER

Can describe the fraction of a shape or group of objects when there are more than two or four pieces or objects

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity

CORE

- Understand quarter of a shape or objects is four equal parts
- Understand one quarter as one of four equal parts of a whole

WORKING DEEPER

Find halves and quarters of lengths and quantities

Measurement

Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]

CORE

- Can use non-standard measures to measure lengths and heights
- Can estimate and measure whether an object is longer or shorter than a metre stick/a class ruler
- Can use language of longer/shorter, tall/short, double/half in relation to length and height

WORKING DEEPER

Can solve problems involving comparisons of measure, e.g. A long brick is twice the length of a short brick. Which is longer: 2 long bricks or 3 short bricks? 3 long bricks or 5 short bricks?

Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than]

CORE

- Can compare mass of objects by holding them and using non-standard units
- Can use balance scales to compare the mass of objects
- Can estimate and measure whether an object weighs more or less than a kilogram
- Can use language of heavy/light, heavier than and lighter than in relation to mass/weight

WORKING DEEPER

Can use measuring equipment to solve problems, e.g. Here are four items (of similar mass). Can you use the balance scales to sort them from lightest to heaviest?

Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]

CORE

- Can use non-standard measures to measure capacity
- Can compare the capacity of different measuring vessels
- Can estimate and measure whether a container contains more or less than a litre jug
- Can use language of full/empty, more than/less than, half, full, quarter

WORKING DEEPER

Can talk about containers that are half as full as another? Twice as full?

Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]

CORE

- Can estimate and measure whether an activity lasts longer/less than a minute/hour
- Can use language of quicker, slower, earlier and later

WORKING DEEPER

Can solve problems involving periods of time, e.g. I walk to school every day. On Monday my journey takes 10 minutes. On Tuesday I walk more slowly. Does my journey take more or less time than on a Monday? Explain your answer

Measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time (hours, minutes, seconds)

CORE

- Can use standard units to measure and compare length and height (cm and m)
- Can use standard units to measure and compare mass/weight (kg)
- Can use standard units to measure and compare capacity and volume (l)
- Can measure in hours, seconds and minutes
- Can decide which measuring tool could be used in a particular situation

WORKING DEEPER

Can select independently the correct unit of measure to record their measurements

Recognise and know the value of different denominations of coins and notes

CORE

- Can identify coins by sorting them
- Can recognise the value of each coin and that some coins have a greater value than others

- Can recognise the value of each note and that some notes have a greater value than others
- Can add up small amounts of money and say how much altogether
- Can pay for items of a small value e.g. 3p, 5p, 7p, 9p using coins
- Can give change using 1p coins
- Can answer questions such as: Michael had £5. He spent £3. How much did he have left? Rosie had a 10p coin. She spent 3p. How much change did she get?

WORKING DEEPER

Can recognise an amount can be paid for in a variety of ways

Can solve problems involving money, e.g. Ella has two silver coins. How much money might she have?

Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]

CORE

- Can use language before, after, next, first, in relation to time passing and sequencing of events in familiar stories or day-to-day routines
- Can use terms such as morning, afternoon and evening, yesterday and tomorrow

WORKING DEEPER

Can use the language of order to discuss events on a calendar

Recognise and use language relating to dates, including days of the week, weeks, months and years

CORE

- Can learn the order of the days of the week and learn that weekend days are Saturday and Sunday
- Can name and order the months of the year
- Can record significant dates in a class calendar

WORKING DEEPER

Can say the day after next and the day before yesterday

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times

CORE

- Can tell time to the hour
- Can draw hands on the clock for times to the hour
- Can tell time to half past the hour
- Can draw hands on the clock for times for half hour
- Can recognise times to the hour and half hour in day to day routines
- Can use clocks and time lines to answer questions such as: It is half past seven. What time will it be in 4 hours time? What time was it two hours ago?

WORKING DEEPER

Can reason about what time it is, e.g. using only the hour hand, what time could or couldn't it be?

Geometry: Properties of shape

Recognise and name common 2D shapes [for example, rectangles (including squares), circles and triangles]

CORE

- Recognise 2D shapes in a variety of orientations - rectangles (including squares), circles, triangles
- Describe 2D shapes according to their properties (sides and corners)

WORKING DEEPER

Can explain, What is the same and what is different about a set of shapes?

Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres]

CORE

- Recognise 3D shapes in a variety of orientations - cylinder, triangular prism, cone, cube, cuboid, pyramids and spheres

WORKING DEEPER

Describe 3D shapes according to their properties (faces, vertices and edges)

Can identify 3D shapes from their 2D shadows?

Geometry: Position and Direction

Describe position, direction and movement, including whole, half, quarter and three-quarter turns

CORE

- Can distinguish between left and right
- Can use positional language, e.g. next to
- Can use ordinal language, e.g. 1st, 4th
- Can use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside
- Can connect turning clockwise with movement on a clock face

WORKING DEEPER

Pupils use the language of position, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside

Can ask questions to find the position of an object

Year 2

Number and place value

Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward

CORE

- Count in 2s, 5s and 10s from 0
- Count in 3s from 0
- Count forwards and backwards in 5s from 0
- Count forwards and backwards in 2s from 0
- Count forwards and backwards in 10s from any number
- Solve problems involving counting, e.g. I say a number when counting in 2s and 10s. What could it be?

WORKING DEEPER

Explain reasoning in counting activities, e.g. I count in 10s from 3, will I say 35?

Recognise the place value of each digit in a two-digit number (tens, ones)

CORE

- Identify the number of tens and ones in a 2 digit number
- Identify the larger of two 2 digit numbers and explain reasoning

WORKING DEEPER

Solve problems involving 2 digit numbers, e.g. given 4 digit cards, what are the range of numbers over 50 that you can make? How do you know you have them all?

Identify, represent and estimate numbers using different representations, including the number line

CORE

- Create 2 digit numbers using concrete equipment and use to explain reasoning about the size of numbers
- Position 2 digit numbers on a marked number line and explain reasoning about where they are positioned

WORKING DEEPER

Position numbers on an unmarked number line

Solve open ended problems using different representations, e.g. I have 4 beads to position on a spike abacus. What range of numbers can I make?

Compare and order numbers from 0 up to 100; use <, > and = signs

CORE

- Position the <, > and = signs between visual representations of two 2 digit numbers
- Position the <, > and = signs correctly between two 2 digit numbers

WORKING DEEPER

Position the <, > and = signs correctly between two calculations or create calculations to make the signs correct

Read and write numbers to at least 100 in numerals and in words

CORE

- Read numbers from 1 - 100 in numerals
- Write numbers from 1 - 100 in words

WORKING DEEPER

Use the patterns in numbers 1 - 100 to investigate numbers over 100

Use place value and number facts to solve problems

CORE

- Use coins to make given amounts of money, explaining reasoning as to how many coins have been used
- Solve problems linked to place value

WORKING DEEPER

When given an amount of money, investigate the range of ways to make the amount using £1, 10p and 1p coins

Solve open ended problems linked to place value

Addition and Subtraction

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

CORE

- Relate number facts to 10 to adding and subtracting multiples of 10 within 100
- Recall and use addition and subtraction facts to 20 fluently; derive and use related facts to 100
- Solve missing box and missing symbol calculations

WORKING DEEPER

Find different possibilities for addition and subtraction calculations to tally a given number

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

CORE

- Add and subtract a 2-digit number and 1s mentally
- Add and subtract a 2-digit number and 10s mentally
- Add and subtract 2 simple, 2-digit numbers, which do not involve bridging a 10 mentally
- Adding 3 single-digit numbers
- Add and subtract numbers using concrete objects and pictorial representations including using a number line to add numbers that require bridging

WORKING DEEPER

Insert missing numbers and symbols into calculations involving addition and subtraction, e.g. 6? + ?4 = 100

Discuss what's the same and what's different about addition and subtraction calculations

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

CORE

- Show that addition can be done in any order (commutative)
- Show that subtraction can't be done in any order

WORKING DEEPER

Can derive related addition and subtraction facts from a given fact

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

CORE

- Recognise and use the inverse relationship between addition and subtraction
- Check calculations using the inverse operation

WORKING DEEPER

Within an addition and subtraction calculation, solve missing number problems at least involving a 2-digit number and 1s or 10s

Within an addition and subtraction calculation, solve missing number problems involving a wider range of numbers

Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures and applying their increasing knowledge of mental and written methods

CORE

- Solve simple 2-step problems with addition and subtraction, applying increasing knowledge of mental and written methods

- Add and subtract numbers using objects, pictorial representations and the written columnar method adding several 2-digit numbers
- Add and subtract numbers using objects, pictorial representations and the written columnar method subtracting 2-digit numbers
- Add and subtract numbers using objects, pictorial representations and the written columnar method adding a 2-digit number to a 3-digit number
- Add and subtract numbers using objects, pictorial representations and the written columnar method adding 3-digit numbers

WORKING DEEPER

Use addition and subtraction facts to solve more complex problems

Multiplication and Division

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

CORE

- Use concrete objects to show understanding of multiplication
- Recall the 10x table in a random order
- Recall the 2x table in a random order
- Recall the 5x table in a random order
- Recognise odd and even numbers

WORKING DEEPER

Recognise patterns between the 5 and 10 times tables

Explain reasoning about the answers to word problems, e.g. would you rather have 5 packets of biscuits with 3 in each packet, or 4 packets of biscuits with 10 in each packet?

Explain reasoning about what happens when you add and multiply pairs of 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

CORE

- Write addition sentences as multiplication sentences and vice versa
- When shown an array write the 4 addition and multiplication sentences that the image represents and 2 division facts

WORKING DEEPER

Use 2, 5 and 10 times tables to work out other facts, e.g. when looking at an array of 8 x 7 how can the 2, 5 and 10 times tables be used to work this out

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot

CORE

- Use an array to explain the commutative law, e.g. why 2 x 5 is the same as 5 x 2?
- Use an array to record the 2 division sentences that can be made from the image
- Explain why a division calculation cannot be done in any order, e.g. why is 2 ÷ 10 not 5?

WORKING DEEPER

Solve reasoning questions about related facts, e.g. True or false, 5 × 6 = 6 × 5, 5 × 3 = 10 × 6, 5 × 4 = 2 × 10. Explain your reasoning

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

CORE

- Use materials, arrays, repeated addition, mental methods, and multiplication and division facts to solve multiplication word problems in context
- Use materials, arrays, mental methods, and multiplication and division facts to solve sharing word problems in context
- Use materials, arrays, mental methods, and multiplication and division facts to solve grouping word problems in context

- Use materials, arrays, repeated addition, mental methods, and multiplication and division facts to solve multi-step problems involving multiplication and division

WORKING DEEPER

Solve "I think of a number" problems involving multiplication and division

Solve open ended problems involving multiplication and division where there is more than one option as the answer, e.g. if you wanted to share cakes equally between 5 people what quantity of cakes could be used?

Explain why there is a remainder in some problems and why the remainder cannot be greater than the divisor

Fractions, decimals and percentages

Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity

CORE

- Find fractions of quantities with resources

WORKING DEEPER

Solve problems involving 1/2 and 1/4

Can say which fraction is largest/smallest and why

Write simple fractions for example, 1/2 of 6 = 3

CORE

- Know to calculate a fraction you divide the object/quantity by the denominator and multiply by the numerator
- Understand a fraction is an operator

WORKING DEEPER

Be able to make fractions on a number line and reason why the fractions are in that position

Recognise the equivalence of 2/4 and 1/2

CORE

- Know 1/2 is equivalent to 2/4
- Find 1/2 and 2/4 of lengths and objects

WORKING DEEPER

Can find all the possibilities of how to shade 16 squares into 1/2 and 1/4. What do they notice?

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

CORE

- Can make sensible estimations in relation to all areas of measure
- Can measure accurately in centimetres and metres using rulers and metre sticks
- Can record measures using correct abbreviations cm and m
- Can measure accurately in grams and kilograms using measuring scales
- Can record measures using correct abbreviations g and kg
- Can measure accurately in millilitres and litres using measuring vessels
- Can record measures using correct abbreviations ml and l
- Can measure accurately in degrees Celsius
- Can record measures using correct abbreviations °C
- Can measure accurately in hours, seconds and minutes
- Can decide the correct unit of measure to use in a given situation, e.g. what unit of measure would we use to measure the mass of an apple?
- Can decide on the appropriate measuring tool to use in a given situation, e.g. what would you use to see how much water is in this cup?

WORKING DEEPER

Can make comparisons between different objects using appropriate units of measure

Compare and order lengths, mass, volume/capacity and record the results using >, < and =

CORE

- Can compare and order different units of measure
- Can use ‹› and = to record comparisons

WORKING DEEPER

Can reason about, what is the same and what is different about different units of measure? e.g. here is a litre bottle and a 2 litre bottle containing some water. What's the same? What is different?

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

CORE

- Can record using symbols £ and p (separately depending on the unit being used)
- Can add together different coins and find the total
- Can find coins that make a particular amount, e.g. which coins could you use to make 20p?

WORKING DEEPER

Can solve problems involving change

Find different combinations of coins that equal the same amounts of money

CORE

- Can say how many different combinations of coins can you use to make a given total, e.g. 20p

WORKING DEEPER

Solve problems like: Holly has a 5p, 1p, 50p and 10p. Harry has the same amount of money but has 6 coins. What are they? Is there only one possible answer?

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

CORE

- Can find totals of different amounts of money
- Can decide which coins could be used to pay for the total
- Can solve subtraction problems such as: Jess has saved 62p. She spends 15p. How much does she have left?
- Can find change from a given amount, e.g. Jess buys a banana for 23p. She pays for it using a 50p. How much change does she get?

WORKING DEEPER

Can solve problems in the context of giving change, e.g. Grace uses a £2 coin to buy a can of drink which costs 85p. She is given four coins in change. Find all the possible combinations of coins that could have been given

Compare and sequence intervals of time

CORE

- Can describe intervals of time in days
- Can state the difference between time in days

WORKING DEEPER

Can organise events considering their sequence and amount 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

CORE

- Can tell the time to quarter past the hour

- Can tell the time to quarter to the hour
- Can tell the time to the 5 minutes

WORKING DEEPER

Can explain thinking: e.g. the time is 3.15pm. Kate says that in two hours she will be at her football game which starts at 4.15. Is Kate right? Explain why?

Know the number of minutes in an hour and the number of hours in a day

CORE

- Know that there are 60 minutes in an hour
- Know that there are 24 hours in a day

WORKING DEEPER

Can reason around the purpose of the minute and hour hand, e.g. there isn't any point in having a minute hand on a clock because I can tell the time without it. Do you agree with this statement?

Geometry: Properties of shape

Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line

CORE

- Identify the number of sides in a range of 2D shapes, including quadrilaterals and polygons
- Identify vertical lines of symmetry in 2D shapes

WORKING DEEPER

Can name the different shapes made from the pieces of a square when you cut across its diagonals?

Describe the properties of the shapes. Can you make a shape with a line of symmetry?

Can you make a shape with a line of symmetry?

Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces

CORE

- Recognise and name 3D shapes, including cuboids, prisms and cones
- Describe the properties of 3D shapes, including number of faces, edges and vertices

WORKING DEEPER

Can solve problems using properties of shape, e.g. Jack has made a cube using 12 sticks and 8 balls of modelling clay. What shape could he make with: 6 sticks and 4 balls of clay? 4 long sticks, 8 short sticks, 8 balls of clay?

Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]

CORE

- Identify 2D shapes on the surface of a 3D shape, including: A triangle on a pyramid, A square on a cube, A rectangle on a cuboid, A circle on a cylinder and cone, A triangle and rectangle on a triangular prism

WORKING DEEPER

Can reason as to what shape it could or couldn't be based on knowing one of the faces of a 3D shape

Compare and sort common 2D and 3D shapes and everyday objects

CORE

- Sort and classify 2D and 3D shapes and everyday objects using a Venn diagram, according to their properties
- Can sort and classify 2D and 3D shapes and everyday objects using a Carroll diagram

WORKING DEEPER

Solve reasoning questions about 2D and 3D shapes, e.g. for a given set of 2D and/or 3D shapes, say what is the same and what is different; Which is the odd one out, etc.

Geometry: Position and Direction

Order and arrange combinations of mathematical objects in patterns and sequences

CORE

- Can describe patterns in sequences
- Can predict what comes next in a sequence
- Can continue a pattern

WORKING DEEPER

Can predict what the 10th shape would be in the pattern

Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)

CORE

- Can recognise whole and half turns
- Can recognise quarter and three quarter turns
- Can give instructions for a friend/robot using a right angled turns

WORKING DEEPER

Can use a mixture of turns and clockwise/anti-clockwise moves to describe a sequence of moves

Statistics

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

CORE

- Generate data in everyday situations, e.g. dinner or packed lunch?
- Present data in different ways using a scale of 2, 5 or 10
- Answer retrieval questions from the charts and graphs that they are working with

WORKING DEEPER

Evaluate the effectiveness of graphs and tables, e.g. does this chart tell us how popular school dinners are? Reason why or why not?

Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

CORE

- Answer questions about the data that they have collected using scales of 2, 5 and 10, e.g. which is the most popular chocolate bar when a full chocolate bar represents 2 people on a pictogram?

WORKING DEEPER

Answer reasoning questioning about the data, e.g. tell me a truth and a fiction about this graph? What is the same and different about these two charts?

Ask and answer questions about totalling and comparing categorical data

CORE

- Find the total of two categories on a pictogram, tally, block diagram and simple table
- Find the difference between two categories on a pictogram, tally, block diagram and simple table

WORKING DEEPER
Answer reasoning questioning about the data, e.g., what would be a silly answer to the question, what is the difference in the number of children who like rugby and football? Explain reasoning.