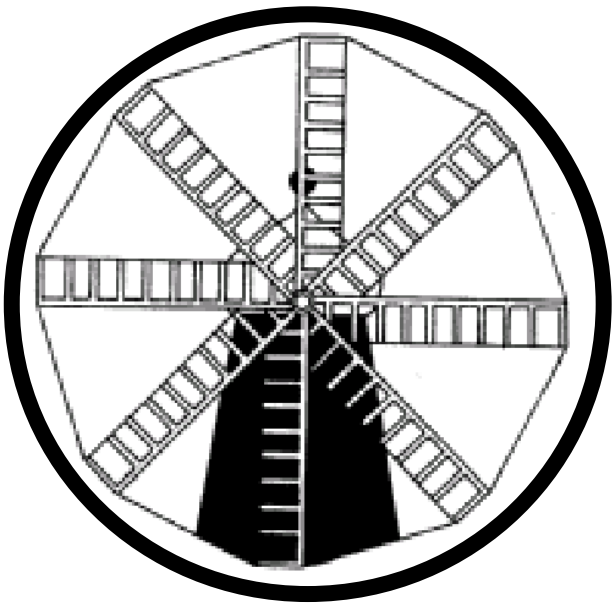
Heckington St. Andrew's Primary School



Mathematics

Learning Journey

Name: _____

YEAR THREE

NUMBER—Number and Place Value

I can count in multiples of 4.	I can count in multiples of 8.	I can count in multiples of 50
I can count in multiples of 100.	I can find 10 more or less than a given number.	I can find 100 more or less than a given number.
I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	I can compare and order numbers up to 1000.	I can identify, represent and estimate numbers using different representations.
I can read and write numbers up to 1000 in numerals and in words.	I can solve number problems and practical problems involving these ideas.	

NUMBER—Addition and Subtraction

I can mentally add three-digit number and ones.	I can mentally add three-digit numbers and tens.	I mentally can add a three-digit number and hundreds.
I can mentally subtract ones from a three-digit number .	I can mentally subtract a tens from a three-digit number .	I can mentally subtract hundreds from a three-digit number.
I can use a formal written methods of columnar addition.	I can use a formal written methods of columnar subtraction.	I can estimate the answer to a calculation.
I can use the inverse operation to check answers .	I can add and subtract money, including £ and p.	I can solve addition and subtraction problems.
I can solve missing number addition problems	I can solve missing number subtraction problems.	

NUMBER—Multiplication and Division and Place Value

I can recall the multiplication facts for the 3 times table.	I can recall the multiplication facts for the 6 times table.	I can recall the multiplication facts for the 4 times table.
I can recall the multiplication facts for the 8 times table.	I can recall the division facts for the 3 times table.	I can recall the division facts for the 6 times table.
I can recall the division facts for the 4 times table.	I can recall the division facts for the 8 times table.	I can give the multiplication fact that is linked to a division fact.
I can multiply a two-digit number by a one-digit number (mentally).	I can divide a two-digit number by a one-digit number (mentally).	I can use a written method to multiply a two-digit number by a one-digit number.
I can use a written method to divide a two-digit number by a one-digit number.	I can connect the 2,4 and 8 x tables and the 3 and 6 x tables.	I can solve problems, including missing number problems.
I can scale objects up by using my knowledge of multiplication and division.	I can scale objects down using my knowledge of multiplication and division.	I can solve problems in which 'n' objects are connected to 'm' objects (e.g. 3 hats and 4 coats— how many different outfits?)

NUMBER—Fractions

I can count up and down in tenths on a number line.	I can find tenths by dividing an object into ten EQUAL parts.	I can find fractions of a discrete set of objects: unit fractions (1/3 of 36).
I can find fractions of a discrete set of objects: non-unit fractions (2/3 of 36).	I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	I can recognise equivalent fractions (using diagrams)
I can show equivalent fractions (using diagrams).	I can add and subtract fractions with the same denominator (within a whole).	I can compare unit fractions and fractions with the same denominator.
I can put fractions with the same denominator in order.	I can solve problems involving fractions.	

MEASUREMENT

I can choose suitable units to estimate and measure length.	I can suggest suitable units to measure mass .	I can suggest suitable units to measure volume/ capacity.
I can measure different lengths m / cm / mm.	I can measure different mass Kg / g.	I can measure different volume and capacity l / ml.
I can add and subtract different lengths m / cm / mm.	I can add and subtract different mass Kg / g.	I can add and subtract different volume and capacity l /ml.
I can compare different lengths m / cm / mm.	I can compare different mass Kg / g.	I can compare different volume and capacity l / ml.
I can add money, including £ and p.	I can subtract money, including £ and p. I can work out change.	I can tell and write time from an analogue clock.
I can use Roman numerals from I to XII.	I can tell and write time from a 12-hour and 24-hour clock.	I can read the time on a clock to the nearest minute.
I can read the time on a clock to the nearest 5 minutes.	I can record and compare time in terms of seconds, minutes and hours.	I can use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight.
I know the number of seconds in a minute.	I know the number of days in each month, year and leap year.	I can find how long an activity takes if I know when it starts and when it ends .
I can compare durations of events.		

GEOMETRY—Properties of shape

I can draw 2D shapes.	I can recognise whether a 2-D shape is symmetrical or not and describe how I know.	I can make 3-D shapes using modelling materials.
I can recognise 3-D shapes in different orientations.	I can describe the properties of 3-D shapes.	I recognise that angles are a property of shape or a description of a turn.
I can identify right angles.	I recognise that two right angles make a half-turn, three make three quarters or a turn and four a complete turn.	I can identify whether angles are greater than or less than a right angles (90^0).
I can identify horizontal and vertical lines.	I can identify pairs of perpendicular and parallel lines.	

STATISTICS

I can read pictograms.	I can read tally charts and tables.	I can read bar charts.
I can present data using scaled pictograms.	I can present data using scaled tables.	I can present data using scaled bar charts.
I can answer questions about pictograms.	I can answer questions about tally charts and tables.	I can answer questions about bar charts.
I can ask questions linked to pictograms.	I can ask questions linked to tally charts and tables.	I can ask questions linked to bar charts.
I can solve one step problems involving pictograms.	I can solve one step problems involving tally charts and tables.	I can solve one step problems involving bar charts.
I can solve two step problems involving pictograms.	I can solve two step problems involving tally charts and tables.	I can solve two step problems involving bar charts.

YEAR FOUR

NUMBER—Number and Place Value

I can count in multiples of 25, 9,7,6	I can count in multiples of 1000.	I can find 1000 more or less than a given number
I can count on and back, using negative numbers.	I understand the place value of each digit in a four digit number (thousands, hundreds, tens and ones).	I can read four-digit numbers.
I can write (in figures and words) numbers beyond 1000.	I can order and compare numbers beyond 1000.	I can identify represent and estimate numbers using different representations.
I can round numbers to the nearest 10.	I can round numbers to the nearest 100.	I can round numbers to the nearest 1000.
I can read Roman numerals to 100 (I to C).	I know and can explain how the Roman number system compares to our system now.	I can solve number and practical problems.

NUMBER—Addition and Subtraction

I can work out sums and differences of multiples of 10 or 100.	I can add two-digit numbers mentally.	I can subtract two-digit numbers mentally.
I can add numbers with up to three-digits in my head (where it is most efficient).	I can subtract three-digit in my head (where most efficient).	I can add three-digit and four-digit numbers using a written method (columnar) where appropriate.
I can subtract three-digit and four digit numbers using a written method (columnar) where appropriate.	I can estimate answers using rounding to check answers to calculations.	I can use the inverse operation to check answers to calculations.
I can solve two step addition problems in a context.	I can solve two step subtraction problems in a context.	I can decide which operation and method to using when solving problems.

Number—Multiplication and Division and Place Value

I know almost all my tables to 12 x 12. 2 6 10 3 7 11 4 8 12 5 9	I know all multiplication facts to 12 × 12 (even when mixed). 2 6 10 3 7 11 4 8 12 5 9	I know all division facts to 12 × 12 (even when mixed). 2 6 10 3 7 11 4 8 12 5 9
I can multiply by 1 and 0 (mentally).	I can divide by 1 and 0 (mentally).	I can multiply together three numbers (mentally) - making connections to the most efficient combinations.
Use place value, known and derived facts to multiply three numbers together.	I can recognise and use factor pairs and commutativity in mental calculations (3x2=2x3).	I can estimate and check the result of a calculation.
I can use a written method to multiply a two-digit number and three-digit number by a one-digit	I can use a formal written method to divide a two-digit number by a one-digit number.	I can use the distributive law to multiply two digit numbers by 1 digits numbers.
I can scale objects by using multiplication and explain the process.	I can scale objects by using division and can explain the process.	I can solve problems where n objects are connected to m objects.

NUMBER—Fractions and Decimals

I can recognise and show, using diagrams, families of common equivalent fractions.	I can count backwards and forwards in hundredths.	I recognise that fractions arise when dividing an object by one hundred and dividing tenths by ten.
I can add and subtract fractions with the same denominator (e.g. 4/5 – 1/5). I can also show this through diagrams (beyond a whole).	I can recognise and write decimal equivalents of any number of tenths or hundredths (7/10, 35/100).	I can 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.
I can round decimals with one decimal place to the nearest whole number.	I can compare numbers with the same number of decimal places up to two decimal places.	I can solve simple measure and money problems involving fractions and decimals to two decimal places.
I know that one-tenth can be written as 1/10 or as 0.1 and that one-hundredth can be written as 1/100 or 0.01	I know that 1/2 can also be written as 0.5, 1/4 as 0.25 and 3/4 as 0.75	I can use a number line to connect fractions, numbers and measures.
I understand the relation between non-unit fractions and multiplication and division of quantities.	I can use factors and multiples to recognise equivalent fractions and simplify where appropriate.	

MEASUREMENT

I can convert between different units of measure (e.g. km to m).	I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.	I can find the area of rectilinear shapes by counting squares.
I can estimate, compare and calculate different measures, including money in pounds and pence.	I know the relationships between units of measure: metres and centimetres, kilograms and grams, litres and millilitres (I can convert).	I can read time on analogue and digital 12– and 24–hour clocks.
I can write time on analogue and digital 12– and 24– hour clocks.	I can convert time between analogue and digital 12– and 24– hour clocks.	I can solve problems converting hours to minutes.
I can solve problems converting minutes to seconds.	I can solve problems converting years to months.	I can solve problems converting weeks to days.
I can relate area to arrays and multiplication.		

GEOMETRY—Properties of shape

I can compare and classify triangles according to their properties and size (equilateral , isosceles, scalene, right-angles isosceles etc.).	I can pick out triangles that have a right angle from other triangles.	I can compare and classify quadrilaterals based on properties and size (parallelogram, rhombus, trapezium).
I can identify acute and obtuse angles.	I can compare and order angles up to two right angles by size.	I know facts about regular polygons such as the number of sides and number of angles.
I can use what I know about polygons to group them into regular and irregular polygons.	I can identify lines of symmetry in 2D shapes presented in different orientations.	I can draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry.
I can recognise lines of symmetry in a variety of diagrams, including where the line of symmetry does not	I can complete a simple symmetric figure with respect to a specific line of symmetry.	

GEOMETRY—Position and Direction

I can describe positions on a 2-d grid as coordinates in the first quadrant.	I can describe movements between positions as translations of a given unit to the left/right and up/down.	I can plot specific points and draw sides to complete a given polygon.
I can draw a pair of axes in one quadrant, with equal scales and integer labels.	I can read, write and use pairs of coordinates (2, 5) including using coordinate/ -plotting ICT tools.	

STATISTICS

I can interpret discrete data using appropriate graphical methods (bar charts).	I can interpret continuous data using appropriate graphical methods (bar charts).	I can present discrete data using appropriate graphical methods (bar charts).
I can present continuous data using appropriate graphical methods (bar charts).	I can interpret discrete data using appropriate graphical methods (time graphs).	I can interpret continuous data using appropriate graphical methods (time graphs).
I can present discrete data using appropriate graphical methods (time graphs).	I can present continuous data using appropriate graphical methods (time graphs).	I can solve comparison problems using information presented in bar charts.
I can solve sum problems using information presented in bar charts.	I can solve difference problems using information presented in bar charts.	I can solve comparison problems using information presented in pictograms.
I can solve sum problems using information presented in pictograms.	I can solve difference problems using information presented in pictograms.	I can solve comparison problems using information presented in other graphs (line graphs).
I can solve sum problems using information presented in other graphs (line graphs).	I can solve difference problems using information presented in (line graphs).	