

Block by block Yearly Overview

Year 3

TERM 1

Using and Applying

- Solve problems involving addition, subtraction, multiplication or division in contexts of measures or money
- Record associated number sentences and check that the solution makes sense in the context of the problem
- Describe and explain methods, choices and solutions to problems, orally and through annotated pictures, diagrams and graphs
- Generate, describe, recreate patterns and relationships; construct equivalent number sentences and sets of shapes with common properties; predict and test with examples; interpret data presented pictorially
- Solve one and two step problems involving whole numbers and unit fractions, money or measures, including time and temperature
- Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in the context of the problem
- Present solutions to problems in an organised way; explain decisions, methods and results using mathematical symbols.
- Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences. Make inferences from given information and frame an hypothesis to test further

Block A Term 1

Place Value

- Count in steps of 5 from 0. Count in 10s from any number forward and backwards
- Recognise the place value in a digit in a two digit number
- Identify, represent and estimate numbers using different representations, including the number line (0-100)
- Compare and order numbers from 0- 100. Use $<$ $>$ and $=$ signs
- Read and write numbers to at least 100 in numerals and words

Addition and Subtraction

- Solve simple one step problems with addition and subtraction
- Recall and use $+$ and $-$ facts to 20 fluently, and derive and use related facts up to 100
- Add and subtract numbers using informal methods including
 - two digit and ones
 - two digit and tens
 - two two-digit numbers
 - adding 3 one digit numbers
- Show that addition of two numbers can be done in any order and subtraction cannot. Use the inverse relationship between addition and subtraction to check calculations and missing number problems

Measurement

- Compare and order lengths (mm, cm, m) and record the results using $>$ $<$ $=$
- Recognise the symbols for pounds and pence. Combine amounts to make a particular value and match different combinations of coins to equal the same amounts of money.
- Add and subtract money of the same unit, including giving change

Statistics

- Interpret and construct simple pictograms, tally charts, block diagrams and tables
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- Ask and answer questions about totalling and compare categorical data

Block B Term 1

Place Value

- Count in steps of 2 from 0. Count in 10s from any number forward and backwards (0-200)
- Compare and order numbers from 0- 200. Use < > and = signs
- Identify, represent and estimate numbers using different representations, including the number line (0-200)
- Use place value and number facts to solve problems (0-200)

Multiplication and Division

- Recall and use multiplication facts for the 2, 5 and 10 x tables, including recognising odd and even numbers
- Calculate mathematical statements for x and ÷ and write them using correct signs
- Recognise and use the inverse relationship between x and ÷ in calculations
- Solve one step problems involving x and ÷ using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts
- Show that multiplication of 2 numbers can be done in any order but division cannot.

Fractions

- Find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, of a length, shape, set of objects or quantity
- Write simple fractions e.g. $\frac{1}{2}$ of 6=3 and recognise the equivalence of 2 quarters and one half

Measurement

- Compare and sequence intervals of time
- Tell and write the time to 5 minutes, including quarter past/ to the hour and draw the hands on a clock face to show these times.

Block C Term 1

Place Value

- Count in steps of 3 from 0. Count in 10s from any number forward and backwards
- Find 10 or 100 more or less than a given number (0- 200)
- Recognise the place value of each digit in a three digit number
- Compare and order numbers up to 200
- Read and write numbers up to 200 in numerals and words

Addition and Subtraction

- *Derive and recall all addition and subtraction facts for each number to 20, sums and differences of multiples of 10 and number pairs that total 100*
- *Add or subtract mentally combinations of one and two digit numbers, pairs of two digit whole numbers (e.g. 47+58, 91-35)*
- Add and subtract numbers mentally including:
 - three digit and ones
 - three digit and tens
 - three digit and hundreds
- Add and subtract numbers with up to 3 digits (2 digits), beginning to use the efficient written methods of columnar addition and subtraction (informal methods should still be used before moving to column addition)
- Estimate (approximate by rounding) the answer to a calculation and use the inverse operations to check answers

Measurement

- Measure and compare, add and subtract mass (g/kg)
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII (History link) and 12 hour clock
- Compare durations of events, e.g. to calculate time taken by particular events or tasks

Geometry and Shape

- Identify and describe the properties of 2D and 3D shapes, including no. of sides and symmetry in a vertical line, no. of edges, vertices and faces
- Identify 2D shapes on the surface of 3D shapes
- Compare and sort common 2D and 3D shapes and everyday objects
- Draw 2D shapes and make 3D shapes using modelling materials. Recognise 3D shapes in different orientations and describe them.

Block D Term 1

Place Value

- Count in steps of 3 from 0
- Find 10 or 100 more or less than a given number (0-200)
- Identify, represent and estimate numbers using different representations, including the number line (0-200)
- Solve number problems and practical problems involving previous place value objectives (0-200)

Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5, 10, 3, 4 and 8 x tables
- *Multiply one and two digit numbers by 10 and 100*
- *Use practical and informal written methods to multiply and divide two digit numbers; round remainders up or down*
- *Understand that division is the inverse of multiplication and vice versa. Use this to derive and record related \times and \div number sentences*

Fractions

- Count up and down in tenths; recognise that tenths arise from dividing an object or set into 10 equal parts.
Mental objective
- *Read and write proper fractions, interpreting the denominator as the parts of a whole and the numerator as the number of parts; identify and estimate fractions of shapes; use diagrams to compare fractions and establish equivalents*

Measurement

- **Use measure (length, mass, money) as a context for multiplication and division**

Geometry and Shape

- *Recognise horizontal and vertical lines; use the eight compass points to describe direction; describe and identify the position of a square on a grid of squares (Geography link)*

TERM 2

Using and Applying

- Solve one and two step problems involving whole numbers and unit fractions, money or measures, including time and temperature
- Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in the context of the problem
- Present solutions to problems in an organised way; explain decisions, methods and results using mathematical symbols.
- Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences. Make inferences from given information and frame an hypothesis to test further

Block A Term 2

Place Value

- Count in steps of 100 from any number. (0-500)
- Compare and order numbers up to 500
- Read and write numbers up to 500 in numerals and words
- Identify, represent and estimate numbers using different representations (0-500)

Addition and Subtraction

- *Develop and use written methods to record, support or explain addition and subtraction of two and three digit numbers.*
- *Round two or three digit numbers to the nearest 10 or 100 and give estimates for their sums and differences*
- Add and subtract numbers mentally including:
 - three digit and ones
 - three digit and tens
 - three digit and hundreds
- Add and subtract numbers with up to 3 digits (**most confident with 2 digit, moving onto 3 digit**), beginning to use the efficient written methods of columnar addition and subtraction
- Estimate (approximate by rounding) the answer to a calculation and use the inverse operations to check answers
- Solve problems, including missing number problems using number facts, place value and more complex addition and subtraction

Measurement

- Measure and compare, add and subtract lengths (mm, cm, m, km)
- Measure the perimeter of simple 2D shapes
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII ([History link](#)) and 12 and 24 hour clocks.
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight.
- Compare durations of events, e.g. to calculate time taken by particular events or tasks

Geometry and Shape

- **Identify and describe the properties of 2D and 3D shapes, including no. of sides and symmetry in a vertical line, no. of edges, vertices and faces**
- **Identify 2D shapes on the surface of 3D shapes**
- **Compare and sort common 2D and 3D shapes and everyday objects**
- Draw 2D shapes and make 3D shapes using modelling materials. Recognise 3D shapes in different orientations and describe them.

Statistics

- Solve one step and two step questions such as "How many more?" "How many fewer?" using information presented in scaled bar charts, pictograms and tables

Block B Term 2

Place Value

- Count in steps of 50 from any number (0-500)
- Find 10 or 100 more or less than a given number (0-500)
- Round numbers to the nearest 10 (0-500 and money)
- Solve number problems and practical problems involving numbers 0-500

Multiplication and division

- Recall and use multiplication and division facts for the 2, 5, 10, 3, 4 and 8 x tables
- Write and calculate mathematical statements for \times and \div using the tables they know, including $TU \times U$, using mental and progressing to efficient written methods
- *Use practical and informal written methods to multiply and divide two digit numbers; round remainders up or down*
- Solve problems, including missing number problems, involving \times and \div , including integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions

- Recognise, find and write fractions of a discrete set of objects **fractions of numbers and sets** : unit fractions and non-unit fractions with small denominators
- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- Solve problems that include all of the above **in context of measures where possible**

Geometry and Shape

- Recognise angles as a property of shape and associate angles with turning
- 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, vertical, perpendicular and parallel lines in relation to other lines.

Block C Term 2

Place Value

- Count from 0 in multiples of 50 and 100 (0-1000)
- Compare and order numbers up to 500
- Identify, represent and estimate numbers using different representations, including the number line (0-500)

Addition and Subtraction

- Add and subtract numbers mentally including:
 - three digit and ones
 - three digit and tens
 - three digit and hundreds
- Add and subtract numbers with up to 3 digits, beginning to use the efficient written methods of columnar addition and subtraction
- Estimate (approximate by rounding) the answer to a calculation and use the inverse operations to check answers
- Solve problems, including missing number problems using number facts, place value and more complex addition and subtraction

Measurement

- Measure and compare, add and subtract capacity (ml/l)
- Add and subtract amounts of money to give change, using both £ and p in practical contexts
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight.
Mental objective
- Draw 2D shapes and make 3D shapes using modelling materials. Recognise 3D shapes in different

orientations and describe them

Block D Term 2

Place Value

- Count from 0 in multiples of 4 (0-1000)
- Find 10 or 100 more or less than a given number (0-500)
- Solve number problems and practical problems involving numbers 0-500

Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5, 10, 3, 4 and 8 x tables
- Write and calculate mathematical statements for \times and \div using the tables they know, including TU x U, using mental and progressing to efficient written methods (**grid method**)
- Solve problems, including missing number problems, involving \times and \div , including integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions

- Recognise and show, using diagrams, equivalent fractions with small denominators
- Compare and order unit fractions with the same denominator. **Use symbols $<$ $>$ and $=$**
- Solve problems that involve all of the above
- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one digit number s or quantities by 10. **Mental objective**

Measurement

- **Use measure (length, mass, capacity, money) as a context for multiplication and division**

Statistics

- Interpret and construct simple pictograms, tally charts, block diagrams and tables
- Solve one step and two step questions such as “How many more?” “How many fewer?” using information presented in scaled bar charts, pictograms and tables

TERM 3

Using and Applying

- Solve one and two step problems involving whole numbers and unit fractions, money or measures, including time and temperature
- Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in the context of the problem
- Present solutions to problems in an organised way; explain decisions, methods and results using mathematical symbols.
- Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences. Make inferences from given information and frame an hypothesis to test further

Block A Term 3

Place Value

- Count from 0 in multiples of 8. (0-500)
- Compare and order numbers up to 1000
- Read and write numbers up to 1000 in numerals and words **and be confident about their place value e.g. partitioning and recombining in various ways**
- Identify, represent and estimate numbers using different representations (0-1000)

Addition and Subtraction

- Add and subtract numbers mentally including:
 - three digit and ones
 - three digit and tens
 - three digit and hundreds
- Add and subtract numbers with up to 3 digits, beginning to use the efficient written methods of columnar addition and subtraction
- Estimate (approximate by rounding) the answer to a calculation and use the inverse operations to check answers
- Solve problems, including missing number problems using number facts, place value and more complex addition and subtraction

Measurement

- Measure and compare, add and subtract length, mass and capacity. **Be able to differentiate between different units of measure. Know how many g in a kg, ml in a l, mm and cm in a m and m in a km**
- Measure the perimeter of simple 2D shapes
- Add and subtract amounts of money to give change, using both £ and p in practical contexts

Geometry and Shape

- 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, vertical, perpendicular and parallel lines in relation to other lines.

Block B Term 3

Place Value

- Count from 0 in multiples of 8 (0-1000)
- Find 10 or 100 more or less than a given number (0-1000)
- Round numbers to the nearest 10 (0-1000 and money)
- Solve number problems and practical problems involving numbers 0-1000

Multiplication and Division

- Recall and use multiplication and division facts for the **2, 5, 10**, 3, 4 and 8 x tables
- Write and calculate mathematical statements for \times and \div using the tables they know, including TU \times U, using

mental and progressing to efficient written methods

- Solve problems, including missing number problems, involving \times and \div , including integer scaling problems and correspondence problems in which n objects are connected to m objects.
- *Multiply and divide one digit and two digit numbers by 10 or 100 and describe the effect.*

Fractions

- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one digit number s 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
- Solve problems that include all of the above

Statistics

- Interpret and construct simple pictograms, tally charts, block diagrams and tables
- Solve one step and two step questions such as “How many more?” “How many fewer?” using information presented in scaled bar charts, pictograms and tables

Block C Term 3

Place Value

- Count from 0 in multiples of 4, 8 (0-1000)
- Compare and order numbers up to 1000
- Read and write numbers up to 1000 in numerals and words **and be confident about their place value**
- Solve number problems and practical problems involving numbers 0-1000

Addition and Subtraction

- Add and subtract numbers mentally including:
 - three digit and ones
 - three digit and tens
 - three digit and hundreds
- Add and subtract numbers with up to 3 digits, beginning to use the efficient written methods of columnar addition and subtraction
- Estimate (approximate by rounding) the answer to a calculation and use the inverse operations to check answers
- Solve problems, including missing number problems using number facts, place value and more complex addition and subtraction

Measurement

- Measure and compare, add and subtract length (mm,cm,m), mass (g/kg) and capacity (ml/l)
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight.
- Know the number of seconds in a minute, days in a month, year and leap year.
- Compare durations of events, e.g. to calculate time taken by particular events or tasks

Block D Term 3

Place Value

- Count from any number in multiples of 50 and 100 (0-1000)
- Find 10 or 100 more or less than a given number (0-1000)
- Solve number problems and practical problems involving numbers 0-1000

Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5, 10, 3, 4 and 8 x tables
- Write and calculate mathematical statements for \times and \div using the tables they know, including $TU \times U$, using mental and progressing to efficient written methods

- Solve problems, including missing number problems, involving \times and \div , including integer scaling problems and correspondence problems in which n objects are connected to m objects.
- *Multiply and divide one digit and two digit numbers by 10 or 100 and describe the effect.*

Fractions

- Add and subtract fractions with the same denominator within one whole
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Compare and order unit fractions with the same denominator.

Geometry and Shape

- Draw 2D shapes and make 3D shapes using modelling materials. Recognise 3D shapes in different orientations and describe them
- Recognise angles as a property of shape and associate angles with turning
- Identify horizontal, vertical, perpendicular and parallel lines in relation to other lines.

Statistics

- Interpret and construct simple tally charts, block diagrams and tables
- Solve one step and two step questions such as “How many more?” “How many fewer?” using information presented in scaled bar charts, pictograms and tables