Numeracy

Understanding x and ÷ to include:

- Dividing TU.t÷U using standard written methods.

Mental calculation strategies to include:

- Multiplying U.t x U or U.t x U mentally by partitioning.
- Using rounding strategies when multiplying.
- Dividing TU.t÷U or HTU.t÷U using standard written methods.
- Exploring mathematical pattern, particularly using addition and subtraction.
- Using known number facts and place value to consolidate mental multiplication and division.

Making Decisions and Checking Results to include:

- Choosing and using appropriate number operations to solve problems.
- Checking these answers with an equivalent calculation.
- Checking these answers using a calculator and the inverse operation.
- Estimating by approximating and checking the result and explaining methods and working.

Money and 'real life' problems to include:

- Using all four operations to solve money or 'real life' word problems.

Fractions, decimals and percentages to include:

- Using the concept of a percentage as a fraction of 100 and finding simple percentages of quantities.
- Recognising the equivalence between fractions, decimals and percentages.
- Expressing simple fractions as percentages.
- Using a calculator to convert a fraction to a decimal.

Handling data to include:

- Solving a problem by representing and interpreting data in tables, graphs, charts and diagrams.
- Beginning to find the mean of a set of data.
- Recognising and predicting events which are equally likely.
- Using the probability scale of 0 to 1 on the number line.
- Recognising that there may be a difference between the theory of outcomes and experimental results.

Measures, including problems about measures to include:

- Solving a variety of multi-step problems involving different mathematical operations and quantities.
- Using, reading and writing standard metric units, including their abbreviations and relationships between them.
- Converting smaller to larger units and vice versa.
- Knowing imperial units and rough metric equivalents.
- Suggesting suitable units and measuring equipment to estimate or measure, mass or capacity.
- Recording estimates and readings from scales to a suitable degree of accuracy.

Pencil and paper procedures (+ and -) to include:

- Solving real life problems and checking solutions.
- Relating these patterns to arithmetical facts and operations.

Pencil and paper procedures (x and ÷) to include:

- Multiplying U.t x U Using standard written methods.
- Dividing HTU÷U and HTU÷TU using standard written methods.

Shape and space to include:

- Rehearsing the names of 2-d shapes.
- Introducing the parallelogram, rhombus, kite and trapezium.
- Rehearsing the names of different polygons.

Properties of numbers to include:

- Recognising prime numbers to at least 20.
- Recognising square numbers up to 12 x 12 and to calculate the squares of larger numbers.
- Finding the numbers which have a given square root
- Recognising a sequence of numbers, finding its pattern and predicting the next few terms.
- Recognising the properties of the sums of odd and even numbers.
- Recognising the properties of the products of odd and even numbers.

Reasoning and generalising about numbers to include:

- Explaining methods and reasoning both orally and in writing.
- Solving mathematical problems and puzzles.
- Making and investigating a general statement about familiar numbers by finding examples that satisfy it.
- Explaining a generalised relationship in words and expressing it in a formula using letters as symbols.

Reasoning about shapes to include:

- Naming and classifying different quadrilaterals.
- Constructing polygons from dissected pieces of another shape.
- Making and investigating a general statement about familiar shapes by finding examples that satisfy it.

Using a calculator to include:

- Developing calculator skills and using a calculator effectively.

Ratio and Proportion to include:

- Beginning to understand the idea of proportion.
- Beginning to understand the idea of ratio and relate it to proportion.
- Solving simple problems involving the ideas of ratio and proportion.

Literacy

This term we will be learning …

- ✓ To use independent spelling strategies including: use of syllabic parts, using known prefixes, suffixes and other common letter strings, using visual skills, checking critical features, learning and inventing spelling rules, applying knowledge of rules and exceptions, using dictionaries and ICT spell checks.
- ✓ To experiment with language and invent new words using known roots, prefixes and suffixes.
- ✓ To revise and consolidate work form previous 5 terms.
- ✓ To revise language conventions and grammatical features of different types of text and writing.
- ✓ To conduct detailed language investigations.
- ✓ To secure control of complex sentences.
- ✓ To secure understanding of and to identify the key features of explanatory texts and impersonal formal language, securing control of it in own writing.
- ✓ To appraise a text quickly and efficiently, securing the skills of skimming and scanning.
- ✓ To investigate how linked poems are related and to write own sequence of poems linked by theme or form.
- ✓ To describe and evaluate the style of and compare and contrast the work of a single writer orally and in writing.
- ✓ To annotate passages in detail in response to a certain question.
- ✓ To write summaries of books or parts of books, deciding on priorities relevant to purpose.
- ✓ To use a reading journal effectively to raise and refine personal responses.
- ✓ To write an extended story, worked on over a period of time.
- ✓ To describe and evaluate the style of an individual poet, commenting critically on the overall impact and write a brief, helpful review tailored to a real audience.
- ✓ To review a range of non-fiction text types and their characteristics, discussing when a writer might choose to write in a given style and form.

Key texts/Authors/Poets:

Range:

Fiction and poetry: comparison of work by significant children's author(s) and poets: (a) work by same author (b) different authors' treatment of same theme(s).

Non-Fiction: (i) explanations linked to work from other subjects; (ii) non-chronological reports linked to work from other subjects; (iii) reference texts, range of dictionaries, thesauruses, including I.T. sources.