Radstock Primary School

End of Year Expectations for Year 6

This booklet provides information for parents and carers on the end of year expectations for children in Year 6, in order to help you understand the content of the core curriculum that we are teaching.

Every child is unique and will have their own individual starting point from which they will develop knowledge, skills and understanding over the next academic year.

All the objectives will be worked on throughout the year and will be the focus of direct teaching. Any extra support that you can provide in helping your children to achieve these is greatly valued.

If you have any queries regarding the content of this booklet or want support in knowing how best to help your children please talk to your child's teacher.

Spoken Language

These apply to children throughout the school:

- listen and respond appropriately to adults and their peers
- ask relevant questions to extend their understanding and knowledge
- use relevant strategies to build their vocabulary
- articulate and justify answers, arguments and opinions
- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings
- maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas
- speak audibly and fluently with an increasing command of Standard English
- participate in discussions, presentations, performances, role play, improvisations and debates
- gain, maintain and monitor the interest of the listener(s)
- consider and evaluate different viewpoints, attending to and building on the contributions of others
- select and use appropriate registers for effective communication.

Reading

Word

- Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology, both to read aloud and to understand the meaning of new words that they meet.

Comprehension

- Continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks.
- Reading books that are structured in different ways and reading for a range of purposes.
- Increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions.

- Recommending books that they have read to their peers, giving reasons for their choices.
- Identifying and discussing themes and conventions in and across a wide range of writing.
- Making comparisons within and across books.
- Learning a wider range of poetry by heart.
- Preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience.
- Checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context.
- Asking questions to improve their understanding.
- Drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.
- Predicting what might happen from details stated and implied.
- Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.
- Identifying how language, structure and presentation contribute to meaning.
- Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.
- Distinguish between statements of fact and opinion.
- Retrieve, record and present information from non-fiction.
- Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously.
- Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary.
- Provide reasoned justifications for their views.

Writing

Transcription

- Use further prefixes and suffixes and understand the guidance for adding them.
- Spell some words with 'silent' letters [for example, knight, psalm, solemn].
- Continue to distinguish between homophones and other words which are often confused.

- Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically,
- Use dictionaries to check the spelling and meaning of words.
- Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary.
- Use a thesaurus.

Handwriting

- Choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters.
- Choosing the writing implement that is best suited for a task.

Composition

- Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own.
- Noting and developing initial ideas, drawing on reading and research where necessary.
- Considering how authors have developed characters and settings in what pupils have read, listened to or seen performed in narratives.
- Selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning.
- describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action in narratives.
- Precising longer passages.
- Using a wide range of devices to build cohesion within and across paragraphs.
- Using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining].
- Assessing the effectiveness of their own and others' writing.
- Proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning.
- Ensuring the consistent and correct use of tense throughout a piece of writing.
- Ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register.
- Proof-read for spelling and punctuation errors.
- Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Maths

Number – number and place value

- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above.

Number – addition, subtraction, multiplication and division

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number – fractions (including decimals and percentages)

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ × ½ = 1/8]
- divide proper fractions by whole numbers [for example, 31 ÷ 2 = 61]

- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and proportion

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables.

Measurement

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa

- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Geometry – properties of shapes

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry – position and direction

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

Science

Working Scientifically

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Using test results to make predictions to set up further comparative and fair tests.

- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

Properties of Materials

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

Forces

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Living Things Habitats

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.
- Give reasons for classifying plants and animals based on specific characteristics.

Evolution

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Electricity

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.