



End of Year Expectations for Year 5

(Maths, Reading, Writing & Science)

This booklet provides information for parents and carers on the end of year expectations for learners in our school. These expectations are based on the New National Curriculum and the age expected standards for the year group.

All the objectives will be worked on throughout the year and will be the focus of direct teaching. Any extra support you can provide in helping your child 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 child, please talk to your child's year group staff.

More information can be found at:

School website: <http://www.town-farm.surrey.sch.uk/>

DFE website: <https://www.gov.uk/government/collections/national-curriculum>



Maths

'Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.'

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.

Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.'

National Curriculum for Mathematics

By the end of year 5, children will apply their mathematical experiences to explore ideas and raise relevant questions, constructing complex explanations and reasoned arguments. They will be able to solve a wide variety of complex problems which require sustained concentration and demand efficient written and mental methods of calculations. These will include problems relating to fractions, scaling (times as many), converting between units of measure and employ all four operations (+, -, x, ÷)

Some examples:

- Count forwards and backwards with positive and negative numbers through zero. Count forwards/backwards in steps of powers of 10 for any given number up to 1,000,000.
- Compare and order numbers with 3 decimal places.
- Identify all multiples and factors including finding all factor pairs.
- Recognise place value of any number up to 1,000,000 and round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000, or 100,000.
- Read Roman numerals to 1000.
- Recall prime numbers up to 19.
- Add and subtract numbers with more than 4-digits using efficient written methods (column). Also numbers with up to 2 decimal places.
- Solve addition and subtraction multi-step problems in contexts.
- Multiply 4-digits by 1 digit/2 digits.



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- Divide 4-digits by 1 digit.
 - Multiply and divide whole numbers and decimals by 10, 100 and 1000.
 - Recognise mixed numbers and fractions, and convert from one to another.
 - Multiply proper fractions by whole numbers.
 - Recognise and use square numbers (²) and cube numbers (³).
 - Solve time problems using timetables and converting between different units of time.



Reading

'English has a pre-eminent place in education and in society. A high-quality education in English will teach pupils to speak and write fluently so that they can communicate their ideas and emotions to others and through their reading and listening, others can communicate with them. Through reading in particular, pupils have a chance to develop culturally, emotionally, intellectually, socially and spiritually. Literature, especially, plays a key role in such development. Reading also enables pupils both to acquire knowledge and to build on what they already know. All the skills of language are essential to participating fully as a member of society; pupils, therefore, who do not learn to speak, read and write fluently and confidently are effectively disenfranchised.'

National Curriculum for English

Readers in Year 5 choose books from a wide range of fiction including modern fiction, fiction from our literary heritage and books from other cultures and traditions. They will show increasing independence in their reading choices, but may need support to be introduced to books that will challenge them and extend their skills. Year 5 readers should read books that demand some resilience of the reader in terms of length and complexity of vocabulary and sentence structure.

Some examples:

- Summarises main points of an argument or discussion within their reading and makes up own mind about issue/s.
- Can compare between two texts.
- Appreciates that people use bias in persuasive writing.
- Appreciates how two people may have a different view on the same event.
- Draw inferences and justify with evidence from the text.
- Varies voice for direct or indirect speech.
- Recognise clauses within sentences.
- Uses more than one source when carrying out research.
- Creates set of notes to summarise what has been read.



Writing

The Year 5 writer writes in a variety of genres and forms, taking account of different audiences and purposes. When writing narrative texts, they are beginning to develop an ability to develop their characters by what they say and do ('showing not telling'); and their plots are able to engage their reader with a key event within their plot; and sustains the interest of the reader to a logical conclusion.

A Year 5 writer is able to experiment with vocabulary choices, word order and sentence length. They develop sentence complexity and are beginning to use and control a wider range of punctuation for effect. They may also make use of structures that do not reflect spoken language (e.g. 'It had been a strange day and it was about to get stranger'; 'brazenly, without a care in the world...')

Year 5 writers confidently write in a range of conventional text types using the features of each text type appropriately. Expectations are that they will use the grammatical terminology modal verb, relative pronoun, relative clause, parenthesis, bracket, dash, cohesion, ambiguity to discuss their own and other's writing.

Some examples:

- Add phrases to make sentences more precise and detailed.
- Use range of sentence openers – judging the impact or effect needed.
- Begin to adapt sentence structure to text type.
- Use pronouns to avoid repetition.
- Use brackets, dashes, commas.
- Commas to clarify meaning or avoid ambiguity.
- Link clauses in sentences using a range of subordinating and coordinating conjunctions.
- Use verb phrases to create subtle differences (e.g. she began to run).
- Consistently organise into paragraphs.
- Link ideas across paragraphs using adverbials of time (e.g. later), place (e.g. nearby) and number (e.g. secondly).
- Legible and fluent style.



Science

Living Things and their Habitats

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals.

Animals, including Humans

- Describe the changes as humans develop to old age.

Properties and changes 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.

Earth and Space

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

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.