

Year 5 – Queen’s Park Primary School

English

Upper Key Stage 2

Spoken Language (Years 1 to 6)

- listen and respond appropriately to adults and their peers
- ask relevant questions to extend their understanding and knowledge
- 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, roleplay, improvisations and debates
- maintain and monitor the interest of the listener(s)
- consider and evaluate different viewpoints, attending to and building on the contributions of others

Reading: Word Reading

- apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.

Reading: Comprehension

Maintain positive attitudes to reading and understanding of what they read by:

- 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
- 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.

Understand what they read by:

- 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
- 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
- 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

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, as listed in English Appendix 1
- 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.

Writing: Handwriting & Presentation

Write legibly, fluently and with increasing speed by:

- 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.

Writing: Composition

Plan their writing by:

- 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
- in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed.

Draft and write by:

- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- summarising 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].

Evaluate and edit by:

- 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.

Writing: Vocabulary, Grammar & Punctuation

Develop their understanding of the concepts set out in English Appendix 2 by:

- recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
 - using passive verbs to affect the presentation of information in a sentence
 - using the perfect form of verbs to mark relationships of time and cause
 - using expanded noun phrases to convey complicated information concisely
 - using modal verbs or adverbs to indicate degrees of possibility
 - using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun
 - learning the grammar for years 5 and 6 in English Appendix 2.
- Indicate grammatical and other features by:
- using commas to clarify meaning or avoid ambiguity in writing
 - using hyphens to avoid ambiguity
 - using brackets, dashes or commas to indicate parenthesis
 - using semi-colons, colons or dashes to mark boundaries between independent clauses
 - using a colon to introduce a list
 - punctuating bullet points consistently

Maths

Number: Number & Place Value

- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- solve number problems and practical problems that involve all of the above
- read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Number: Addition & Subtraction

- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- add and subtract numbers mentally with increasingly large numbers
- use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Number: Multiplication & Division

- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- multiply and divide numbers mentally drawing upon known facts
- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared (2^2) and cubed (3^3)
- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Number: Fractions

- compare and order fractions whose denominators are all multiples of the same number
- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 1/5$]
- add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
- read and write decimal numbers as fractions [for example, $0.71 = 71/100$]
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- round decimals with two decimal places to the nearest whole number and to one decimal place
- read, write, order and compare numbers with up to three decimal places
- solve problems involving number up to three decimal places
- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- solve problems which require knowing percentage and decimal equivalents of $1/2$, $1/4$, $1/5$, $2/5$, $4/5$, and those fractions with a denominator of a multiple of 10 or 25.

Measurement

- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
- estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
- solve problems involving converting between units of time
- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

Geometry: Properties of Shapes

- identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- use the properties of rectangles to deduce related facts and find missing lengths and angles
- distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- know angles are measured in degrees. estimate and compare acute, obtuse and reflex angles
- draw given angles, and measure them in degrees ($^{\circ}$)
- identify angles at a point and one whole turn (total 360°)
- identify angles at a point on a straight line and half a turn (total 180°)
- identify other multiples of 90° .

Geometry: Position & Direction

- identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Statistics

- solve comparison, sum and difference problems using information presented in a line graph
- complete, read and interpret information in tables, including timetables.

Science

Working Scientifically (Upper Key Stage 2)

- 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.

Living Things & 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 & 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 & 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.

History

The Roman Empire and its impact on Britain

The Roman Empire by 42 CE and the power of its army (from NC optional)

The successful invasion by Claudius and conquest, including Hadrian's wall

British resistance e.g. Boudica

(from optional NC)

To demonstrate their understanding of the past by describing characteristic features of periods and societies from the ancient to the more recent past, and by identifying contrasts, connections, and trends within and across periods of history.

To have knowledge and understanding of some of the significant people, events, and periods from the history of their locality, Britain and the wider world and be able to fit these into a secure chronological framework and narrative.

To be able to describe past events, people and developments using dates and terms appropriately and select and organise information to communicate their understanding of the past in different ways.

The Roman Empire and its impact on Britain

Architecture, Engineering and Law

Romanisation of Britain – impact of technology – (from optional NC)

The legacy of Roman culture (art, architecture or literature) on later periods in British history, including the present day

To be able to use different sources to help them investigate the past and use relevant information to support their findings. They should understand how our knowledge of the past is constructed from a range of sources and be able to describe from different ways in which the past has been interpreted.

Design & Technology

Generate ideas through brainstorming and identify a purpose for their product

Draw up a specification for their design

Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail

- Use results of investigations, information sources, including ICT when developing design ideas

- Select appropriate materials, tools and techniques
- Measure and mark out accurately
- Use skills in using different tools and equipment safely and accurately

- Weigh and measure accurately (time, dry ingredients, liquids)
- Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens

- Cut and join with accuracy to ensure a good-quality finish to the product
- Evaluate a product against the original design specification
- Evaluate it personally and seek evaluation from others

Geography

Name and locate the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle and date time zones.

Describe some of the characteristics of these geographical areas - plains, deserts, lakes, mountains, bridges, canyon

Locate the geographic zones of the world

Understand the significance of the geographic zones of the world.

Locate the world's countries, with focus on North and South America

Name and locate the countries of North and South America and identify their main physical and human characteristics.

Understand some of the reasons for geographical similarities and differences between countries. Understand geographical similarities and differences through the study of the human and physical geography of a region or area within North or South America.

Human and physical features on Grand Canyon including settlement,

Human and physical features of South America including mountain ranges, population and life expectancy

Compare temperatures of different locations

Climate of South America

Locate the world's countries of particular interest to pupils

Use the Collins Junior atlas

Use index and contents pages in atlases

Use large scale maps – Find countries and cities on larger maps

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

Use photographs to describe features studied

Recognise how human and physical characteristic aspects have changed over time.

Collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes

Understand the impacts of weather on humans, plants and animals

Begin to make the connection between human activity and climate change

Understand fossil fuels are and how humans use them and how they relate to climate change

Understand some of the impacts of climate change

Understand some actions that would be healthier for the planet.

Computing

Key Stage 2

- Systems and searching Recognising IT systems around us and how they allow us to search the internet.
- Video production Planning, capturing, and editing video to produce a short film.
- Selection in physical computing Exploring conditions and selection using a programmable microcontroller.
- Flat-file databases Using a database to order data and create charts to answer questions
- Vector drawing Creating images in a drawing program by using layers and groups of objects. Selection in quizzes Exploring selection in programming to design and code an interactive quiz.

Physical Education

Key Stage 2

- Football
- Hockey
- Basketball
- Gymnastics
- Tag Rugby
- Swimming
- Tennis
- Athletics
- Dance
- Outdoor and Adventurous

Music

Year 5
Stars hide your fires (ME)
performing together
Living on a Prayer
Christmas
Hall of the Mountain King-
Historical
Roundabout - Notation/ Chords/
pitch/ rhythm
Syncopation - Cup song/ Backbeat
SOUNDMAKERS- Ukulele

PSHE

New Beginnings/ Democracy/ Global
Citizenship
Getting on and Falling Out/ Say no to
Bullying/ Online safety/ Money
Management
Mental health and Wellbeing/ Gender/ Good
to be Me/
Drugs and Alcohol education/
Relationships/Protective Behaviours
Changes and Moving Forward
Relationships and Sex and Health Education

Art & Design

Key Stage 2

- Selecting appropriate techniques eg. (Line, tone, smudging, cross hatching, dotting) using pencils, chalk and charcoal for effect.
- Can apply simple rules of space/perspective (one point). Can develop quick studies from observation recording action and movement and select a view from an image as well as looking into designers.
- Sharing thoughts and opinions about their own, their peers and artists work using key vocabulary linked to the skill and art movement and recording this in sketchbooks.
- Can create life size models using found materials in a variety of figurative and abstract forms
- Can explore shape and form through a variety of carving skills on soap