

National Curriculum 2014 - Year 5

ENGLISH

Reading

- Apply knowledge of morphology and etymology when reading new words
- Read and discuss a broad range of texts
- Read books structured in different ways; read for a range of purposes
- Recommend books to others
- Identify and discuss themes and conventions and make comparisons
- Learn a wider range of poetry by heart
- Prepare poems/plays to read aloud and perform
- Check for sense and ask questions to improve understanding
- Draw inference and make predictions
- Summarise main ideas
- Identify how structure and presentation contribute to meaning
- Discuss authors' use of language
- Distinguish between fact and opinion
- Retrieve, record and present information from non-fiction
- Discuss books they read and hear
- Explain and discuss their understanding, including through formal presentations and debates
- Justify their views

Writing

- Spell: words with prefixes, suffixes and silent letters; homophones and other confusing words; using knowledge of morphology and etymology
- Use a thesaurus/dictionary to check meanings/spellings
- Write legibly, fluently and with increasing speed
- Plan writing: to suit audience and purpose; noting and developing initial ideas; considering how authors develop characters and settings
- When writing: select appropriate grammar and vocabulary; use linking, organisational and presentational devices; in narratives, use dialogue and develop character, setting and atmosphere
- Punctuate longer passages
- Assess effectiveness of own and others' writing and propose changes to enhance effect and clarify meaning

- Check writing for: correct and consistent tenses; subject/verb agreement; distinction between spoken/written language; appropriate register; correct spelling and punctuation
- Perform own compositions
- Understand formal language structures, including subjunctive
- Use: expanded noun phrases; modal and passive verbs; relative clauses
- Use: commas and hyphens to avoid ambiguity; brackets, dashes and commas for parenthesis; semi colons, colons or dashes between independent clauses; colons in lists; punctuation of bullet points
- Learn and use grammar and terminology in Appendix 2

Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

SCIENCE

- Explain life cycle differences in a mammal, amphibian, insect and bird
- Describe reproduction in some plants and animals
- Describe changes as humans develop and age
- Classify materials according to various properties
- Know that some materials dissolve in water to form a solution
- Separate mixtures of materials
- Give reasons for particular uses of everyday materials
- Explore reversible changes and changes that are difficult to reverse
- Describe the movement of Earth and other planets relative to the Sun and of the Moon relative to Earth
- Use Earth's rotation to explain day and night
- Explore the effects of gravity and friction (including air and water resistance)
- Know that some mechanisms magnify forces

Working scientifically

- Plan different types of enquiry to answer questions
- Take accurate measurements and repeat them if needed
- Record increasingly complex data in various ways
- Use results to make predictions and suggest further tests
- Present findings orally and in writing
- Identify scientific evidence for or against an idea

DESIGN AND TECHNOLOGY (KS2)

- Develop products fit for purpose
- Communicate design ideas in various ways
- Use a wider range of tools and materials
- Evaluate existing products and improve own products
- Build and strengthen more complex structures
- Use mechanical, electrical and computing systems in own products
- Understand and apply principles of a healthy diet
- Prepare and cook mainly savoury dishes
- Understand seasonality

GEOGRAPHY (KS2)

- Locate the world's countries, focusing on Europe and the Americas
- Study UK counties, cities, regions, physical features, land use and changes over time
- Identify the lines and zones on a globe, including time zones
- Compare a UK region with one in Europe and one in the Americas
- Understand key aspects of physical and human geography
- Use maps, atlases, globes and digital/computer mapping
- Use eight points of the compass, four- / six-figure grid references, symbols and keys
- Use a range of methods to study the local area

HISTORY (KS2)

- Changes in Britain from Stone Age to Bronze Age
- Roman Empire and its impact on Britain
- Settlement of Britain by Anglo-Saxons and Scots
- Vikings and Anglo-Saxons in Britain (to 1066)
- An aspect of British history extending past 1066
- Local history study
- Overview of earliest civilisations and in-depth study of one (Ancient Sumer, Indus Valley, Ancient Egypt or Shang Dynasty)
- Ancient Greece
- A non-European society (early Islamic, Mayan or Benin)

COMPUTING (KS2)

- Design, write and debug programs
- Use sequence, selection and repetition in programs
- Use logical reasoning
- Understand computer networks
- Use search technologies effectively
- Create a range of digital products (including for handling data)
- Use technology safely, respectfully and responsibly

MATHEMATICS

Number

- Numbers to at least 1 million: read, write, order, compare; know place value; round to nearest power of 10; count on/back in powers of 10
- Use negative whole numbers in context
- Roman numerals: read numbers to 1000 and years
- Add and subtract whole numbers with more than four digits using column methods
- Mentally add and subtract increasingly large numbers
- Use rounding to check answers
- Identify multiples, factors, prime numbers, prime factors and composite numbers
- Find primes to 100; recall primes to 19
- Multiply numbers up to four digits by a one- or two-digit number using formal written method
- Multiply and divide numbers mentally
- Divide numbers up to four digits by a one-digit number using formal written method; interpret remainders
- Multiply and divide by powers of 10
- Use square and cube numbers; use 2^2 and 2^3 notation
- Compare and order fractions
- Identify, name and write equivalent fractions
- Use mixed numbers and improper fractions and convert between them
- Add and subtract fractions with common related denominators
- Multiply fractions by whole numbers
- Write decimals as fractions
- Recognise and use thousandths and relate to tenths, hundredths and decimal equivalents

- Order and round decimal numbers
- Recognise and understand % sign; link percentages to fractions and decimals
- Solve problems involving all aspects of number, including multi-step problems

Measurement

- Convert between metric units and between metric and imperial units
- Measure and calculate the perimeter of composite right-angled shapes
- Calculate and compare area of rectangles; estimate area of irregular shapes
- Estimate volume and capacity
- Use four operations to solve measure problems using decimal notation
- Solve problems involving converting between units of time
- Use all four operations to solve measure problems

Geometry

- Identify 3D shapes from 2D representations
- Measure, estimate, compare and draw angles in degrees
- Identify angles: at a point (whole turn); on a straight line (half turn); other multiples of 90°
- Finding missing lengths and angles in rectangles
- Distinguish between regular and irregular polygons
- Reflect and translate shapes

Statistics

- Solve problems based on line graphs
- Complete, read and interpret information in tables

LANGUAGES (KS2)

- Listen and respond
- Explore language through stories, songs, poems and rhymes
- converse; ask and answer questions; express opinions; seek help
- Speak in sentences
- Develop accurate pronunciation
- Express ideas and describe things orally and in writing
- Understand written words and phrases
- Broaden vocabulary
- Understand basic grammar

ART AND DESIGN (KS2)

- Use sketchbooks to collect, record and evaluate ideas
- Improve skills in drawing, painting and sculpture, using various materials
- Learn about great artists, architects and designers

MUSIC (KS2)

- Use voice and instruments with increasing accuracy, control and expression
- Improvise and compose music
- Listen with attention to detail
- Use and understand musical notation
- Appreciate a wide range of live and recorded music
- Develop understanding of musical history

PHYSICAL EDUCATION (KS2)

- Use running, jumping, catching and throwing in isolation and in combination
- Play competitive games, modified as appropriate
- Develop flexibility and control in gymnastics and athletics
- Take part in outdoor adventurous activities
- Compare performances to achieve personal bests
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue