

Woodside Academy

Year 6 Curriculum



English

Reading

- Read books structured in different ways; read for a wide range of purposes
- Check for sense and ask in-depth questions to improve understanding and empathy
- Draw inference and make more logical predictions
- Summarise main ideas
- Identify how structure and presentation contribute to meaning
- Discuss authors' use of language and its effect on the reader
- Distinguish between fact and opinion
- Read and discuss a broad range of texts
- Recommend a wider variety of books to others
- Apply knowledge of morphology and etymology more effectively when reading new words
- Identify and discuss themes and conventions and make more in-depth comparisons between texts
- Learn a wider range of poetry by heart • Prepare a variety of poems/plays to read aloud and perform confidently
- Retrieve, record and present information from more complex non-fiction texts
- Justify their views using evidence

Spoken Language

- Articulate accurately and justify their own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate and engage actively in conversations
- Speak clearly, fluently and more confidently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Explore a wider range of different viewpoints
- Listen and respond appropriately showing consideration to the speaker
- Ask a wider range of relevant questions
- Build and use more challenging vocabulary
- Speculate, hypothesise and explore more complex ideas
- Communicate more effectively using appropriate register

Writing including GPS

- Use: expanded noun phrases; modal and passive verbs; relative clauses
- Use with greater accuracy: 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 of the National Curriculum for English
- When writing: select appropriate grammar and vocabulary; use linking, organisational and presentational devices effectively; in narratives use dialogue and develop character, setting and atmosphere to engage the reader
- Spell: words with prefixes, suffixes and silent letters; homophones and other confusing words; use knowledge of morphology and etymology more accurately
- Use a thesaurus/dictionary to check meanings/spellings
- Write legibly, fluently and with increasing speed, and be able to adapt handwriting for different purposes
- Plan writing: to suit audience and purpose; noting and developing initial ideas; considering how authors develop characters and settings, and the effect on the reader
- Check writing for: accuracy correct and consistent tenses; subject/verb agreement; distinction between spoken/written language; appropriate register; correct spelling and punctuation
- Understand formal language structures, including subjunctive

Mathematics

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 0
- Solve number and practical problems that involve all of the above

Number - Addition and Subtraction

- Use their knowledge of the order of operations to carry out calculations involving the 4 operations
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Perform mental calculations, including those with mixed operations and larger numbers

Number – Multiplication and Division

- Multiply multi-digit numbers up to 4 digits by a two-digit whole numbers 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

Number – Fractions

- 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, $\times =$]
- Divide proper fractions by whole numbers [for example, $\div 2 =$]
- Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,]
- Identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places
- Multiply one-digit numbers with up to 2 decimal places by whole numbers
- Use written division methods in cases where the answer has up to 2 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

Algebra

- Use simple formulae
- Generate and describe linear number sequences; express missing number problems algebraically
- Find pairs of numbers that satisfy an equation with 2 unknowns
- Enumerate possibilities of combinations of 2 variables

Measurement

- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 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 up to 3 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 volumes 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]

Statistics

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

Ratio and Proportion

- Solve problems involving the relative sizes of 2 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

Geometry – Properties of shape

- 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 4 quadrants)
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Scientific Investigation

Science

With a new focus on scientific enquiry, lessons aim to explore practical enquiries, comparative and fair tests.

Encouraging children to make systematic and careful observations, using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further scientific questions.

- 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 experiments • Present findings orally and in writing
- Identify scientific evidence for or against an idea
- Explore how light behaves (travelling in straight lines, reflection, refraction, shadow formation)
- Explore the impact of diet, exercise, drugs and lifestyle on health
- Explore biological classification in more detail
- Describe how nutrients are transported in humans and other animals
- Know living things have evolved over time
- Know offspring are similar but not identical to parents
- Identify how living things adapt and how this may lead to evolution
- Identify main parts of the human circulatory system
- Associate brightness of lamp or volume of buzzer with number and voltage of cells
- Compare and give reasons for variations in how circuit components function
- Draw circuit diagrams using recognised symbols

Design and Technology

- Develop products fit for purpose based on market research carried out
- Communicate design ideas in various ways showing material knowledge
- Choose appropriate range of tools and materials to complete tasks
- Evaluate their product against their own design criteria and consider the views of others to improve their work
- Build and strengthen more complex structures using a range of materials and fixing techniques
- Use mechanical, electrical and computing systems in own products
- Understand and apply principles of a healthy diet and active lifestyle
- Prepare and cook mainly savoury dishes using different heat sources
- Understand seasonality and choose appropriate seasonal ingredients

Social Investigation

Geography

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

• History

- Settlement of Britain and development by Anglo-Saxons and Scots • Vikings and Anglo-Saxons in Britain (to 1066)
- A focused aspect of British history after 1066
- Major changes in Britain from Stone Age to Iron Age
- Roman Empire and its lasting impact on Britain
- In-depth history study
- A study of earliest civilizations and in-depth study of Ancient Egypt Ancient Greece
- A non- European society (Mayan)

PSHE

- Assessing risks as they become more grown up
- Evaluating healthy lifestyles and body image
- Linking emotions to health
- To judge what is responsible and what is not responsible
- Strategies to resist negative persuasion
- Moral debates on Fair trade, democracy, local and national governments
- Different personality and the impact of media on them
- That risks with drugs changes as you get older and strategies to help them
- How to communicate feelings effectively
- Managing feelings connected to starting secondary school

Computing

- Design, write and debug programs
- Use sequence, selection and repetition in programs to meet a challenge
- Use logical reasoning efficiently
- Understand a wide range of computer networks
- Use search technologies effectively to locate specific information
- Create a range of digital products (including for handling data) using a range of multi-media
- Use technology safely, respectfully and responsibly

Physical education

- Develop greater flexibility and control in gym, dance and athletics
- Take part in a variety of outdoor adventurous activities
- Compare and evaluate performances to achieve personal bests
- Use running, jumping, catching and throwing in isolation and in combination accurately
- Play competitive games, modified by pupils as appropriate

Swimming

- To swim competently, confidently and proficiently over a distance of at least 25 metres.
- To use a range of strokes effectively [for example, front crawl, backstroke and breaststroke].

Spanish

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

Creative Investigation

Art and Design

- Improve skills in drawing, painting and sculpture, using various materials and techniques with increasing competence
- Learn about great artists, architects and designers and create work in their particular style

Use sketchbooks to collect, record and evaluate ideas and suggest next steps for improvement

Music

- Use voice and instruments with increasing accuracy, control and expression - recognising which style to use based on interpretation
- Improvise and compose music using notation
- Listen with attention to detail and communicate own views and understanding
- Use and understand musical notation with greater confidence and complexity
- Appreciate a wide range of live and recorded music and share opinions and understanding
- Develop an understanding of musical history and its influences on modern day music

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