

Woodside Academy

Year 4 Curriculum



English

Reading

- apply their growing knowledge of root words, prefixes and suffixes
- read further exception words
- listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbook
- reading books that are structured in different ways
- using dictionaries to check the meaning of words that they have read
- preparing poems and play scripts to read aloud and to perform
- discussing words and phrases that capture the reader's interest and imagination
- recognising some different forms of poetry
- asking questions to improve their understanding of a text
- 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
- identifying main ideas drawn from more than one paragraph and summarising these
- identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- read year 3/4 common exception words

Writing

- use further prefixes and suffixes
- spell further homophones
- spell words that are often misspelt
- place the possessive apostrophe accurately in words with regular plurals
- use the first two or three letters of a word to check its spelling in a dictionary
- write from memory simple sentences
- use the diagonal and horizontal strokes that are needed to join letter
- increase the legibility, consistency and quality of their handwriting
- composing and rehearsing sentences orally
- draft and write by organising paragraphs around a theme
- assessing the effectiveness of their own
- proposing changes to grammar and vocabulary to improve consistency
- read aloud their own writing and edit appropriately for spelling and punctuation errors
- extending the range of sentences with more than one clause by using a wider range of conjunctions
- using the present perfect form of verbs
- choosing nouns or pronouns appropriately for clarity
- using prepositions
- using a range of adverbials for fronted adverbials with commas
- using apostrophes for omissions and possession
- using correct tense of person
- using expanded noun phrases
- to present different genres of writing correctly
- using a range of punctuation including inverted commas and commas
- using correct tense for the genre of writing
- using relative clauses
- using a range of poetic features

Spoken language

- 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
- consider and evaluate different viewpoints, attending to and building on the contributions of others
- select and use

Mathematics

Whole Numbers

- Place value of ten thousands, thousands, hundreds, tens and ones and counting numbers up to 100,000
- Numbers up to 100,000 are compared and arranged in ascending or descending order
- Partitioning of numbers to 10,000 including flexible partitioning
- Find 1, 10, 100, 1000 more or less
- Rounding numbers to the nearest ten, hundred and thousand
- Estimation – estimation based on rounding numbers
- Compare numbers to 10,000
- Roman numerals
- Addition and subtraction
- Factors pairs
- Multiples – multiply by a whole number
- Multiplication and division facts for 3, 6, 9, 7, 11 and 12
- Multiply a number by 1 and 0
- Multiplication by a 1 and a 2 digit number
- Division by a 1 digit number
- 2/3 step word problems using all 4 operations

Statistics

- Interpret charts
- Comparison, sum and difference
- Interpret line graphs
- Draw line graphs

Money

- Write money using decimals
- Convert between pounds and pence
- Compare money amounts
- Estimate with money
- Calculate and solve problems with money

Fractions

- A mixed number is made up of a whole number and a proper fraction
- A proper fraction is a part of a whole
- A proper fraction is a number between 0 and 1
- In an improper fraction, the numerator is equal to or greater than the denominator
- Conversion of fractions – a mixed number and an improper fraction can represent the same number
- Adding and subtracting fractions
- Equivalent fractions
- Fractions of a set
- Applying the concepts of a fraction in word problems

Area, perimeter and length

- To understand that perimeter of a rectangle and square is 2x length and 2x width.
- The area of a rectangle and square is length multiplied by width.
- Area of rectangle and rectilinear shapes.
- Perimeter of a rectangle, rectilinear and polygon shapes.
- Opposite sides of a rectangle are equal
- The four sides of a square are equal.
- Apply the concepts of area and perimeter for rectangles and squares in word problems.
- Metres, kilometres and equivalents

Shape

- Understand angles as turns
- Identify, compare and order angles
- Understand triangles, quadrilaterals and polygons
- Identifying symmetrical shapes
- Identifying lines of symmetry
- Making symmetrical shapes and patterns

Decimals

- Understanding tenths
- Understanding hundredths
- Understanding thousandths
- Comparing decimals
- Rounding decimals
- Fractions and decimals
- Addition of decimals
- Subtraction of decimals
- Word problems of addition and subtraction
- Multiplication of a decimal by a whole number
- Division of a decimal to a whole number.
- Estimation of decimals by rounding up and down
- Word problems of multiplying and dividing of decimals
- Partition and flexibly partition decimals
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Time

- A second is a unit of measurement of time
- 60 seconds = 1 minute
- Convert from 12 hour or 24 hour clock notation
- Convert analogue to digital
- Duration can be measured in hours and minutes
- Years, months, weeks and days

Position and direction

- Describe position using coordinates
- Plot coordinates
- Draw 2-d shapes on a grid
- Translate on a grid
- Describe translation on a grid

Scientific Curriculum

Science

- Understand sound as vibrations
- Investigate how sound travels through materials
- Investigate the relationship between distance and volume
- Investigate effectiveness of preventing sound vibrations traveling through different materials
- Investigate pitch and volume
- Investigate string telephones
- Identify electrical appliances including mains and battery powered
- Understand electrical safety
- Construct simple circuits
- Recognise and investigate conductors and insulators
- Identify and classify carnivores, herbivores and omnivores
- Construct and interpret food chains
- Identify teeth, their purposes and keeping them healthy
- Investigate how the digestive system works, the basic parts and their functions
- Recognise different habitats and animals' habitual needs
- Identify and classify animals by similarities and differences including vertebrates, invertebrates, mammals, amphibians, insects, reptiles, fish and birds by use of a classification key
- Identify and group plants according to their characteristics
- Recognise solids, liquids and gases and organise materials accordingly
- Explore properties of solids, liquids and gases
- Observe how heating and cooling can change materials state
- To understand evaporation and condensation
- To recognise how evaporation and condensation play their part in the water cycle

Computing

- Understand the components needed to connect networks
- Understand what the internet is
- Understand how websites can be shared using World Wide Web
- Describe how content can be added on the World Wide Web and who owns it
- Be aware of unreliable content such as 'fake news'
- Identify that sound can be recorded and what an input and output is
- Explain that audio recordings can be edited and apply the skill to edit and enhance
- Recognise different parts of creating a podcast
- Understand simple programming language of Logo Robot to create text-based programs
- Understand and use repeat and count controlled loops to repeat a program
- Explain and use a digital device to collect data over time to answer questions
- Explain that a data logger collects data from sensors over time
- Recognise and use a computer to help analyse data from sensors
- Explain how to and edit digital images to improve colour, crop, rotation, cloning and combining
- Recall text-based programming knowledge and apply it to block based programming in scratch
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Design and Technology

- Design: generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- Make: select from and use a wider range of tools and equipment to perform practical tasks
- Evaluate: investigate and analyse a range of existing products and evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- Cooking and Nutrition: understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

Social Curriculum

History

- Know when the Shang Dynasty was and how we know about it.
- Describe the roles of different members of Shang society and know where they fitted in the Shang social hierarchy.
- Study the evidence we have about the dynasty – early form of writing, oracle bones.
- Know what the Shang people believe in?
- Look at royal burials and know what we can learn about them from their contents.
- Recall key facts on Fu Hao
- Know the life and adventures of Alfred Russell Wallace
- Be aware of the railways of the Victorian era
- Know about the Kings and Queens of the Victorian era
- Understand life in Victorian Britain
- Understand differences between Victorian and modern schools
- Awareness of lives of rich and poor people in Victorian times and the workhouses
- Know why the Angles, Saxons and Jutes settle in Britain
- Know how Anglo-Saxon Britain ruled and how Essex got its name.
- Know the shifts in religion and power were from Pagan to Christianity kings.
- Know who were the Vikings and why did they carry out raids.
- Know what the Black Death was.
- Explore the Peasant Revolt and why it occurred.
- Recall key facts on Wat Tyler and his link to the local area.
- Know that the Wat Tyler Park was used by Nobel to develop Dynamite.

Geography

- Find out about settlers needs and how settlements change over time.
- Use maps and map symbols
- Use grid references
- Recognise different kinds of settlement
- Understand what a continent, country and city is
- Locate continents, countries and cities on a world map using an atlas
- Recognise geographical features and human features
- Find similarities and differences between countries
- Identify locations of plants around the world
- Explore biomes around the world
- Explore how plants survive in extreme environments
- Explore the role of plants in agriculture
- Explore ways in which humans use plants
- Investigate plants found in mega diverse countries

PSHE

- Recognise strengths, skills and interests
- Identify how to treat each other with respect
- Recognise how to manage feelings
- Recognise changes as we grow
- Know how choices make a difference to others and the environment
- Recognise how to manage risk in different places

Creative Curriculum

Art and Design

- Closely observes and records objects from the natural and man-made world
- Record information from first hand observation and imagination
- Use sketchbook to record how artists have used paint and paint techniques to produce pattern, colour, texture, tone, shape, space, form and line
- Evaluate and critique their own work
- Experiment with different techniques to show tone and texture.
- Use watercolour paint to produce washes for backgrounds and then add detail
- Use a number of brush techniques to produce shapes, textures, patterns and lines
- Use colour to reflect feeling and mood
- Study the work of famous artists

Music

- Sing in unison with the range of an octave, following musical directions
- Listen to recorded and live performances and understand the story
- Compose short pentatonic phrases with different pitches
- Include instruments to expand the scope of the composition
- Recognise a range of musical terms
- Understand, read, follow and perform songs using minims, crotchets, paired quavers and rests
- Perform melodies following notation including in two or more parts

Physical Education

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance
- perform dances using a range of movement patterns
- take part in outdoor and adventurous activity challenges both individually and within a team
- compare their performances with previous ones and demonstrate improvement to achieve their personal best
- Swimming and water safety: swim competently, confidently and proficiently over a distance of at least 25 metres
- Swimming and water safety: use a range of strokes effectively
- Swimming and water safety: perform safe self-rescue in different water-based situations

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