

# Woodside Academy

## Curriculum Year 4



### 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

#### 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
- proof-read for spelling and punctuation errors
- read aloud their own writing
- 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 conjunctions, adverbs and prepositions
- using fronted adverbials



## 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 appropriate registers for effective communication.

## History

- Changes in Britain from the Stone Age to the Iron Age including Wat Tyler, Peasants Revolt, Richard II and Black Death.
- a local history study of Wat Tyler
- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

## Geography

- Locate the world's countries focusing on Europe
- Study UK countries, cities, regions, physical features, land use and changes over time.
- Understand key aspects of physical and human geography.
- Use maps, atlases, globes and digital computer mapping.
- Use eight points of the compass and six figure grid references with ordnance survey symbols and keys.
- Choosing an appropriate range of methods to study the local area.
- Geographical skills and fieldwork: use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies

## 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.



## Science

- Recognise that living things can be grouped in a variety of ways.
- Identify vertebrates by observing similarities and differences.
- Use a key to identify invertebrates.
- Show the characteristics of living things in a table and a key
- Know that all living things need to reproduce in order for the species to survive
- Understand the terms germination, pollination, fertilisation and seed dispersal
- Classify producers, predators and prey and construct relevant food chains.
- Classify different types of trees using fieldwork.
- Identify solids, liquids and gasses.
- Recognise the changing states of matter and what they look like.
- Investigate how a material changes form.
- Identify how sounds are made using vibration.
- Investigate how the ear works and how we hear.
- Find patterns in the pitch of sound and volume.
- Understand that sounds get fainter from a distance.
- Describe the water cycle and its features.

## Computing

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
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## Art and Design

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials
- about great artists, architects and designers in history

## Music

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music

## 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



# 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
- Rounding numbers to the nearest ten
- Rounding numbers to the nearest hundred
- Estimation – estimation based on rounding numbers
- Factors – when a given number is divided by its factor it does not leave any remainder
- Multiples – multiply by a whole number
- Multiplication by a 1 and a 2 digit number
- Division by a 1 digit number
- 2/3 step word problems using all 4 operations

## Tables and line graphs

- Data involving two variables is presented in a table
- A variable may be sub classified into two or more sub-variables

# 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
- Fractions of a set
- Applying the concepts of a fraction in word problems

## Angles

- An angle is an amount of turning and not the amount of space
- Angles are named as ABC or a
- Drawing angles of 180 degrees
- A right angle is 90 degrees, 2 right angles is 180 degrees, 3 right angles is 270 degrees, and 4 right angles is a complete is 360 degrees.
- 8 point compass

## Perpendicular and parallel lines

- Drawing perpendicular lines
- Drawing parallel lines
- Horizontal and vertical lines



## Squares and rectangles

- Squares and rectangles – right angles and equal and differing lengths of side
- Properties of squares

## 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

## Time

- A second is a unit of measurement of time
- 60 seconds = 1 minute
- 24 hour clock – Time can be expressed using 12 hour or 24 hour clock notation
- Duration can be measured in hours and minutes

## Area and perimeter

- To understand that perimeter of a rectangle and square is  $2 \times \text{length}$  and  $2 \times \text{width}$ .
- The area of a rectangle and square is length multiplied by width.
- Perimeter of a composite shape
- Area of a composite shape.
- 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.

## Symmetry

- Identifying symmetrical shapes
- Identifying lines of symmetry
- Making symmetrical shapes and patterns

## Tessellations

- Identifying tessellations

