



Cornerstone  
Academy Trust

# Curriculum Objectives



## English

### Spoken Language

Children will be taught to . . .

- listen and respond to statements and questions posed by adults and other learners; ask relevant questions to extend their understanding and knowledge; take opportunities to learn new vocabulary across all subjects
- 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; gains, maintains and monitors the interest of the listener(s)
- consider and evaluate different viewpoints, attending to and building on the contributions of others; selects and uses appropriate registers for effective communication

## Reading

### Word Reading

Children will be taught to . . .

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



## Reading

### Reading Comprehension

Children will be taught to . . .

- read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or text-books; read books that are structured in different ways and reading for a range of purposes
- recommend books that they have read to their peers, give reasons for their choices
- identify and discuss themes and conventions in and across a wide range of writing, making comparisons within and across books
- learn a wide range of poetry by heart; prepare 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
- check that the book makes sense to them, discuss their understanding and explore the meaning of words in context; asks questions to improve their understanding
- draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justify inferences with evidence; predict what might happen from details stated and implied
- summarise the main ideas drawn from more than one paragraph, identify key details that support the main ideas; identifies 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; retrieves, records and presents 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 courteously; 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; provides reasoned justifications for their views



## Writing

### Spelling

Children will be taught to . . .

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters [for example, knight, psalm, solemn]
- distinguish between homophones and other words which are often confused; spells 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; uses a thesaurus

### Handwriting

Children will be taught to . . .

- 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; chooses the writing implement that is best suited for a task

### Grammar (See English Appendix 2 for guidance)

Children will be taught to . . .

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



## Writing

### Composition

Children will be taught to . . .

- identify the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- note and develop initial ideas, drawing on reading and research where necessary
- write narratives, consider how authors have developed characters and settings in what pupils have read, listened to or seen performed
- select appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- how narratives, describes settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- précise longer passages
- use 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 proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- proof-read for spelling and punctuation errors; ensure the consistent and correct use of tense throughout a piece of writing; correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear



## Maths

### Number - number and place value

Children will be taught to . . .

- 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.
- use calculator methods to include several digits

### Number – addition and subtraction

Children will be taught to . . .

- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- calculate mentally a difference such as  $8006 - 2993$
- 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 and division

Children will be taught to . . .

- 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 ( $^2$ ) and cubed ( $^3$ )
- 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
- know multiplication facts up to 12 x 12 ( In old Curriculum was 10 x 10 but think it should be to 12)
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates



## Number – fractions (including decimals and percentages)

Children will be taught to . . .

- 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,  $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$ ]
- 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,  $0.71 = \frac{71}{100}$ ]
- 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  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$  and those fractions with a denominator of a multiple of 10 or 25



## Measurement

Children will be taught to . . .

- 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 with increasing accuracy 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 using a formula (including squares), and including using standard units, square centimetres ( $\text{cm}^2$ ) and square metres ( $\text{m}^2$ ) and estimate the area of irregular shapes
- estimate volume [for example, using  $1 \text{ cm}^3$  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

Children will be taught to . . .

- the identify 3-D shapes, including cubes and other cuboids, from 2-D representations
- 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  $360^\circ$ )
  - angles at a point on a straight line and  $\frac{1}{2}$  a turn (total  $180^\circ$ )
  - other multiples of  $90^\circ$
- 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.
- recognise parallel and perpendicular lines



## **Geometry –position and direction**

Children will be taught to . . .

- 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 change
- draw common 2D and 3D shapes in different orientations on grids

## **Geometry – statistics**

Children will be taught to . . .

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



## Science

### Working Scientifically

#### Plan

Children will be taught to . . .

- plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

#### Do

Children will be taught to . . .

- take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate
- record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

#### Review

Children will be taught to . . .

- report and present 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
- use test results to make predictions to set up further comparative and fair tests
- identifying scientific evidence that has been used to support or refute ideas or arguments



## Biology

### Animals including humans

Children will be taught to . . .

- describe the changes as humans develop to old age
- use scientific names for major organs of body systems, including the circulatory system and identify these organs in the human body

### Living things in their environment

Children will be taught to . . .

- 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
- use keys based on observable external features to help them identify and group living things systematically
- recognise that feeding relationships exist between plants and animals in a habitat, and describe these relationships, using food chains

## Chemistry

### Properties and changes of materials

Children will be taught to . . .

- 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

## Physics

### Forces

Children will be taught to . . .

- 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

## Earth and Space

Children will be taught to . . .

- 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



## History

Children will be taught...

### **A Historical Era – Stone Age to Iron Age**

- explore the Neolithic hunter-gatherers of the Stone Age
- investigate the Bronze Age with a focus on religion, building, invention and travel
- explore how this changes moving into the Iron Age, investigating hill forts, tribes, farming and art

### **A Local Historical Study – Killerton House**

- a walking theatre performance at the Killerton estate on a chosen historical context, selected from key historical events that took place at the house and grounds

### **A theme in British History that extends pupils' chronological knowledge**

- enquiry question: "Who has shaped the Britain we have today?"
- investigate famous and important political leaders throughout History – recording research into Sway and OneNote
- use the idea of the Earth's rotation to explain day and night and that apparent movement of the sun across the sky



## Geography

Children will be taught...

### Human Geography – Features of Britain

- name and locate cities in the UK, alongside their geographical regions and human characteristics, such as canals, railways and buildings

### Physical Geography – Rivers and Coasts

- describe and understand key aspects of physical geography, such as rivers and coasts and the water cycle.
- name and locate cities in the UK, alongside their geographical regions and physical characteristics, such as valleys, rivers, coastline and weather

### Geographical Skills – Fieldwork

- use fieldwork to observe, measure, record and present the physical features in the local area using a range of methods, including: sketch maps, plans and graphs, and digital technologies



## RE

Children will be taught...

### **British Council Themes for “Global Citizens” – Fairness and Equality**

- understand the concepts of equal opportunities, freedom and discrimination
- discussion around why equality should exist and an exploration of why it doesn't
- this theme encourages attitudes and mind-sets that will be vital for young people who want to shape the world they live in and become positive global citizens

### **Learning about Religion – What does it mean to be good?**

- understanding how to treat others fairly and linking this to a variety of religious scriptures
- explore roles and responsibilities of authority figures within their own lives and of religious leaders in different faith communities
- reflecting on ideas of right and wrong and their own responses to them



## Computing

Children will be taught ...

### **Digital Literacy & Online Safety: Sway and Adobe Premiere**

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

### **Information Technology: Documentaries**

- 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
- 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

### **Coding (Computer Science): Micro:Bit, Minecraft, Kodu**

- 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



## MFL (Spanish)

### Project: Healthy Living

- Numbers to 100
- To hold a conversation about themselves (including topics from previous years)
- Sports
- Healthy eating
- Keeping fit
- Clothes
- Going shopping - shops (butcher, corner shop, clothes shop, supermarket etc.)
- Weather - temperature, dressing for the weather, extreme conditions, weather reports
- Opposites
- Illnesses

Children will be taught . . .

- listen attentively to spoken language and show understanding by joining in and responding
- speak in sentences, using familiar vocabulary, phrases and basic language structures
- appreciate stories, songs, poems and rhymes in the language
- develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases
- explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words
- engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help
- present ideas and information orally to a range of audiences
- read carefully and show understanding of words, phrases and simple writing
- write phrases from memory, and adapt these to create new sentences, to express ideas clearly
- describe people, places, things and actions orally and in writing



## Music

Children will be taught . . .

- 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



## Art

Children will be taught to . . .

- experiment with graded pencils and other implements to achieve variation in tone
- use view finders to develop close observation skills
- use recycled, natural and man-made materials to create sculptures
- develop skills in using clay, including slabs, coils and slips
- produce intricate patterns and textures in a malleable media

### Cautionary Tales

- The children are inspired by the work of German expressionists – August Macke, Kirchner. Alongside Edvard Munch to investigate how mood, and feelings are depicted through line and print.

### Symbolism

- children focus on symbolism found within the *Pre-Raphaelite Brotherhood, Frida Kahlo, Gustav Klimt, Odilon Redon, Paul Gauguin*
- children design and create their symbol in relief using mod rock and card.

### Dale Chihuly

- children select colours to represent sea forms and create a collaborative piece from created out of plastic bottles
- this will lead to a collaborative hanging sculpture using recycled materials

### Environmental Art

- Artists that use plastics: Alejandro Durán: *Washed Up & Shoots*, Max Liboion: *Sea Globes*, Sue Lipscombe: *Bristol Whales*, Calder Kamin, *Plastic Planet*
- children focus on the creation and reduction of plastic waste and how it impacts on the planet discuss how artists have made comment on this in their art and what is the impact
- children design and create a 2D/3D artwork commenting on our impact on the environment

### Art Exhibition

- Use sketchbooks to explore and develop ideas based on the theme of 'depicting a narrative in art,' using *Symbolism* as a stimulus for creativity



### PE

Children will be taught ...

- Use running, jumping, throwing and catching in isolation and in combination
- Play competitive games, modified where appropriate, such as basketball, cricket, football, netball, rounders and tennis, and apply basic principles suitable for attacking and defending
- Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- Perform dances using a range of movement patterns
- Take part in outdoor and adventurous activity challenges both individually and within a team

### PSHE

Children will be taught to...

- give pupils the knowledge and develop the self-esteem, confidence and self-awareness to make informed choices and decisions
- encourage and support the development of social skills and social awareness
- enable pupils to make sense of their own personal and social experiences
- promote responsible attitudes towards the maintenance of good physical and mental health, supported by a safe and healthy lifestyle;
- enable effective interpersonal relationships and develop a caring attitude towards others
- encourage a caring attitude towards and responsibility for the environment
- help our pupils understand and manage their feelings;
- understand how society works and the rights and responsibilities involved
- develop good relationships with other members of the school and the wider community
- appreciate and inherit the Cornerstone Academy Trust School core values 'Fortune Favours the Brave' into their own philosophy
- develop positive learning behaviours



## Design & Technology

Children will be taught...

### Creating Audiobooks

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, prototypes and computer-aided design
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products using a Micro:Bit

### Eggy Challenge—Create a Catapult

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- investigate and analyse a range of existing and historical models
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, pulleys, cams, levers and linkages.]

### Killerton Living History Project—Producing meals from the era

- 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.
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed



## Outdoor Learning

Children will be taught to...

- use keys based on observable external features to help them identify and group living things systematically
- use maps, atlases, globes and digital/computer mapping.
- 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.
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps)
- grow the necessary vegetables to create this to create a main meal to eat

## Project Based Learning

Children will complete projects:

- **Killerton 'Living History' Performance:** Pupils will perform a piece of Promenade Theatre, based in a historical period, at Killerton Estate. Pupils will learn about the history of the period and write scripts to perform about a day in the life of the Killerton Estate.
- **Cautionary Tales For Children:** Pupils will create their own Cautionary Tales based on the book by Hilaire Belloc. These books will be written in the style of the author and be illustrated in the style of German Expressionism.
- **GCP - Documentary Project:** In teams pupils will create a Documentary about a current issue or question they feel is important in their community. They will conduct research, experiment and survey, interview and film their conclusions based on the facts and opinions they have gathered. They will collaborate to edit the finished film together and share it in a screening to their classmates and another school in the world.