



Academic Guide for Parents

Appendix

Core Skills

Art Core Skills

Band 1

- Begin to understand colour theory, distinguishing between tonal value and colour [hue]
- Experiment with the marks, lines, shapes, textures, patterns and tones that can be made with different drawing instruments on a range of surfaces
- Draw from observation including detail and sense of scale. Demonstrate an ability to show relationships between objects and figures
- Begin to reflect on own drawings and paintings. To describe the process and what materials were used.
- To begin to experiment with a greater range of materials including clay, wire etc.
- Experiment with the marks that can be made with different drawing instruments on a range of surfaces
- Create different textures with a variety of materials and tools
- Begin to represent familiar figures and objects with free lines and shapes
- Use drawing, painting and sculpture to develop and share experiences and imagination ideas

Band 2

- Use a sketchbook to record observations and use them to review and revisit ideas and processes – including drawing, designing, experimenting, collecting and annotating – as part of an ongoing creative method
- Paint with increasing control of colour and tone, including mixing and applying paint in different ways to match and to make new colours
- Analyse and mix increasingly subtle colours and tones and show an awareness of the effects of warm and cool colours, of complementary and harmonious colours and of variations in tone
- Develop and evaluate a variety of art, craft and design techniques, including drawing, painting and sculpture with a range of materials
- Draw from memory, imagination and observation using an increasing range of fine and broad media, demonstrating control of line, shape, colour and tone
- Lift an impression or print from a textured or incised surface using a stamp or block
- Use clay, paper, card and found materials to explore three dimensions and develop an understanding of the tactile properties of textures and surfaces
- Demonstrate an appreciation of significant artists, architects and designers in history and also within contemporary contexts
- Begin to reflect on own work and make changes, learning from own experiments to inform progress
- Take pride in the quality and presentation of own artwork

Band 3

- Use a sketchbook to support the creative design process through drawing, designing, experimenting, investigating, documenting, annotating and reviewing
- Demonstrate careful control of line, shape and tone when drawing from memory, imagination and observation using an increasing range of fine and broad media, demonstrating control of line, shape, colour and tone.
- Analyse and mix increasingly subtle colours and tones and show an awareness of the effects of warm and cool colours, of complementary and harmonious colours and of variations in tone

- Develop and evaluate a variety of art, craft and design techniques, including drawing, painting and sculpture with a range of materials
- Paint with increasing control of colour and tone, including mixing and applying paint in different ways to match and to make new colours
- Use clay, paper, card and found materials to explore three dimensions and develop an understanding of the tactile properties of textures and surfaces
- Paint with increasing confidence of line, shape, colour, tone and texture.
- Design and construct 3D models, using clay, paper, card and found materials.
- Use printing and pattern-making techniques to design and lift an impression or print from a textured or incised surface
- Demonstrate an appreciation of significant artists, architects and designers in history and also within contemporary contexts.
- Reflect on own work and make significant changes learning from own experiments to inform progress

Band 4

- Use a sketchbook to thoroughly support the creative design process through drawing, designing, experimenting, investigating, collating, annotating, analysing and evaluating
- Analyse and mix increasingly subtle colours and tones and show an awareness of the effects of warm and cool colours, of complementary and harmonious colours and of variations in tone
- Use a range of wet and dry media to explore wash, transparency, marks and strokes, layers, blending, splash, drip and dribble, scumble, impasto etc. using watercolour, tempera and acrylic
- Explore a diverse range of artistic processes (for example, fabric collage and weaving techniques).
- Critically and technically analyse and evaluate artwork (own and others); identify key features, make comparisons and use this information to inform and improve own artwork
- Draw and paint with an increased control of line, shape, colour and tone, including mixing and applying paint in different ways to match and to make new colours.
- Use clay, paper, card and found materials to explore three dimensions and develop an understanding of the tactile properties of textures and surfaces.
- Use printing and pattern-making techniques to design and lift an impression or print from a textured or incised surface
- Develop and evaluate a variety of art, craft and design techniques, including drawing, painting and sculpture with a range of materials
- Demonstrate how artists work have inspired pupil's own art

Band 5

- Develop a critical understanding of the work of artists, architects and designers, including showing an awareness of the importance of social, cultural, political and religious contexts
- Create original artwork that demonstrates a high-level of competence with a range of artistic techniques and using an array of different media.
- Express a personal interest in various forms of art by attending galleries and exhibitions and recording observations through sketches, own photography and annotation.
- Present work in a professional manner taking pride in every aspect of both sketchbook work and formal artwork

English Core Skills

Band 1

Reading

- Use a range of strategies to decode unfamiliar words
- Understand how commas are used to give reading more meaning
- Read texts aloud varying intonation, tone and volume
- Recount what has happened in a story, putting events and ideas in sequence
- Ask questions to improve understanding of text
- Use a dictionary to check the meaning of words

Writing

- Express time and cause using conjunctions, including when, so, before, after, because
- Use adjectives, adverbs and prepositions with increasing confidence
- Write simple compound sentences
- Use paragraphs to group related ideas
- Use headings and subheadings for layout
- Use punctuation, including capital letters, full stops, commas, question marks, exclamation marks
- Know how to add speech marks in creative writing
- Ensure that the correct letter formation is being used

Speaking and Listening

- Begin to adapt style and content to the needs of the listener
- Listen carefully in different contexts
- Join in group discussions, asking questions and adding relevant details

Band 2

Reading

- Become increasingly familiar with a wide range of books, including fairy stories, myths and legends
- Ask relevant questions to improve understanding of a text
- Predict what might happen from details stated and implied
- Distinguish between statements of fact and opinion
- Retrieve and present information from texts
- Explain and discuss understanding of a text, including providing reasoned justifications for ideas

Writing

- Plan and develop initial ideas, drawing on reading and research where necessary
- Write compound sentences using a variety of conjunctions
- Demonstrate an awareness of spelling patterns and apply these when writing
- Use dictionaries and thesauruses
- Understand how to use apostrophes to show omission and possession, including possessive plurals
- Assess the effectiveness own and others' writing and suggest improvements

Speaking and listening

- Read aloud a wide range of books and poetry with accuracy and at a reasonable speaking pace
- Prepare readings and presentations, with appropriate intonation to show understanding

Band 3

Reading

- Understand new vocabulary using the context in which a word is used or using a dictionary
- Read from a range of genres, including fiction, non-fiction and poetry
- Make comparisons within and across books
- Make inferences where something is implicit within a text
- Structure answers using 'Point – Evidence – Explain'
- Evaluate how authors use language, sentence structure and punctuation, considering the impact on the reader
- Recognise a range of poetic conventions, including simile, metaphor, personification, alliteration, assonance, enjambment and imagery

Writing

- Write with increasing fluency
- Identify the audience for and purpose of a piece of writing, selecting the appropriate form
- Correctly punctuate direct and reported speech
- Ensure the consistent and correct use of tense throughout a piece of writing
- Proof-read writing for spelling and punctuation errors

Speaking and listening

- Speak confidently and effectively in a range of formal and informal contexts
- Give short speeches and presentations, expressing ideas clearly and succinctly

Band 4

Reading

- Identify the purpose of and audience for a piece of writing
- Justify ideas, including making inferences, using evidence from the text
- Identify and comment on the effectiveness of figurative language
- Explain the effectiveness of a range of poetic conventions in context
- Make critical comparisons across texts

Writing

- Use a wide range of vocabulary
- Develop ideas using compound and complex sentences
- Structure writing in an effective and interesting way
- Adapt style and tone according to purpose and audience
- Amend the vocabulary, grammar and structure of a piece of writing to improve its coherence and overall effectiveness
- Ensure fluency through the use of correct punctuation, including using semi-colons, colons and dashes

Speaking and listening

- Listen to and build on the contributions of others, asking questions to clarify and inform, and challenging courteously when necessary
- Participating in formal debates and structured discussions, summarising and/or building on what has been said

Band 5

Reading

- Read a wide range of challenging literature and literary non-fiction
- Identify and interpret different themes in a single text and across texts
- Critically evaluate texts by drawing on knowledge of their context, including social, historical and cultural contexts
- Evaluate the effectiveness of a range of poetic conventions
- Analyse aspects of plot, characterisation and setting and the relationships between them

Writing

- Enhance writing through the use of figurative language as well as literary and rhetorical devices
- Make notes, draft and write for a wide range of purposes and audiences
- Select and organise facts and ideas in an effective and interesting way
- Restructure writing, including amending its grammar and vocabulary, to improve its coherence, clarity and overall effectiveness
- Draw on new vocabulary and grammatical constructions from own reading

Speaking and listening

- When working in a group or leading a class, guide and manage discussions, involving others productively
- Speak confidently on a given topic without prior preparation

French Core Skills

Band 1

Listening and responding

- Understand a range of familiar statements and questions

Reading and responding

- Understand short phrases presented in a familiar context
- Match sound to print by reading aloud single familiar words and phrases
- Use glossaries / lists to find out the meanings of new words

Speaking

- Give short, simple responses to questions
- Describe people, places and objects
- Use set phrases
- Accents may be approximate but meaning is clear

Writing

- Copy familiar short phrases correctly
- Write items and set phrases used regularly in class
- Spellings may be approximate but generally understood

Band 2

Listening and responding

- Understand short passages made up of familiar language in the present tense
- Follow short dialogues, messages and instructions on one topic
- Listen to longer passages and identify the main points despite not being able to understand everything

Reading and responding

- Understand short texts and dialogues made up of familiar language
- Identify the main points in a passage
- Read simple texts independently
- Use a bilingual dictionary to look up new words

Speaking

- Take part in brief prepared tasks of two or three exchanges, using visual or other cues to help
- Use short phrases to express personal responses
- Use memorised language to express simple ideas and substitute words as necessary

Writing

- Write two or three short sentences on familiar topics, using aids
- Write short phrases from memory
- Identify missing words to add to a passage
- Spelling is readily understandable

Band 3

Listening and responding

- Understand longer passages covering a variety of topics in the present tense
- Understand familiar language used in unfamiliar contexts
- Listen to extended pieces and glean meaning
- Understand different points of view, opinions and specific details

Reading and responding

- Understand a range of written material including dialogues, stories, newspaper articles, social media etc .
- Identify and note main points and specific details including opinions

Speaking

- Take part in simple structured conversations of three or four exchanges, supported by visual or other cues
- Use knowledge of grammar to adapt and substitute single words or phrases
- Pronunciation is generally accurate

Writing

- Write individual paragraphs of three or four simple sentences, drawing largely on memorised language
- Use knowledge of grammar to adapt and substitute individual words and set phrases
- Add missing words discriminating between different parts of speech
- Use dictionaries or glossaries to check learnt words

Band 4

Listening and responding

- Understand the near future, present and perfect tenses
- Understand learnt language spoken at normal speed
- Understand and pick out the main points from real material taken from television and radio

Reading and responding

- Understand a variety of texts using the near future, perfect and imperfect tenses
- Scan longer passages of material for particular information
- Use reference materials to support learning

Speaking

- Take part in conversations seeking and conveying information and opinions in simple terms, including meeting routine needs for information and explanation
- Talk in the near future or perfect tenses

Writing

- Write short paragraphs that seek and convey information and opinions
- Write in the present, near future and perfect tenses
- Convey meaning clearly
- Apply grammar in a range of contexts
- Use simple descriptive language
- Edit and redraft work

- Use reference sources to improve accuracy as well as variety of expression

Band 5

Listening and responding

- Understand a variety of tenses (future, perfect, imperfect, pluperfect, conditional etc.)
- Understand different types of spoken material from a range of sources
- Draw inferences, recognise attitudes and emotions

Reading and responding

- Understand complex sentences with unfamiliar vocabulary, using prior knowledge to work out meaning
- Use new vocabulary and structures found in reading to respond in speaking or writing
- Read for personal interest (magazines/books/internet)
- Access unfamiliar topics involving more complex language and structures
- Use a single language dictionary to look up new words

Speaking

- Initiate and develop conversations and discuss matters of personal or topical interest
- Improvise and paraphrase
- Demonstrate good intonation and pronunciation

Writing

- Produce pieces of writing of varying lengths on real or imaginary subjects, using an appropriate register
- Link sentences and paragraphs, and structure ideas
- Use previously learnt language for own purposes
- Express and justify ideas, own opinions and seek the views of others
- Write in a style appropriate to the content
- Use reference materials to extend range of language and improve accuracy
- Translate extended passages into English and translate sentences into French

Geography Core Skills

Band 1

- Use world maps, atlases and globes to locate different countries in the world as well as the continents and oceans
- Name and locate the countries and major cities of the United Kingdom
- Use a key when using a map
- Recognise simple weather symbols
- Compare features of own locality with a contrasting location

Band 2

- Use the eight points of a compass to describe the location of features and routes on a map
- Interpret four-figure grid references, symbols and keys, including when working with Ordnance Survey maps
- Undertake fieldwork and observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps and graphs
- Locate and describe key human and physical features of the United Kingdom
- Create accurate and well-annotated diagrams

Band 3

- Understand the difference between human and physical geography
- Use maps, atlases, globes and computer mapping to locate countries and describe human and physical features
- Use world maps, atlases and globes to identify the position and significance of latitude, longitude, the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circles, the Prime/Greenwich Meridian and time zones (including day and night)
- Interpret Ordnance Survey maps in the classroom and the field, including using six-figure grid references and scale, as well as topographical features
- Identify land-use patterns and understand how these have changed over time
- Undertake fieldwork investigations, including collect and analysing data and drawing conclusions
- Explain ideas in writing supported by relevant knowledge
- Read and interpret climate graphs
- Begin to use case studies to illustrate key areas of study

Band 4

- Recall key global locations
- Interpret Ordnance Survey maps in the classroom and the field, including using grid references and scale
- Know and use appropriate geographical terminology
- Select relevant case studies and explain their importance
- Produce annotated diagrams to illustrate the formation of geographical landforms
- Use key indicators, such as GDP per capita, literacy rates and life expectancy rates to identify the level of development of a particular country or region
- Compare and contrast different interpretations of current issues

- Collect and organise geographical data
- Analyse geographical data, identifying and explaining patterns within the results
- Draw conclusions from geographical data with reference to the original hypotheses
- Evaluate the reliability of geographical data and identify areas for improvement

Band 5

- Draw on a broad knowledge of contemporary issues, such as climate change and sustainability
- Produce well-structured, extended responses to geographical questions
- Demonstrate an ongoing interest in politics and current affairs
- Understand how human and physical processes interact to influence and change landscapes, environments and the climate
- Use evidence gathered from independent research to produce a coherent, well-reasoned argument

History Core Skills

Band 1

- Understand the differences between the past and present
- Demonstrate a simple understanding of why certain events occurred
- Place historical events into a chronological framework
- Use appropriate historical language
- Research historical events using a range of resources

Band 2

- Understand chronology and sequence events in the correct order
- Understand why events happen drawing on relevant historical information about an event
- Compare different interpretations of past events
- Form an opinion about the past
- Appreciate that past events influence the present
- Begin to write structured accounts of historical events

Band 3

- Select relevant knowledge to support ideas about past events
- Plan and construct extended written pieces
- Demonstrate an ability to be empathetic about events and how they effected people's lives
- Identify the causes and consequences of historical events
- Identify key people from history periods studied and understand the influence they had on historical events
- Classify sources as primary or secondary and begin to evaluate the reliability of sources

Band 4

- Make links between sources, comparing and contrasting the ideas they present
- Use own knowledge to support and contextualise information from sources
- Evaluate the reliability and utility of sources
- Reach a well-argued judgement making full use of sources and own knowledge
- Carefully structure answers to ensure ideas are well developed and substantiated
- Analyse historical trends and demonstrate an appreciation of historical concepts such as continuity and change, cause and effect
- Create structured narratives and analytical accounts of historical events
- Support assertions with relevant knowledge, persuasive analyses and balanced judgements
- Discern how and why contrasting arguments and interpretations of the past have been constructed

Band 5

- Infer from complex sources with a variety of meanings
- Draw on and bring together significant aspects of the history of the wider world
- Deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'

- Make connections between local, regional, national and international history as well as between cultural, economic, military, political, religious and social history
- Understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- Think philosophically and question the ethical and moral arguments and opinions behind a topic

Latin Core Skills

Band 2

- Know and understand the person and number of a verb (1st/2nd/3rd person; singular/plural)
- Conjugate verbs in the present tense (all conjugations)
- Know and use the language associated with the different cases of nouns (nominative, vocative, accusative, genitive, dative, ablative)
- Recognise that nouns are masculine, feminine or neuter in gender
- Understand the 1st and 2nd declensions of nouns
- When translating from Latin, identify the verb first, then the subject, then the object

Band 3

- Understand the 3rd declension of nouns
- Recognise that adjectives must agree with their noun in number, gender and case
- Understand the 1st and 2nd declensions of adjectives
- Distinguish between present, imperfect and perfect tenses
- Conjugate verbs in the imperfect tense (all conjugations)
- Conjugate verbs in the perfect tense (all conjugations)
- Recognise infinitive verb forms
- Recognise imperative verb forms
- Understand where to place adjectives, adverbs and prepositions when constructing sentences in Latin
- Translate a simple passage written in Latin into English

Band 4

- Understand the 3rd declension of adjectives
- Conjugate verbs in the future tense (all conjugations)
- Conjugate verbs in the pluperfect tense (all conjugations)
- Recognise prohibition constructions
- Recognise and understand personal, demonstrative and reflexive pronouns
- Appreciate the syntax of subordinate clauses
- Recognise and understand comparatives and superlatives of adjectives

Band 5

- Understand the 4th and 5th declensions of nouns
- Conjugate all verbs in the passive voice
- Conjugate irregular verbs: volo, nolo, fero
- Conjugate verbs in the present, imperfect, perfect and pluperfect subjunctive mood
- Understand the declensions of participles
- Recognise and understand emphatic and relative pronouns
- Understand complex sentences/passages with unfamiliar vocabulary, applying prior knowledge and understanding to the context

Life Skills Core Skills

Band 1

Health and Well-being

- Understand the importance of, and how to maintain, personal hygiene
- Know the names for the main parts of the body and the bodily similarities and differences between boys and girls
- Identify rules for and ways of keeping physically and emotionally safe

Relationships

- Recognise that behaviour can affect other people
- Share own opinions on things that matter and explain views through discussions with one other person and the whole class
- Offer constructive support and feedback to others

Living in the Wider world

- Know that people and other living things have rights and that everyone has responsibilities to protect those rights
- Recognise what improves and harms their environments
- Know strategies to resist teasing or bullying, if they experience or witness it, whom to go to and how to get help

Band 2

Health and Well-being

- Reflect on and celebrate own achievements, and identify strengths and weaknesses
- Know about drugs and substances
- Use strategies for keeping physically and emotionally safe

Relationships

- Recognise and respond appropriately to a wider range of feelings in others
- Recognise different types of relationships and challenge stereotypes
- Develop strategies to resolve disputes and conflict
- Realise the nature and consequences of discrimination, teasing and bullying
- Know how to recognise bullying and abuse in all its forms

Living in the wider world

- Know why and how rules and laws that protect people are made and enforced
- Understand that there are basic human rights set out in the United Nations Declaration of the Rights of the Child
- Realise the consequences of anti-social behaviours

Band 3

Health and Well-being

- Understand what positively and negatively affects their physical, mental and emotional health
- Recognise how images in the media (and online) do not always reflect reality
- Know how bodies will, and emotions may, change as they approach and move through puberty
- Know how to manage requests for images of themselves or others

Relationships

- Recognise what constitutes a positive, healthy relationship
- Respectfully listen and respond to a wide range of people
- Understand personal boundaries
- Understand about the difference between, and the terms associated with, sex, gender identity and sexual orientation

Living in the Wider World

- Research, discuss and debate topical issues, problems and events
- Know that there are universal rights and that they are there to protect everyone
- Critically examine what is presented to them in social media

Band 4

Health and Well-being

- Recognise own personal strengths and how this affects self-confidence and self-esteem
- Understand about human reproduction
- Know the benefits of physical activity and exercise and the importance of sleep and exercise and a balanced diet
- Understand how the media portrays young people

Relationships

- Develop further the communication skills of active listening,
- Know about the unacceptability of sexist, homophobic, biphobic, transphobic, racist and disablist language and behaviour
- Recognise peer pressure and have strategies to manage it and to understand the feelings and pressure that the need for peer approval can generate
- Understand the safe and responsible use of information communication technology

Living in the Wider World

- Recognise, clarify and, if necessary, challenge own core values and appreciate how our values influence our choices
- Demonstrate the knowledge and skills needed for setting realistic and challenging personal targets and goals
- Understand and use strategies for safely challenging stereotyping and discrimination
- Understand about own identity as a learner

Band 5

Health and Well-being

- Understand that self-esteem can change with personal circumstances
- Know the characteristics of mental and emotional health and strategies for managing it
- Know the causes and triggers for unhealthy coping strategies, such as self-harm and eating disorders
- Knows factual information about legal and illegal substances

Relationships

- Know the features of positive and stable relationships and those of unhealthy relationships
- Understand different types of relationships and the factors that can affect these
- Understand when the sharing of explicit images may constitute a serious criminal offence

Living in the Wider World

- Appreciate the similarities, differences and diversity among people and the impact of discrimination on individuals
- Recognise that everyone has the same rights to opportunities to learn and work
- Demonstrate an awareness of the potential tensions between human rights, British law and cultural and religious expectations and practices
- Know about different work roles and career pathways
- Know and understand the importance of protecting own and others' reputation online

Maths Core Skills

Band 1

Number

- Read, write, order and compare numbers up to 1000
- Recognise the place value of each digit in a three-digit number
- Count forwards and backwards in multiples of 2, 5, 10, 20 and 100 from a given starting number
- Add and subtract multiples of 10 and 100 mentally
- Add 2-digit numbers by counting on and partitioning (only one number to be partitioned), using a number line if appropriate (e.g. $46 + 38 = 46 + 30 + 8$)
- Subtract 2-digit numbers by counting on or counting back and partitioning (only one number to be partitioned), using a number line if appropriate (e.g. $134 - 21 = 134 - 20 - 1$; $73 - 67 \rightarrow 67 + ? = 73$)
- Add and subtract amounts of money to give change, using both £ and p in practical contexts
- Recall and use multiplication and division facts for the 2, 3, 4, 5, 8, 9, 10 and 11 times tables
- Use mental methods to multiply a 2-digit number by a 1-digit number
- Solve missing number problems involving multiplication and division as well as addition and subtraction (e.g. $4 \times ? = 24$; $? - 13 = 12$)
- Estimate the answer to a calculation and use inverse operations to check answers
- Recognise and show, using diagrams, equivalent fractions
- Recognise and write tenths and hundredths as fractions and decimals, using base-10 apparatus to support understanding, and convert between units, tenths and hundredths
- Compare and order decimals with up to 2 decimal places
- Compare and order unit fractions, and fractions with the same denominators

Geometry and measures

- Measure the area and perimeter of simple shapes
- Tell and write the time from an analogue clock
- Recognise angles as a property of shape or a description of a turn and identify right angles

Band 2

Number

- Read, write, order and compare numbers up to 1,000,000, including determining the value of each digit
- Use knowledge of place value to multiply and divide integers and decimals by 10, 100 and 1000
- Recall and use multiplication and division facts for the 6, 7 and 12 times tables
- Use knowledge of place value and times tables to derive related multiplication and division facts (e.g. 600×4 , $4.2 \div 6$)
- Select and use an appropriate strategy when adding and subtracting, including counting on and counting back, using commutativity, using rounding with near multiples of 10 and 100, and using formal written methods where appropriate
- Select and use an appropriate strategy when multiplying and dividing, including using doubling and halving (when multiplying and dividing by 4, 8, 5, 25 and 50), using commutativity, and using formal written methods where appropriate
- Use rounding to check answers to calculations are reasonable
- Solve missing number problems, including balancing equations (eg. $12 + 17 = ? + 15$)
- Interpret negative numbers in context and count forwards and backwards through zero along a number line
- Find equivalent fractions

- Convert between simple fractions, decimals and percentages
- Find simple fractions and percentages of an amount
- Know and use the vocabulary of multiples, factors, prime numbers and square numbers

Geometry and measures

- Measure and calculate the perimeter of regular and irregular polygons
- Recognise and understand that the area of a rectangle can be calculated by multiplying the length by the width
- Draw and measure angles
- Solve problems involving time

Band 3

Number

- Use efficient written methods to add and subtract integers and decimals and to multiply and divide integers and decimals
- Round integers and decimals to a given degree of accuracy
- Add and subtract simple fractions with different denominators
- Multiply and divide fractions by integers
- Find and use equivalences between fractions, decimals and percentages
- Find fractions and percentages of an amount

Algebra

- Understand the use of symbols to represent unknown numbers, lengths, angles etc.
- Understand that algebra serves as a mathematical shorthand to express the relationship between variables
- Substitute values into algebraic expressions and formulae
- Solve simple equations

Geometry and measures

- Calculate the area and perimeter of composite shapes involving right-angle triangles as well as rectangles
- Find missing angles in half a turn or a full turn
- Convert between standard units of length, mass and volume
- Compare and classify geometric shapes based on their properties
- Use coordinates in all four quadrants
- Reflect, rotate and translate shapes on a coordinate grid

Statistics

- Interpret and compare data sets using the average (mean, median or mode) and range as appropriate

Band 4

Number

- Demonstrate fluency when performing mental calculations
- Select and use appropriate calculation strategies, including when working with fractions and decimals
- Use efficient methods to find percentages of an amount
- Make and justify estimates of calculations by rounding to an appropriate degree of accuracy

- Express a number as a product of its prime factors and use prime factorisation when solving problems

Algebra

- Simplify algebraic expressions, including expanding brackets and factorising
- Construct and solve equations
- Find an expression to describe the n th term of a sequence

Geometry and measures

- Identify alternate, corresponding and co-interior angles
- Find the interior and exterior angles of a regular polygon
- Understand how to calculate the area and circumference of a circle
- Deduce and use the formulae for the area of a parallelogram, triangle and trapezium
- Enlarge shapes by a given scale factor, including negative and fractional scale factors

Statistics

- Solve problems involving using the mean, median, mode and range

Band 5

Number

- Use all four operations with mixed numbers
- Know and use the index laws for multiplication and division of positive integer powers
- Express numbers using standard form

Algebra

- Solve linear inequalities
- Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs
- Expand double brackets and factorise simple quadratic equations
- Solve a pair of simultaneous linear equations by eliminating one variable; link a graphical representation of an equation or a pair of equations to the algebraic solution
- Find an expression to describe the n th term of a quadratic sequence

Geometry and measures

- Understand and apply Pythagoras' theorem
- Find missing lengths when working with 2D and 3D shapes, including circles and cylinders

Problem solving

- Present a concise, reasoned argument, using symbols and diagrams as appropriate and related explanatory text

Music Core Skills

Band 1

- Identify changes in dynamics
- Identify changes in tempo
- Identify whether a piece of music is major or minor
- Repeat simple rhythmic patterns
- Perform simple songs from memory
- Sing in two-parts
- Begin to identify the instrumentation of a piece of music, including distinguishing between the main families of instruments
- Identify the mood of a piece of music

Band 2

- Identify the pitch of notes on the staff in the treble clef
- Interpret simple musical notation, including identifying note values as well as simple time and key signatures
- Understand and use basic Italian terms
- Sing expressively, combining dynamics, tempo and pitch
- Sing in three-parts
- Perform individually and as part of a group to an audience
- Navigate a vocal score, following a single line
- Compose simple melodic and rhythmic phrases
- Identify changes within a piece of music, including mood, pitch, rhythm and tempo
- Evaluate own and other's work, considering mood, pitch, rhythm and tempo

Band 3

- Identify the pitch of notes on the staff in the treble and bass clef
- Begin to understand how different musical elements including pitch, tempo, dynamics, texture and timbre are combined and used expressively
- Demonstrate an awareness of wider range of time and key signatures
- Understand musical notation, as well as a range of Italian terms
- Perform as part of an ensemble, demonstrating an awareness of the contributions of others
- Compose simple lines of music involving a melody and a basic harmonic and/or rhythmic accompaniment
- Evaluate own and other's work, considering texture, structure, timbre and dynamics
- Identify similarities and differences between works by significant classical composers
- Classify different pieces of music according to their genre, such as folk, jazz, pop and film
- Identify individual instruments playing in a piece of music
- Distinguish between simple musical forms, such as binary and ternary

Band 4

- Read music fluently
- Identify simple and compound time signatures
- Perform confidently in a range of solo and ensemble contexts
- Develop musical ideas by drawing on a range of musical structures, styles, genres and traditions
- Distinguish between different musical forms, such as concertos, sonatas and operas
- Understand how the music of the past reflects the historical and social context in which it was composed
- Listen with increasing discrimination to a wide range of music from significant composers

Band 5

- Transpose simple melodies into a given key
- Recognise all key signatures and clef
- Identify cadences and chords
- Perform to a high standard (Grade 5+)
- Extend and develop musical ideas, drawing on a range of musical structures, styles, genres and traditions
- Analyse a piece of classical music and identify the musical period to which it belongs
- Understand how historical, social and cultural contexts influence composition
- Demonstrate a breadth of knowledge of musical terms in Italian, German, French and Latin
- Develop own interest in music through attending concerts and initiating own projects

PE and Games Core Skills

Band 1

- Use running, jumping, throwing and catching in isolation and in combination
- Develop balance, agility and co-ordination, and apply these in a range of activities
- Participate in team games and activities, developing simple tactics for attacking and defending
- Perform linking gymnastics movements, following a set routine, with some personal interpretation
- Develop flexibility, strength, technique, control and balance

Band 2

- Play competitive games, including more contact team sports, modified where appropriate, and apply basic principles suitable for attacking and defending
- Demonstrate tactical awareness to outwit or outmanoeuvre an opponent
- Demonstrate a willingness to direct own physical development by committing to extracurricular and external clubs
- Develop an awareness of the need to take part in regular exercise and eat healthily, and understand the health benefits of doing so
- Perform gymnastics using more complex movement patterns
- Compare performance over time and identify areas for improvement
- Begin to communicate effectively as part of a group or team, including verbal and non-verbal forms of communication

Band 3

- Use a range of tactics and strategies to overcome opponents in direct competition through team and individual games
- Develop technique and improve performance in competitive sports
- Analyse performance over time, and identify and implement steps needed to improve
- Demonstrate a willingness to take part in competitive sports and non-competitive sports
- Communicate effectively, including verbal and non-verbal forms of communication, including showing respect and sensitivity to everyone involved in a game (players, officials, coaches, spectators)
- Use physical education terminology in context

Band 4

- Reflect critically upon performance (both physical and mental) and set goals to enhance learning
- Demonstrate an understanding of the various principles that contribute to fitness, and their importance in various contexts
- Within a competitive match or group activity, analyse situations in order to overcome opponents
- Apply movement concepts, tactics, strategies and rules appropriately
- Put together phases of play within a game
- Demonstrate attitudes and strategies that enhance relationships with others, enabling greater success through a deeper understanding of the roles of others

Band 5

- Demonstrate high level of competence in complex moves, skills and techniques in performance or playing situations
- Apply movement concepts, tactics, strategies and rules in a critical and effective manner
- In competitive and non-competitive situations, perform with a high degree of precision, synchronization, energy, style and flair
- Perform at a high level across at least two sports or excel in a single sport
- Understand and use physical education key terminology when analysing performances

Science Core Skills

Band 1

- Ask relevant questions when conducting simple experiments
- Set up comparative and fair tests
- Make simple predictions
- Take accurate measurements
- Report findings in a variety of ways
- Draw simple conclusions from experiments and suggest improvements

Band 2

- Ask relevant questions and use different types of scientific enquiries to answer them
- Carry out simple practical enquiries, including taking repeat readings when appropriate
- Make careful observations and take measurements using a range of equipment
- Record and present data in a variety of ways, including labelling diagrams and drawing tables and bar charts
- Use results to draw simple conclusions, including making predictions for new tests and suggesting improvements to test procedures
- Use straightforward scientific evidence to answer questions

Band 3

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Take measurements, using a range of scientific equipment, with increasing accuracy, including taking repeat readings when appropriate
- Record data and results using tables, classification keys, scatter graphs and bar and line graphs
- Using test results to make predictions to set up further comparative tests
- Report and present findings from enquiries, including drawing conclusions, in oral and written forms
- Identifying scientific evidence that has been used to support or refute ideas or arguments

Key concepts

- Understand that all organisms share a common set of essential life processes (movement, respiration, sensitivity, growth, reproduction, excretion, and nutrition)
- Recognise that the fundamental particle from which all matter is made is the atom
- Explain how the properties of different states of matter is determined by the arrangement and of movement of particles
- Understand that the solar system comprises of objects that are gravitationally bound to the Sun

Band 4

Scientific Attitudes

- Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas
- Pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility
- Examine the ethical and moral implications of using and applying science

- Explore how the creative application of scientific ideas can bring about technological developments and consequent changes in the way people think and behave

Experimental Skills and investigations

- Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience
- Use scientific theories, models and explanations to develop hypotheses
- Independently plan and carry out investigations
- Measure and manipulate concentrations

Analysis, evaluation and problem solving

- Use theories to explain concepts
- Use knowledge of functions and features to solve problems
- Evaluate the reliability of methods and suggest possible improvements
- Derive and use simple equations and carry out appropriate calculations
- Represent random distribution of results and estimate uncertainty
- Communicate the scientific rationale for the investigation plan and methods

Measurement

- Convert units
- Begin to use chemical nomenclature

Key concepts

- Explain how evolution results in diverse adaptations to ensure survival and that this diversity allows organisms to occupy different niches within an ecosystem
- Understand that atoms come together to form bonds during chemical reactions and that the properties of the resulting materials depend on which atoms are combined and the way they are arranged
- Recognise that matter is made of elementary particles which have mass and charge
- Understand that energy is transmitted through materials and space by means of various types of waves, for example, sound waves in air, seismic waves through the earth, electromagnetic waves, including light that may travel through materials or empty space

Band 5

Scientific Attitudes

- Understand that science progresses through a cycle of hypothesis, practical experimentation, observation, objective analysis and review
- Recognise the importance of publishing results and peer review

Experimental Skills and investigations

- Consider both the potential and limitations of science, including ethical issues
- Consider the validity of the data collected in experiment by reviewing the methodology

Analysis, evaluation and problem solving

- Use awareness of characteristics to describe relationships
- Reach a judgement based on the evaluation of evidence and arguments

Measurement

- Use chemical nomenclature

Key concepts

- Understand that the inherited sequence of DNA underlies an organism's phenotype such as shape or blood type and that heritable mutations allow evolution or genetic change over time
- Recognise that all interactions involve matter and energy and that energy and charge cannot be created or destroyed, meaning that overall they remain unchanged by an interaction or transformation