



The Core Knowledge Sequence UK

English Language and Literature: Year 5

I. WRITING, GRAMMAR, AND USAGE

Teachers: Children should be given many opportunities for writing, both imaginative and expository, but place a stronger emphasis than in previous years on expository writing, including, for example, summaries, book reports and descriptive essays. Provide guidance that strikes a balance between encouraging creativity and requiring correct use of conventions. Children should be given more responsibility for (and guidance in) editing for organisation and development of ideas and proofreading to correct errors in spelling, usage and mechanics. In Year 5, children should be able to spell most words or provide a highly probable spelling, and know how to use a dictionary to check and correct words that present difficulty. They should receive regular practice in vocabulary enrichment.

A. WRITING AND RESEARCH

- Produce a variety of types of writing—including stories, reports, summaries, descriptions, poems and letters—with a coherent structure of storyline.
- Know how to gather information from different sources (such as in encyclopaedias, magazines, interviews, observations, atlases and the Internet), and write short reports presenting the information in his or her own words.
 - Understand the purpose and audience of the writing.
 - Define a main idea and stick to it.
 - Provide an introduction and a conclusion.
 - Organise material in coherent paragraphs.
 - Document sources in a rudimentary bibliography.
- Organise material in paragraphs and understand the following:
 - How to use a topic sentence
 - How to develop a paragraph with examples and details
 - That each new paragraph is indented

B. GRAMMAR AND USAGE

- Understand the components of a complete sentence.
 - Identify the subject and predicate in single-clause sentences.
 - For example (subject is in bold and predicate is in italics): **Anna** *scored a goal*.
 - Distinguish complete sentences from fragments.
- Identify the subject and verb in a sentence and understand that they must agree.
- Identify active and passive verbs
- Identify and use different sentence types: declarative, interrogative, imperative and exclamatory.
- Know the following parts of speech and how they are used: nouns, pronouns, verbs (action verbs and auxiliary verbs), adjectives (including articles), adverbs, conjunctions (*and, but, or*), prepositions and interjections.
- Know how to use the following punctuation:
 - End punctuation: full stop, question mark or exclamation mark
 - Colons and semi colons: causing a break in a sentence, linking ideas together
 - Comma: between city and county in an address, in a series, after *yes* and *no*, before conjunctions that combine sentences, inside speech marks in dialogue.
 - Apostrophe: in contractions, in singular and plural possessive nouns
 - Quotation marks: for titles of poems, songs, short stories and magazine articles.

- Speech marks for dialogue/direct speech
- Understand what synonyms and antonyms are, and provide synonyms and antonyms for given words.
- Know what prefixes and suffixes are and how they affect word meaning (see below).
- Prefixes
 - *im, in* (as in 'impossible', 'incorrect')
 - *non* (as in 'non-fiction', 'non-violent')
 - *mis* (as in 'misbehave', 'misspell')
 - *en* (as in 'enable', 'endanger')
 - *pre* (as in 'prehistoric', 'premature')
- Suffixes
 - *ily, y* (as in 'easily', 'speedily', 'tricky')
 - *ful* (as in 'thoughtful', 'wonderful')
 - *able, ible* (as in 'washable', 'flexible')
 - *ment* (as in 'agreement', 'amazement')
- Correct usage of problematic homophones [Review from Year 4]
 - There, their, they're
 - Your, you're
 - Its, it's
 - Here, hear
 - To, too, two

II. POETRY

Teachers: The poems listed here constitute a selected core of poetry for this year group. You are encouraged to expose children to more poetry, old and new, and to have children write their own poems. To bring children into the spirit of poetry, read it aloud and encourage children to read it aloud so they can experience the music in the words. At this age, poetry should be a source of delight; technical analysis should be delayed until later years.

A. POEMS

- Become familiar with the following works:
 - Dreams (Langston Hughes)
 - Fog (Carl Sandburg)
 - The Lady of Shallot (Alfred, Lord Tennyson)
 - Monday's Child Is Fair of Face (traditional)
 - The Pobble Who Has No Toes (Edward Lear)
 - The Rhinoceros (Ogden Nash)
 - Sky in the Pie (Roger McGough)
 - A Tragic Story (William Makepeace Thackeray)

B. LITERARY TERMS

- Become familiar with and able to use the following literary terms:
 - Stanza and line
 - Rhythm
 - Rhyme
 - Mood

III. FICTION

Teachers: In Year 5, children should be fluent, competent readers of appropriate materials. Decoding skills should be automatic, allowing the children to focus on meaning. Regular practice in reading aloud and independent silent reading should continue. Children should read outside school for at least 20 minutes daily.

The titles below constitute a selected core of stories for this year group. Teachers and parents are encouraged to expose children to many more stories, and to encourage children to write their own stories. Children should also be exposed to non-fiction prose: biographies, books about science and history, books on art and music, etc. Also, engage children in dramatic activities, possibly with one of the stories below in the form of a play. Some of the stories below, such as *Gulliver's Travels* and *Robinson Crusoe*, are available in editions adapted for younger readers.

A. STORIES

- Become familiar with the following works:
 - The Fire on the Mountain (an Ethiopian folktale)
 - 'A voyage to Lilliput' from *Gulliver's Travels* (Jonathan Swift)
 - The Happy Prince (Oscar Wilde)
 - The Wonderful Chuang Brocade (a Chinese folktale)
 - *Robinson Crusoe* (Daniel Defoe)
 - *Treasure Island* (Robert Louis Stephenson)

B. MYTHS AND MYTHICAL CHARACTERS

- Become familiar with the following works:
 - Sir Gawain and the Green Knight

V. SAYINGS AND PHRASES

Teachers: Every culture has phrases and proverbs that make no sense when carried over literally into another culture. For many children, this section may not be needed; they will have picked up these saying by hearing them at home and among friends. However, this section of sayings has been one of the categories most appreciated by teachers who work with children from home cultures that differ from British culture.

- Become familiar with the following sayings and phrases:
 - Prevention is better than cure.
 - As the crow flies
 - Beauty is only skin deep.
 - The bigger they are, the harder they fall.
 - Birds of a feather flock together.
 - Blow hot and cold
 - Break the ice
 - Bull in a china shop
 - Bury the hatchet
 - Can't hold a candle to
 - Don't count all your chickens before they hatch.
 - Don't put all your eggs in one basket.
 - Gone to pot
 - Half a loaf is better than none.
 - More haste less speed
 - Laugh and the world laughs with you.
 - Lightning never strikes twice in the same place.
 - Live and let live.
 - Make ends meet.
 - Make hay while the sun shines.
 - Money burning a hole in your pocket.
 - Once in a blue moon
 - One picture is worth a thousand words.
 - Run-of-the-mill
 - Seeing is believing.
 - Shipshape and Bristol fashion

- Through thick and thin
- To go to Timbuktu
- It never rains but it pours
- You can lead a horse to water, but you can't make it drink.



History and Geography: Year 5

WORLD HISTORY AND GEOGRAPHY

Teachers: The study of geography embraces many topics throughout the Core Knowledge Sequence, including topics in history and science. Geographic knowledge includes a spatial sense of the world, an awareness of the physical processes that shape life, a sense of the interactions between humans and their environment, an understanding of the relations between place and culture, and an awareness of the characteristics of specific regions and cultures. Many geographic topics are listed below in connection with historical topics.

I. SPATIAL SENSE

Teachers: Review as necessary map-reading skills and concepts, as well as geographic terms, from previous years

- Relief maps: identify elevated areas, depressions and river basins.
- Compare aerial photographs and maps. Identify the ways in which maps represent and simplify the real world.
- Read maps and globes using latitude, longitude, coordinates and degrees.
- Scale: measure distances using map scales.
- Identify the Prime Meridian, the 180^o line (International Date Line), the Eastern and Western Hemispheres.

II. MOUNTAINS OF THE WORLD

Teachers: Children should learn the names of some of the world's mountain ranges. They should also become familiar with the terms *peak* meaning the highest point of a mountain and *range* meaning a connected group of mountains.

- The Alps
- The Himalayas
- The Andes and The Appalachian Mountains
- The Atlas Mountains

III. THE SPREAD OF ISLAM AND THE HOLY WARS

Teachers: Since religion is a shaping force in the story of civilisation, the Core Knowledge Sequence introduces children in the early years to major world religions, beginning with a focus on geography and major symbols and figures. In Year 5 the focus is on history, geography, and the development of a civilisation. The purpose is not to explore matters of theology but to understand the place of religion and religious ideas in history. The goal is to familiarise, not proselytise; to be descriptive, not prescriptive. The tone should be one of respect and balance: no religion should be disparaged by implying that it is a thing of the past. A review of major religions introduced in earlier years in the *Core Knowledge Sequence UK* is recommended: Judaism/Christianity/Islam (Year 2) and Hinduism/Buddhism (Year 3).

A. ISLAM

- Muhammad: the prophet
- Allah, Qur'an
- Sacred city of Makkah, mosques
- 'Five pillars' of Islam
 - Declaration of faith
 - Prayer (five times daily), facing toward Makkah
 - Fasting during Ramadan

- Help the needy
- Pilgrimage to Makkah
- Arab peoples unite to spread Islam in Northern Africa, through the eastern Roman Empire, and as far west as Spain.

B. DEVELOPMENT OF ISLAMIC CIVILISATION

- Contributions to science and mathematics: Avicenna (Ibn Sina), Arabic numerals
- Thriving cities as centres of Islamic art and learning, such as Cordoba (Spain)

C. WARS BETWEEN MUSLIMS AND CHRISTIANS

- The Holy Land, Jerusalem
- The Crusades
- Saladin and Richard the Lionheart
- Growing trade and cultural exchange between east and west

V. AUSTRALIA, NEW ZEALAND AND THE SOUTH PACIFIC

A. GEOGRAPHY

- South Pacific Ocean
- Major rivers: the Murray and the Darling (Australia)
- Contrasting climate in different regions:
 - Australia: climate differs regionally—dry outback, greener coastal areas
 - New Zealand: hot in the North Island (farther from the South Pole and closer to the Equator), snow in Arthur's Pass on the South Island
 - South Pacific islands are very hot
- Settlements located along the coasts, especially on the East Coast of Australia and coasts of New Zealand

B. AUSTRALIA

- Large cities: Canberra, Sydney, Adelaide, Melbourne, Brisbane, Cairns, Darwin, Perth, Alice Springs
- Important features: Ayers Rock, outback, Great Barrier Reef (world's largest coral reef), tropical rainforest, beaches
- Aboriginal people: traditional music and dance, strong oral history, importance of ancestors, historic art including aboriginal rock engravings [cross-curricular connection with Year 4 Visual Arts]
- Unique animals: koala, kangaroo, platypus, emu, kookaburra bird
- History
 - British explorer James Cook was the first European to make contact with Australia (on eastern coastline)
 - Australia used as a penal colony for British prisoners
 - Gold rush in the 1850s and subsequent importance of mining
 - Australia became an independent country that was a dominion of the British Empire (1907)
 - New architecture: Sydney harbour bridge and the Sydney Opera House are well-known modern architectural pieces

C. NEW ZEALAND

- Large cities: Auckland, Christchurch
- Important features:
 - Geysers in Rotorua on the North Island [cross-curricular connection with Year 2 History and Geography: geysers in Yellowstone National Park in the US and in Iceland]
 - Geographic isolation and unique species of plants and animals (e.g. kiwi fruit and kiwi bird); some plants and animals were threatened by the arrival of new plants and animals brought through colonisation (e.g. rabbits and ferrets that threatened the kiwi bird and other animals)

- Māori people and culture: elaborate mythology, traditional dancing (see rugby and the haka below),
- History
 - British explorer James Cook was the first to circumnavigate New Zealand
 - New Zealand as a member of the British Commonwealth
 - First country in the world to grant all women the right to vote (1893)
- Sports
 - Mountaineering: Sir Edmund Hillary (from New Zealand) and Tenzing Norgay (from Nepal) were the first to climb Mt. Everest (world's tallest mountain) in 1953 [cross-curricular connection with Year 3 History and Geography]
 - Rugby: All Blacks rugby team, Māori participation in rugby and the national team's performance of the haka (traditional Māori challenge) before matches

D. SOUTH PACIFIC ISLANDS

- James Cook as an explorer and a cartographer who was the first to map South Pacific Islands from New Zealand to Hawaii
- Melanesia: islands include New Guinea, New Caledonia, Fiji, Solomon Islands
- Micronesia: islands include Guam, Marshall Islands
- Polynesia: islands include New Zealand, the Hawaiian Islands, Samoa, Tonga, Tuvalu, the Cook Islands, French Polynesia, Easter Island

UK GEOGRAPHY

I. EAST ENGLAND

A. HERTFORDSHIRE, BEDFORDSHIRE, CAMBRIDGESHIRE, NORFOLK, SUFFOLK, ESSEX

- Flat or rolling land, climate, vegetable farming, Norfolk Broads, Cambridge, port of Felixstowe, Sutton Hoo

II. THE MIDLANDS

A. EAST MIDLANDS: NOTTINGHAMSHIRE, DERBYSHIRE, LEICESTERSHIRE, RUTLAND, NORTHAMPTONSHIRE AND MOST OF LINCOLNSHIRE

B. WEST MIDLANDS: STAFFORDSHIRE, GLOUCESTERSHIRE, WORCESTERSHIRE, WEST MIDLANDS, WARWICKSHIRE, HERFORDSHIRE

- Birmingham, Spaghetti Junction, Grand Union Canal, mining industry (much declined), Peak District, Sherwood Forest, The Trent, Rolls-Royce (engines), car plants, food processing, Leicester, Nottingham, Derby, Bourneville; home of Cadbury's chocolate, Malvern Hills, farming

III. YORKSHIRE AND HUMBERSIDE

A. YORKSHIRE, HUMBERSIDE, PART OF LINCOLNSHIRE

- Peak District, N Yorkshire Moors, Yorkshire Dales, River Humber, port of Hull, coal, iron and steel works, City of York

BRITISH HISTORY

I. 18TH CENTURY BRITAIN

Teachers: The Act of Union in 1707 created Great Britain, a new nation, but it did not yet create 'Britons'. Encourage students to think about the nature and formation of national identity, and identities in general.

Explain how this period sees the development of political institutions that are still familiar today, and use the Jacobite rebellions as a reminder of the continued importance of religion in political and social life.

A. JAMES I AND VI HAD BEEN ATTEMPTING TO FORM A FULL POLITICAL UNION, BUT FAILED

- In Scotland, opinion over union was divided
 - The Act secured the line of succession through protestants
- The Act of Union, 1707
 - The Scottish parliament voted itself out of existence
 - Robert Burns' famous line: 'bought and sold for English gold'
 - Scotland managed to retain her legal and university structures; the Church of Scotland remained Presbyterian
- The creation of Great Britain was one of necessity, with mutual hostility and mistrust on both sides
 - Great Britain into an international power; global empire
 - Scotland developed financially; the loss of power and status helped cause the Scottish Enlightenment

B. DEVELOPMENT OF PARTY POLITICS; PARLIAMENT MORE IMPORTANT AFTER THE BILL OF RIGHTS

- Anne becomes Queen (1702) after the death of William III
 - Spanish War of Succession; the Duke of Marlborough and the Battle of Blenheim
- Accession of George I in 1714; House of Hanover
- Detached approach to government, visited Hanover frequently
 - Decline of monarchical power and influence
- Robert Walpole came to the fore in Parliament [Builds on Year 1 History and Geography]
 - Appointed First lord of the Treasury by George I in 1721
 - Referred to as the 'Prime Minister'

C. JACOBITE REBELLIONS; RETURN OF THE HOUSE OF STUART

- 1715, first Jacobite Rising (The Latin word for James is Jacobus)
- 1745, second, larger Jacobite Rising; Jacobite forces to Derby
 - Charles Edward Stuart, known as the 'Young Pretender' or 'Bonnie Prince Charlie'
 - Support in areas of Scotland and north of England
 - Battle of Culloden
 - 'Bonnie Prince Charlie' escaped to Skye with Flora MacDonald

II. HOW DID BRITAIN GAIN AN EMPIRE?

- Global trade
 - Colonies established abroad where Britain had built forts and towns for merchants and soldiers to live
 - British merchants exchanged British-made goods for new exotic luxuries
 - British ports including Liverpool, Glasgow and Bristol became rich
- The Seven Years War
 - 1756 French invaded the British colony of Minorca, off the coast of Spain
 - Britain went to war with France, battles were fought in trading colonies around the world
 - Canada; The Battle of Quebec, General Wolfe
- India
 - East India Company
 - Mughal Empire crumbling
 - Battle of Plassey
- Rule Britannia
 - 1759 'The Year of Miracles' and the birth of the British Empire

- The Royal Navy
 - Impressment; forcing men to serve in the Royal Navy
 - Life of a sailor; diet, scurvy, punishments

III. AMERICAN REVOLUTION

Teachers: Connect the American Revolution to the ideas of 'liberty' and royal power that students looked at when studying Britain during the 17th Century, as well as the political thought from the Enlightenment in the previous section. The American Revolution can be used to discuss ideas such as representation and democracy. Explain the wider impact of the Revolution in Britain and across Europe, particularly in France. Also raise and discuss issues about the nature and formation of national identity.

A. PROVOCATIONS

- British taxes, 'No taxation without representation'
 - Boston Massacre
 - Boston Tea Party

B. THE DECLARATION OF INDEPENDENCE

- Declaration of Independence; adopted July 4, 1776
 - The proposition that 'All men are created equal'
 - The responsibility of government to protect the 'unalienable rights' of the people
 - Natural rights: 'Life, liberty, and the pursuit of happiness'
 - The 'right of the people... to institute new government'

C. THE REVOLUTION

- Paul Revere's ride
- George Washington chosen as commander of the rebel army
- The French enter the war in support of the Americans
- British surrender at York Town
- Creation of the USA with George Washington as President

IV. FRENCH REVOLUTION

Teachers: The French Revolution can be seen as a watershed moment in the history of the western world, undermining traditional aristocratic and monarchical hierarchies, and children should understand why it has been seen as so significant. Also discuss its impact in Britain, and across Europe, in spreading radical ideologies about democracy and republicanism, and inspiring egalitarian ideas and organisations.

- Louis XVI and Marie Antoinette at Versailles
- Division between rich and poor
 - Marie Antoinette "Let them eat cake!"
 - Only the poor working people paid taxes
 - Debts from funding the American War of Independence led to a rise in taxes
- 14th July 1789 people of Paris stormed a prison called the Bastille and released its prisoners
- Revolution began followed by a reign of terror
- King and Queen beheaded and France becomes a republic (a nation ruled without a monarch)

V. NAPOLEON

Teachers: The rise of Napoleon should be treated in connection with events studied in the French Revolution section. Discuss the nature of Napoleon's power in contrast with the ideas of the Revolution, and encourage students to look at his impact across Europe, especially in connection with the growth of European nationalisms.

A. NAPOLEON BONAPARTE AND THE FIRST FRENCH EMPIRE

- Napoleon as military genius
- In 1804 he made himself 'Emperor' of France
- Planned invasion of England
 - Horatio Nelson, admiral in the Royal Navy led the attack on Napoleon's navy
 - Napoleon defeated at the Battle of Trafalgar (off the Spanish Coast at Cape Trafalgar)
 - Death of Nelson
- Napoleon invades Spain
- Battle of Waterloo
- Napoleon sent into exile on the island of St Helena in the middle of the Atlantic Ocean where he dies seven years later

VI. ABOLITION OF THE SLAVE TRADE

Teachers: Explain the efforts to stop slavery in the context of its huge and extensive operation across the world, particularly in the Americas. Encourage students to think about the personal and psychologically damaging effects of slavery, as well as the reasons why people opposed abolitionism.

A. ABOLITION OF SLAVERY IN THE BRITISH EMPIRE

- Slaves transported from Africa to plantations in the Americas
 - Conditions on slave ships
 - Ill treatment of slaves on plantations
- Beginning of movement for the abolition of slavery
 - Thomas Clarkson
 - William Wilberforce
 - Olandah Equiano
- 1807 Bill for the Abolition of the Slave Trade
- 1833 Slavery abolished throughout the British Empire

VII. GEORGIAN BRITAIN

Teachers: The Georgian Era was a period of British history during which successive kings named 'George' ruled. 1714 to 1837 saw the reign of King George I, King George II, King George III and King George IV. Following the Georgian Era was the Victorian Era which saw George IV's niece take the throne and reign for over sixty years.

- The class system
 - Aristocracy
 - Middling Sort
 - Poor
- The position of women
- Crime

FEATURED GREAT EXPLORER**A. JAMES COOK** [Builds on UK History—The Age of Reason, History and Geography, Year 5]



Visual Arts: Year 5

Teachers: In schools, lessons on the visual arts should illustrate important elements of making and appreciating art, and emphasise important artists, works of art, and artistic concepts. When appropriate, topics in the visual arts may be linked to topics in other disciplines. While the following guidelines specify a variety of artworks in different media and from various cultures, they are not intended to be comprehensive. Teachers are encouraged to build upon the core content and expose children to a wide range of art and artists, particularly any that they may be able to view first-hand.

In studying the works of art specified below, and in creating their own art, students should review, develop, and apply concepts introduced in previous years, such as line, shape, form, space, texture, colour, light, design, symmetry, etc.

I. LANGUAGE OF ART: STYLE

Teachers: In Years 1 - 4 students have learned a great deal about the elements of art and how to talk about works of art and architecture. In Year 5 extend this knowledge by helping children also consider and express styles as they see them in works of art and architecture. They should already be familiar with the term from Language and Literacy.

- Understand the meaning of 'style' as a noun and, in the context of art, as a term to refer to how something looks.
- Practice applying the term 'style' to describe contrasting works of art already known to students, comparing two works, for example:
 - Stubbs's *Whistlejacket* [from Year 3 - Form] (often described as smooth in style since no brushstrokes are visible and the colours have been carefully blended)
 - Munch's *The Scream* [from Year 4 - Design] (which can be described as rough or broad in style as the brushstrokes are evident and the paint appears to have been hastily applied and the colours are unmixed)
- Rococo Vs Modernism
 - Antoine Watteau, *The Pilgrimage to the Isle of Cythera*, 1717 (Louvre Museum, Paris, France)
 - Thomas Chippendale, *Ribbon-backed Chair*, made 1850-1880 from Chippendale's design of 1754 (V&A Museum, London, UK)
- Modernism and Abstract Art
 - Colour theory
 - Theo van Doesburg, *Contra-Composition of Dissonances XVI* (Haags Gemeentemuseum? The Hague, Netherlands)
 - Marcel Breuer, *Wassily Chairs*, 1925-1926 (Bauhaus) Dessau, Germany

II. ISLAMIC ART AND ARCHITECTURE

[Cross-curricular links with Year 5 World History]

- Become familiar with examples of Islamic art, including illuminated manuscripts and illumination of the Qur'an (Koran).
- Note characteristic features of Islamic architecture, such as domes and minarets, in:
 - The Dome of the Rock (Mosque of Omar), initial construction completed in AD 691 (Jerusalem)
 - The Alhambra Palace, 1527 (Granada, Spain)
 - The Taj Mahal, 1632 (Agra, India)

III. THE ART OF AFRICA

[Cross-curricular links with Year 5 World History: Early and Medieval African Kingdoms]

- Note the spiritual purposes and significance of many African works of art, such as masks used in

ceremonies. In addition, recognise cultural changes that are reflected in artwork. For instance, in parts of West Africa where Portuguese traders arrived in the 16th century, many works of art display Portuguese influence in the materials and techniques used, as well as in what was depicted in the art.

- Become familiar with examples of art from specific regions and peoples in Africa. The following suggestions can be found in the British Museum in London:
 - Antelope headdresses of Mali
 - Ivory carvings from Ife and Benin
 - Bronze sculptures and panels from Benin

V. TYPES OF ART: PRINTS AND PRINTMAKING

Teachers: Prints and printmaking provides an excellent opportunity to allow your students to create original artworks using the media and techniques they are examining. Specialist equipment is not necessary to experience print-making; mono-printing, for example, requires little other than paint, wooden sticks and paper, and desks or tablets that can be wiped down!

- Understand that printmaking is an indirect art form, where the artist usually creates a design on a block or plate (or wood, plastic or metal), or even on a screen of silk, and this is transferred to a support—usually paper—after a pressing with ink. Printmaking can be a positive (relief), negative (intaglio) or stencil process.
- Appreciate that the benefit of printmaking is that it allows the creation of multiple versions of the same design. Artists like Rubens and Hogarth realised they could use this to spread their images to a wider audience, not least because paper prints were generally cheap and comparatively quick to produce.
- Find out about some of the various printmaking techniques, ranging from mono-printing, engraving, etching, screen-printing to lithography and brass rubbing.
- Recognise as products of printmaking (prints), and discuss:
 - Albrecht Dürer, *The Rhinoceros* (woodcut) 1515 (British Museum, London)
 - Paulus Pontius after Rubens, *Self-Portrait (of Rubens)*, 1630 (British Museum, London)
 - William Hogarth, *Industry and Idleness Plate 1: The Fellow 'Prentices at their Looms*, Plate 12: The Industrious 'Prentice Lord Mayor of London, 1747 (Tate Britain, London)
 - Henri de Toulouse-Lautrec, *Troupe de Mlle Églantine*, 1896 (colour lithograph), (V&A, London)

ADDITIONAL UNIT: THE ART OF THE EAST: CHINA

[Cross-curricular links with Year 5 World History: China - Dynasties and Conquerors and Year 3 World History: China]

A. CHINA

- Become familiar with examples of Chinese art, including:
 - Silk scrolls
 - Calligraphy (the art of brush writing and painting)
 - Porcelain (such as Ming ware)
 - Jade Carving (for statuary and jewellery)



Music: Year 5

Teachers: In schools, lessons on music should feature activities and works that illustrate important musical concepts and terms, and should introduce important composers and works. When appropriate, topics in music may be linked to topics in other disciplines.

The following guidelines focus on content, not performance skills, though many concepts are best learned through active practice (singing, clapping rhythms, playing instruments, etc.).

I. ELEMENTS OF MUSIC

A. ELEMENTS


- Through participation, become familiar with basic elements of music (rhythm, melody, harmony, form, timbre, etc.).
 - Recognise a steady beat, accents, and the downbeat; play a steady beat and a simple rhythm pattern.
 - Discriminate between fast and slow; gradually slowing down and getting faster.
 - Discriminate between differences in pitch: high and low.
 - Discriminate between loud and soft; gradually increasing and decreasing volume.
 - Understand *legato* (smoothly flowing progression of notes) and *staccato* (crisp, distinct notes).
 - Sing unaccompanied, accompanied, and in unison.
 - Recognise harmony; sing simple rounds and canons.
 - Recognise verse and chorus
 - Continue work with timbre and phrasing.
 - Recognise theme and variations, and listen to Mozart, *Variations on 'Ah vous dirai-je Maman'* (familarly known as 'Twinkle Twinkle Little Star').
 - Sing or play simple melodies.

A. NOTATION

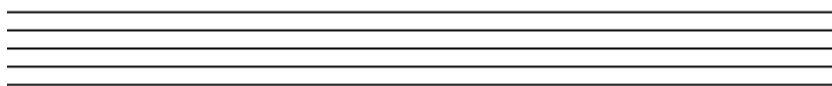
- Review the following notation

○ Crotchet 

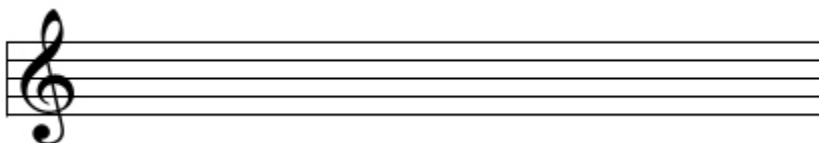
○ Minim 

○ Semi-breve 


○ Stave




○ Treble clef and names of lines and spaces in the treble clef

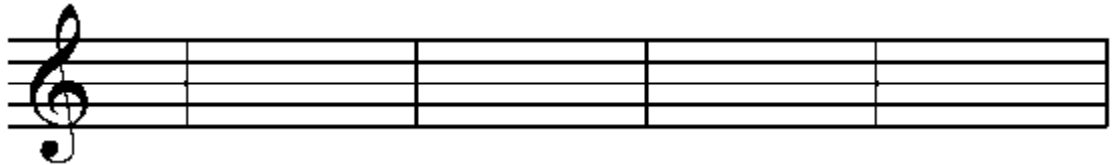


○ Crotchet rest 

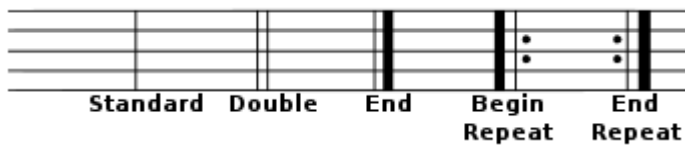
○ Minim rest 

○ Semibreve rest 


○ Bar line





○ Double bar line, bar, repeat signs



○ Quaver 

○ Time signature: $\frac{4}{4}$ quadruple time 

○ Time signature: $\frac{2}{4}$ duple time 

○ Time signature: $\frac{3}{4}$ triple time 

○ Soft: *p*

○ Very soft: *pp*

○ Loud: *f*

○ Very loud: *ff*

• Understand the following notation:

○ Moderately soft: *mp*

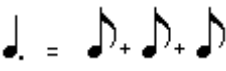
○ Moderately loud: *mf*

○ Middle C in the treble clef



F **A** **C** **E**

○ Tied notes 

○ Dotted notes 

○ Sharps 

○ Flats 

○ *Da Capo (D.C.):* meaning 'from the beginning'

○ *Da Capo al fine (D.C. al fine):* meaning 'repeat from beginning to the *fine* (end) mark'

II. LISTENING AND UNDERSTANDING

Teachers: Expose children to a wide range of music, including children's music, popular instrumental music, and music from various cultures.

A. THE ORCHESTRA

- Review the orchestra, including families of instruments and specific instruments, by listening to Benjamin Britten, *The Young Person's Guide to the Orchestra*.

B. VOCAL RANGES

Teachers: Students should learn to recognise and name the different vocal ranges, and apply their knowledge by beginning part singing.

- Recognise vocal ranges of the adult female voice:
 - High = soprano
 - Middle = mezzo soprano
 - Low = alto
- Recognise vocal ranges of the male voice:
 - High = tenor
 - Middle = baritone
 - Low = bass

C. COMPOSERS AND THEIR MUSIC

Teachers: Provide brief, child-friendly biographical profiles of the following composers, and listen to representative works.

- George Frederic Handel, 'Hallelujah Chorus' from *The Messiah*
- Franz Joseph Haydn, *Symphony No. 94* ('*Surprise*')
- Scott Joplin, *Maple Leaf Rag*
- Wolfgang Amadeus Mozart, *The Magic Flute*, selections, including:

- Overture
- Introduction, *Zu Hilfe! Zu Hilfe!* (Tamino, Three Ladies)
- Aria, *Der Vogelfänger bin ich ja* (Papageno)
- Recitative and Aria, *O zittre nicht, mein lieber Sohn!* (Queen of the Night)
- Area, *Ein Mädchen oder Weibchen* (Papageno)
- Duet, *Pa-pa-gena! Pa-pa-geno!* (Papageno and Papagena)
- Finale, Recitative and Chorus, *Die Strahlen der Sonne!* (Sarastro and Chorus)

D. MUSICAL CONNECTIONS

Teachers: Introduce children to the following in connection with topics in other disciplines:

- Music of the Middle Ages
- Gregorian chant

III. SONGS

- Auld Lang Syne [Cross-curricular connection with Year 5 British History]
- Bear Necessities
- British Grenadiers
- Heart of Oak [Cross-curricular connection with Year 5 British History]
- I Wanna Be Like You
- Loch Lomond [Cross-curricular connection with Year 5 British History]
- Skye Boat Song [Cross-curricular connection with Year 5 British History]
- Waltzing Matilda [Cross-curricular connection with Year 5 Geography - Australia]
- With a Little Help From My Friend



Mathematics: Year 5

I. NUMBERS AND THE NUMBER SYSTEM

A. WHOLE NUMBERS

- Read and write numbers to at least 1 000 000 in figures and words.
- Recognise and extend number sequences formed by counting on or back from any number in whole number or decimal steps of constant size, extending beyond zero when counting backwards.
- Identify Roman numerals from 1 to 100 (I – C).
- Recognise the place value of each digit in any number to at least 1 000 000, and partition such numbers.
- Round numbers to the nearest 10, 100 or 1000.
- Compare positive and/or negative integers using the <, >, and = signs.
- Order a set of positive and/or negative integers and position them on a number line.

B. FRACTIONS

- Compare fractions with like or unlike denominators, using the signs <, >, and =.
- Order a set of fractions with like or unlike denominators and position them on a number line.
- Identify mixed numbers and improper fractions and convert improper fractions to mixed numbers and vice versa.
- Recognise and find equivalence fractions, e.g. $\frac{2}{3} = \frac{8}{12}$.
- Express a smaller number as a fraction of a larger number, e.g. 3 out of 4 as $\frac{3}{4}$.
- Add or subtract fractions with like denominators, converting totals that exceed 1 to a mixed number.
- Find fractions of numbers or quantities, e.g. $\frac{3}{4}$ of 12, $\frac{1}{100}$ of £8.

C. DECIMALS

- Explain what each digit represents in decimals with up to two decimal places, and partition such numbers.
- Compare decimals with up to two decimal places using the signs <, >, and =.
- Order a set of decimals with up to two decimal places and position them on a number line.
- Round a decimal with one decimal place to the nearest whole number, and a decimal with two decimal places to the nearest tenth and whole number.
- Relate fractions to their decimal representations, e.g. $0.45 = \frac{45}{100}$.

D. PERCENTAGES

- Recognise the per cent sign (%) and understand percentages as the number of parts in every 100.
- Express one half, one quarter, three quarters, tenths and hundredths as percentages:
 - e.g. $\frac{3}{4} = 0.75 = 75\%$, $\frac{4}{10} = 0.4 = 40\%$, $\frac{27}{100} = 0.27 = 27\%$.
- Find simple percentages of numbers or quantities, e.g. 10% of 60, 5% of £20.

II. NUMBER OPERATIONS AND CALCULATIONS

A. ADDITION AND SUBTRACTION

- Use the principles (but not the names) of the commutative and associative laws as they apply to addition.
- Use known number facts and place value mentally to:
 - find the difference between two near multiples of 100 or 1000, e.g. $809 - 496$, $3006 - 1993$;
 - add or subtract a multiple of 100 to or from a three-digit or four-digit number, e.g. $458 + 500$, $1357 - 600$;
 - add or subtract three-digit multiples of 10, e.g. $470 + 240$, $570 - 390$.

- Use efficient written methods to add and subtract whole numbers and decimals with up to two decimal places.

B. MULTIPLICATION AND DIVISION

- Use the principles (but not the names) of the commutative, associative and distributive laws as they apply to multiplication:
 - example of commutative law: $15 \times 33 = 33 \times 15$
 - example of associative law: $15 \times 33 = (5 \times 3) \times 33$ or $15 \times (3 \times 11) = 495$
 - example of distributive law: $34 \times 98 = 34 \times (100 - 2) = (34 \times 100) - (34 \times 2) = 3400 - 68 = 3332$
- Recall quickly multiplication facts up to 10×10 and the corresponding division facts.
- Recall square numbers and square roots, and recognise the notation for square (2) and square root ($\sqrt{\quad}$).
- Identify multiples, common multiples, factors and common factors.
- Know the meanings of prime number, prime factor and composite number.
- Use known number facts and place value to multiply pairs of multiples of 10 or 100, e.g. 50×30 .
- Multiply and divide whole numbers and decimals by 0, 1, 10, 100 or 1000, and understand the effect (including understanding that division by 0 is impossible).
- Use efficient written methods to:
 - multiply a three-digit or four-digit number by a one-digit number, e.g. 2814×7
 - multiply a two-digit or three-digit number by a two-digit number, e.g. 57×42
 - multiply decimals with one or two decimal places by a one-digit number, e.g. 8.3×7 , 15.6×8 , $\text{£}4.23 \times 6$
- Divide a two-digit or three-digit number by a one-digit number, including division with remainders, rounding up or down depending on the context, e.g. $574 \div 9$

C. MIXED OPERATIONS

- Use knowledge of rounding, number operations and inverse relationships to estimate and check calculations.
- Begin to use brackets to solve multi-step calculations.

III. MEASUREMENT

A. LENGTH, MASS, CAPACITY, VOLUME AND TEMPERATURE

- Estimate, measure and record lengths, masses, capacities and temperatures using standard units (km, m, cm, mm, kg, g, l, ml, °C) to a suitable degree of accuracy.
- Convert between different units of measure using decimals to one or two places, e.g. 3.25 litres = 3250 ml, or vice versa.
- Interpret a reading that lies between two unnumbered divisions on a scale.
- Understand basic equivalencies between metric and common imperial units still in everyday use.
- Know abbreviations for common imperial units.
- Recognise volume in practical contexts, for example using 1cm^3 blocks or interlocking cubes.

B. TIME

- Read the time on a 24-hour digital clock and use 24-hour clock notation, e.g. 17:42.
- Read a timetable using 24-hour clock notation.

C. MONEY

- Use all four operations to solve problems involving money.

D. PERIMETER AND AREA

- Measure and calculate the perimeter of regular polygons.
- Calculate the area of rectangles and related compound shapes using standard unit cm^2 or m^2 .
- Use the formula for the area of a rectangle.

IV. GEOMETRY

A. 2-D SHAPES AND 3-D SOLIDS

- Identify, visualise and describe properties of triangles, quadrilaterals, regular polygons and 3-D solids.
- Use knowledge of properties to draw 2-D shapes and make nets of common 3-D solids such as a cube, cuboid, pyramid and triangular prism.
 - E.g. The drawing shows how the 3-D solid would look if opened out and unfolded into a flat shape.

B. POSITION, DIRECTION AND MOVEMENT

- Use coordinates in the first quadrant to read and plot specified points, and to draw sides to complete 2-D shapes.
- Draw the position of a shape after a translation.
- Identify, estimate and order acute and obtuse angles.
- Use a protractor to draw and measure angles.

C. SYMMETRY

- Complete symmetrical patterns with up to two lines of symmetry.
- Draw the reflection of a shape or pattern in a mirror line parallel to one side, where all sides of the shape or pattern are not parallel or perpendicular to the mirror line.

V. DATA

- Collect, process, represent, interpret and discuss data in a tally chart, frequency table, pictogram, bar chart or line graph.
- Read, interpret and represent data:
 - where symbols represent more than one unit, e.g. 2, 5, 10, 20 or 100
 - where scales have intervals of differing step size, e.g. axis labelled in 2s, 5s, 10s, 20s or 100s

VI. PROBLEM SOLVING AND REASONING

- Identify, describe and use numerical and symbolic patterns and relationships.
- Solve mathematical problems and puzzles involving numbers or shapes.
- Propose and investigate a general statement involving numbers or shapes.
- Solve one-step and two-step problems involving whole numbers and decimals, and all four operations, in the context of numbers or measurements, including money and time.



Science: Year 5

Teachers: Effective instruction in science requires hands-on experience and observation. While experience counts for much, book learning is also important, for it helps bring coherence and order to a child's scientific knowledge. Only when topics are presented systematically and clearly can children make steady and secure progress in their scientific learning. The child's development of scientific knowledge and understanding is in some ways a very disorderly and complex process, different for each child. But a systematic approach to the exploration of science, one that combines experience with book learning, can help provide essential building blocks for deeper understanding at a later time.

I. THE HUMAN BODY: CIRCULATORY AND RESPIRATORY SYSTEMS

A. THE CIRCULATORY SYSTEM

- Pioneering work of William Harvey
- Heart: four chambers (atrium/atria or atriums [plural] and ventricle/ventricles), aorta
- Blood
 - Red blood cells, white blood cells, platelets, haemoglobin, plasma, antibodies
 - Blood vessels: arteries, veins, capillaries
 - Blood pressure, pulse
- Filtering function of liver and spleen
- Fatty deposits can clog blood vessels and cause a heart attack.
- Blood types (four basic types: A, B, AB, O) and transfusions

B. THE RESPIRATORY SYSTEM

- Process of taking in oxygen and getting rid of carbon dioxide
- Nose, throat, voice box, trachea (windpipe)
- Lungs, bronchi, bronchial tubes, diaphragm, ribs, alveoli (air sacs)
- Smoking: damage to lung tissue, lung cancer

II. CHEMISTRY: BASIC TERMS AND CONCEPTS

A. ATOMS

- All matter is made up of particles too small for the eye to see, called atoms
- Scientists have developed models of atoms; while these models have changed over time as scientists make new discoveries, the models help us imagine what we cannot see.
- Atoms are made up of even tinier particles: protons, neutrons, electrons.
- The concept of electrical charge
 - Positive charge (+): proton
 - Negative charge (-): electron
 - Neutral (neither positive or negative): neutron
 - 'Unlike charges attract, like charges repel' (relate to magnetic attraction and repulsion).

B. PROPERTIES OF MATTER

- Mass: the amount of matter in an object, similar to weight
- Volume: the amount of space a thing fills
- Density: how much matter is packed into the space an object fills
- Vacuum: the absence of matter

C. ELEMENTS

- Elements are the basic kinds of matter, of which there are a little more than one hundred.
 - There are many different kinds of atoms, but an element has only one kind of atom.

- Familiar elements, such as gold, copper, aluminium, oxygen, iron
- Most things are made up of a combination of elements.

D. SOLUTIONS

- A solution is formed when a substance (the solute) is dissolved in another substance (the solvent), such as when sugar or salt is dissolved in water; the dissolved substance is present in the solution even though you cannot see it.
- Concentration and saturation (as demonstrated through simple experiments with crystallisation)

III. ELECTRICITY

Teachers: Through reading and observation, and experiment, examine the following:

- Electricity as the charge of electrons
- Static electricity
- Electric current
- Electric circuits, and experiments with simple circuits (battery, wire, light bulb, filament, switch, fuse)
 - Closed circuit, open circuit, short circuit
- Conductors and insulators
- Electromagnets: how they work and common uses
- Using electricity safely

IV. GEOLOGY

A. THE EARTH'S LAYERS

- Crust, mantle, core (outer core and inner core)
- Movement of tectonic plates
- Earthquakes
 - Faults, San Andreas fault
 - Measuring intensity: seismograph and Richter scale
 - Tsunamis
- Volcanoes
 - Magma
 - Lava and lava flow
 - Active, dormant and extinct
 - Famous volcanoes: Vesuvius, Krakatoa, Mount St. Helens
- Hot springs and geysers: Old Faithful (in Yellowstone National Park, US)
- Theories of how the continents and oceans were formed: Pangaea and continental drift

B. HOW MOUNTAINS ARE FORMED

- Folded mountains, fault-block mountains, dome-shaped mountains

C. ROCKS

- Formation and characteristics of metamorphic, igneous, and sedimentary rock

D. WEATHERING AND EROSION

- Physical and chemical weathering
- Weathering and erosion by water, wind and glaciers
- The formation of soil: topsoil, subsoil, bedrock

V. METEOROLOGY

- The water cycle (review from Year 3): evaporation, condensation, precipitation
- Clouds: cirrus, stratus, cumulus (review from Year 3)
- The atmosphere
 - Troposphere, stratosphere, mesosphere, thermosphere, exosphere

- How the Sun and the Earth heat the atmosphere
- Air movement: wind direction and speed, prevailing winds, air pressure, low and high pressure, air masses
- Cold and warm fronts: thunderheads, lightning and electric charge, thunder, tornadoes, hurricanes
- Forecasting the weather: barometers (relation between changes in atmospheric pressure and weather), weather maps, weather satellites
- Weather and climate: 'weather' refers to daily changes in temperature, rainfall, sunshine, etc., while 'climate' refers to weather trends that are longer than the cycle of the seasons

VI. EVOLUTION

- Animals have offspring that are of the same kind but often offspring have different appearances
- Animals and plants have adapted to suit the environment within which they live
- Adaptation may lead to evolution: Darwin's finches

VI. SCIENCE BIOGRAPHIES

- Michael Faraday (chemist and physicist, developed the electric motor and electric generator)
- Elizabeth Garrett Anderson (English physician and feminist, first Englishwoman physician and surgeon)
- Florence Nightingale (pioneering woman nurse during the Crimean War who later established the Nightingale Training School for nurses at St Thomas' Hospital in London)
- Charles Drew (American doctor and medical researcher)
- Charles Darwin (English naturalist known for his theory of evolution called *Natural Selection*)