

## **ART**

- Identify how materials and processes can be matched to ideas and intentions.
- Gain knowledge about artists, craftspeople and designers in different times and cultures.
- Use hatching and cross-hatching to show tone and texture in drawings.
- Make notes in a sketchbook of how artists have used paint and paint techniques to produce pattern, colour, texture, tone, shape, space, form and line.
- Look at mosaic, montage and collage from other cultures.
- Use the technique of adding materials to create texture, feeling, expression or movement. (e.g wrinkles on a portrait sculpture).
- Explore printing from other cultures and time periods.
- Use textiles skills to create artwork that is matched to an idea or purpose.
- Show awareness of textiles work from other cultures and times.
- Design and make images and artefacts that communicate observations, ideas and feelings by using a variety of methods.
- Annotate sketches in art sketchbook to explain ideas.
- Sketch lightly (so do not need to use a rubber).
- Experiment in creating mood and feelings with colour.
- Know the striking effect work in a limited colour palette can have, through experimentation.
- Make paper coils and lay them out to create patterns or shapes.
- Use mosaic.
- Use montage.
- Join these together to create abstract forms.
- Experiment with making life size models.
- Build up layers of colours to make prints of 2 or more colours.
- Make weavings such as 'God's eyes'.
- Understand the basics of quilting, padding and gathering fabric.
- Write about ideas and add sketches to art sketchbook.
- Use the internet to research ideas or starting points for Art.

## **DESIGN AND TECHNOLOGY**

- Know the application of mechanisms to create movement.
- Combine a number of components well in a product.
- Use simple circuits to either illuminate or create motion.
- Describe a food product in terms of taste, texture, flavour and relate this to the intended purpose of the food.
- A product has been cooked or chilled to change the nature of the raw ingredients.
- Describe the qualities of a material and say why it will be the most suitable choice.
- Join materials to make products using both permanent and temporary fastenings.
- Combine materials to add strength or visual appeal.
- Select the most appropriate techniques and tools to make a product.
- Come up with solutions to problems as they happen.
- Make a product that uses both electrical and mechanical components.
- Product has a good finish so that a user will find it both useful and attractive.
- Select ingredients for a food product.
- Work in a safe and hygienic way.
- Measure out ingredients by weight or quantity, using scales where appropriate.
- Made food product is presented to impress the intended user.
- Use the most appropriate mouldable material suitable for the purpose of a product.
- Shape a product carefully, using techniques and tools that lead to a high quality finish.
- Use art skills to apply texture or design to my product.
- Use scoring, and folding to shape materials accurately.
- Make cuts (scissors, snips, saw) accurately.
- Make holes (punch, drill) accurately.
- Methods of working are precise so that products have a high quality finish.
- Select the appropriate textile(s) for a product.
- Use sharp scissors accurately to cut textiles.
- Know that the texture and other properties of materials affect choice.
- Designs improve as you work.

**MUSIC**

- Sing songs from memory with accurate pitch
- Sing in tune
- Maintain a simple part within a group
- Understand the importance of pronouncing the words in a song well
- Show control in voice when singing
- Play notes on instruments with care so they sound clear
- Perform with control and awareness of what others in the group are singing or playing
- Compose and perform melodies and songs. (Including using ICT)
- Use sound to create abstract effects
- Recognise and create repeated patterns with a range of instruments
- Create accompaniments for tunes
- Accompaniments use drones or melodic ostinato (based on a pentatonic scale)
- Carefully choose order, combine and control sounds with awareness of their combined effect
- Describe music using words such as duration, timbre, pitch beat, tempo and texture
- Use these words to identify where music works well and how it can be improved
- Listen to several layers of sound and talk about the effect on the mood and feelings
- Recognise how musical elements can be used together to compose music
- Know how many beats in a minim, crotchet and semibreve and recognise their symbols
- Know the symbol for a rest in music, and use silence for effect in music
- Describe the different purposes of music throughout history and in other cultures
- Know that the sense of occasion affects the performance

**SCIENCE**

- Identify the different teeth in humans and their jobs.
- Describe the basic digestive system in humans.
- Create and interpret food chains.
- Recognise that environments can change.
- Use classification keys to group, identify and name living things.
- Recognise that living things can be grouped in different ways.
- Identify how sounds are made.
- Recognise what vibrations are.
- Find patterns between pitch and features of the object that produced it.
- Find patterns between volume and strength of vibrations.
- Recognise that sounds get fainter as the distance increases.
- Compare and group solids, liquids and gases.
- Identify evaporation and condensation in the water cycle.
- Identify common electrical appliances.
- Recognise some simple conductors and insulators.
- Identify whether or not a lamp will light in a circuit.
- Recognise that a switch opens and closes a circuit.
- Construct a simple electrical circuit, identifying its parts.



## **MODERN FOREIGN LANGUAGES**

- Listen attentively to spoken language and show some understanding by joining in and responding.
- Join in confidently with songs and rhymes, showing understanding of the meaning of most of the words.
- Engage in a simple conversation with a partner using a given structure.
- Read simple words and phrases independently, showing understanding and use a simple picture dictionary.
- Start to notice similarities and differences between English and another language.
- Write simple phrases from memory and adapt these to create new sentences.
- Apply my knowledge of feminine, masculine and plural forms and begin to understand the basic grammar related to these.

## **HISTORY**

- Look at two versions of the same event in history and identify differences in the accounts.
- Give reasons why there may be different accounts of history.
- Use documents, printed sources (e.g. Archive materials), the Internet, databases, pictures, photographs, music, artefacts, historic buildings, visits to museums and galleries and visits to sites to collect evidence about the past.
- Ask, "What was it like for a ... (child, rich person, etc) during ..."
- Suggest sources of evidence to help me answer questions.
- Present findings about the past using speaking, writing, maths, ICT, drama and drawing skills.
- Use dates and terms accurately.
- Discuss the most appropriate way to present information, for an audience.
- Use a time line to place events found out about.
- Understand that a time line can be divided into BC (Before Christ) and AD (Anno Domini).
- Divide recent history into the present, using 21st Century and the past using 19th and 20th Centuries.
- Name the date of any significant event from the past that has been studied and place it in approximately the right place on a time line.
- Use words and phrases such as century, decade, before Christ, after, before, during to describe the passing of time.
- Use evidence to describe the houses and settlements of people in the past.
- Use evidence to describe the culture and leisure activities from the past.
- Use evidence to describe the clothes, way of life and actions of people in the past.
- Use evidence to describe buildings and their uses of people from the past.
- Use evidence to describe the things people believed in the past (attitudes and religion).
- Use evidence to describe what was important to people from the past.
- Use evidence to describe to show how the lives of rich and poor people from the past differed.
- Use evidence to find out how any of the above may have changed during a time period.
- Use evidence to give reasons why changes may have occurred.
- Show on a time line, the changes identified.
- Describe some similarities and differences between some people, events and objects (artefacts) studied.
- Describe how some of the things studied from the past affect life today.

## PE

- Throw and catch a ball with control and accuracy.
- Strike a ball and field with control.
- Choose the appropriate tactics to cause a problem for the opposition.
- Follow rules in a game.
- Keep possession of a ball (feet, hockey stick, hands).
- Improvise with ideas and movements.
- Use dance movements to communicate an idea.
- Refine movements into sequences.
- Dance movements are clear and fluent.
- Know that dance can express a variety of things.
- Body is balanced.
- Shapes are controlled.
- Plan, perform and repeat sequences.
- Sequences include changes in speed and level.
- Work on improving strength and suppleness by practising stretches and shapes.
- Swim between 25 and 50 metres.
- Arms and legs are co-ordinated when swimming.
- Use more than one swimming stroke.
- Swim both on the surface and below the surface of the water.
- Breathing is co-ordinated with the stroke I am using.
- Sprint over a short distance.
- Run over a longer distance, conserving energy.
- Have a range of throwing techniques (underarm, overarm, putting and hurling).
- Throw with accuracy to hit a target.
- Jump in a number of ways, sometimes using a short-run-up.
- Follow a sketch map of known places.
- Use plans and diagrams to help get from one place to another.
- Enjoy solving problems to challenges outdoors.
- Work and behave safely.
- Discuss with others how to solve problems.
- Say how work is similar to and different to others'.
- Use this understanding to improve own performance.
- Give reasons why warming up before an activity is important.
- Give reasons why physical activity is good for health.

**COMPUTING**

- Understand the function of a search engine and understand the importance of using the correct search terms.
- Beginning to understand the concept of plagiarism.
- Think about the risks of sharing personal information online (including photographs) and understand the idea of a digital footprint.
- Design, write and debug (e.g. correct/improve) programs that accomplish specific goals (e.g. using software to simulate physical processes or control physical objects).
- Solve problems by breaking them into smaller parts.
- Use logical reasoning to explain how some more complicated algorithms (e.g. a sequence of instructions) work.
- Detect and correct errors in algorithms and programs.
- Understand the opportunities that networks offer for communication and collaboration (e.g. working on shared documents).
- Evaluate my work in a variety of ways (e.g. peer- or self-assessment, open discussion with peers or teachers).
- Working towards the Key Stage 2 Key Skills list.
- Minimise, resize and close windows on the desktop.
- Get back to the desktop.
- Take screen shots.
- Know that the shift key can be used to access other symbols on the keys.
- Open multiple tabs without leaving the search e.g. by right clicking and opening in a new tab.
- Copy and paste information from the internet into a word document using ctrl and C or copy and paste through right clicking.
- Use and save favourites in the web browser.
- Alter font type, size and colour for emphasis and effect.
- Use bold, underline and italic.
- Use bullet points and numbers
- Highlight text.
- Use 'select all'.
- Align left, align right and centre text.
- Combine graphics and text.
- Use the shift key to insert characters e.g. exclamation marks.
- Type in capitals and lowercase letters by putting caps lock on/using shift.
- Delete use delete and backspace.
- Use undo and redo tools.
- Create a simple text box.
- Resize, rotate and format text boxes.
- Move a text box or any other object around the page.
- Insert and manipulate multiple text boxes and other objects on any page.
- Insert a picture from a file.
- Insert and manipulate Word Art.
- Insert and format shapes.
- Group and ungroup objects.
- Layer objects for a purpose.
- Insert and format a table e.g. add a border, change the background colour etc.
- Understand the terms field, record, file, sort, classify and order.
- Use a database to answer questions.
- Use a spread sheet to make various types of charts.
- Use a database to sort and classify information and present their findings.
- Send and receive an email.
- Reply to an email.
- Use an address book to store and select email addresses.
- Send an attachment via email.

- Understand that programs like PowerPoint are primarily about presenting information in manageable chunks/slides.
- Add slides and change their layout using the options available.
- Add text to a slide and how to modify it using simple formatting tools.
- Add pictures or clip art onto a slide.
- Place my slideshow into and out of presentation mode.
- Reorder slides.
- Add a sound file to a slide as an object.
- Record a simple sound clip as an object on a slide.
- Add a video to a slide.
- Add hyperlinks to a slide.
- Create slide transitions.
- Add animations to objects on the page.
- Change the running order of animations and slide timings.
- Use transitions and animations for effect.
- Use spell and grammar check through menu bar and right clicking.
- Use the find and replace tool.
- Move a word or a sentence by lassoing the text and dragging it into a new position.
- Orient the page view and page size.
- Insert a table and adjust its formatting adding new columns and rows and merging cells.
- Use menus effectively to navigate software.
- Save a copy of a word file as a PDF.
- Use ~ on google to return synonym results e.g. ~large lakes will find results for great lakes as well.
- Use define before a word using google to get the dictionary definition.
- Use a minus (-) to exclude words on a web search e.g. Manchester – football would take out results for Manchester that involved football.
- Google search using or to give equal value.
- Use the following terms to search a database – greater than, less than, and , or.
- Enter labels and numbers into a spreadsheet.
- Enter formulae into a spreadsheet.
- Use 'SUM' to calculate the total set of numbers in a range of cells.
- Change data in a spreadsheet to answer 'what if...?' questions and check predictions.

## GEOGRAPHY

- Ask "Which PHYSICAL features does this place have?"
- Ask "Which HUMAN features does this place have?"
- Give reasons for why some of those features are where they are.
- Describe different points of view on an environmental issue affecting a locality.
- Find out about places and the features in those places by either going to that place to observe or by looking at information sources.
- Use writing skills to communicate what is known.
- Use maths skills to help record and present observations (Charts, graphs, tables, scales etc).
- Use ICT skills to help find out information and present what has been found out.
- Use the terms PHYSICAL and HUMAN accurately and describe these features.
- Build up a list of geography words.
- Make detailed sketches of the features of a location.
- Devise questionnaires to find out local opinions on an issue.
- Look at maps of areas studied and identify features.
- Draw maps and plans of localities studied that include keys, grid references, four figure grid references (e.g. 0.5, 15), a scale (e.g. 1 square = 1 KM), a compass rose indicating North and some standard \Ordnance Survey symbols.
- Use the contents and index pages of an Atlas to find places quickly.
- Look at how a map is a flat representation of a place on the globe.
- Use a globe to explore the nature of our world and can point out the North and South poles.
- Use the internet to help find out about a location, including aerial photographs (e.g. Google Earth).
- Plan a route using 8 points of the compass.
- Describe a place using information found out using my geography words well.
- Compare places studied using the physical and human features for comparisons.
- Give some reasons for the similarities and differences between places, using geographical language.
- Describe where a place is using the 8 points of the compass to describe its position.
- When I describe where a place is, I use country, region and names of towns, cities, and rivers
- Name and identify the Cambrian Mountains, the Grampian Mountains, the Lake District and the Pennines.
- Name and identify the three longest rivers in the UK (Severn, Thames, Trent).
- Name the significant places and features of a location being studied (and of my country of birth).
- Name and locate France (Paris), Germany (Berlin), Italy (Rome), and Spain (Madrid).
- Name and locate the largest mountain range in Europe (The Alps).
- Know how erosion, deposition and flooding can affect people.
- Identify how a place where people live (settlement) has changed over time and give some reasons for this giving precise observations or research as evidence for this.
- Use both physical and human factors in explanations.
- Compare places where people live and give reasons for the differences.
- Keep a class weather chart throughout the school year and discuss weather around the world.
- Collect temperature and rainfall information and keep this on a class record sheet throughout the school year.

## MATHEMATICS

### Number - number and place value

- Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- Compare and order numbers up to 1000
- Identify, represent and estimate numbers using different representations
- Read and write numbers up to 1000 in numerals and in words
- Solve number problems and practical problems involving these ideas.

### Number - addition and subtraction

- Add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- Estimate the answer to a calculation and use inverse operations to check answers
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

### Number - multiplication and division

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which  $n$  objects are connected to  $m$  objects.

### Number - fractions

- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators

- Recognise and use fractions as numbers and non-unit fractions with small denominators
- Recognise and show, using diagrams, equivalent fractions with small denominators
- Add and subtract fractions with the same denominator within one whole
- Compare and order unit fractions, and fractions with the same denominators
- Solve problems that involve all of the above

### Measurement

- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2-D shapes
- Add and subtract amounts of money to give change, using both £ and p in practical contexts
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- Know the number of seconds in a minute and the number of days in each month, year and leap year
- Compare durations of events [for example to calculate the time taken by particular events or tasks].

### Geometry - property of shapes

- Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- Recognise angles as a property of shape or a description of a turn
- Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines

### Statistics

- Interpret and present data using bar charts, pictograms and tables
- Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables

**LITERACY - READING****Word Reading**

- Apply growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they meet
- Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

**Comprehension**

- Develop positive attitudes to reading and understanding of what they read by:
  - listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
  - reading books that are structured in different ways and reading for a range of purposes
  - using dictionaries to check the meaning of words that they have read
  - increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
  - identifying themes and conventions in a wide range of books
  - preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
  - discussing words and phrases that capture the reader's interest and imagination
  - recognising some different forms of poetry [for example, free verse, narrative poetry]
- Understand what they read, in books they can read independently, by:
  - checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
  - asking questions to improve their understanding of a text
  - drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
  - predicting what might happen from details stated and implied
  - identifying main ideas drawn from more than one paragraph and summarising these
  - identifying how language, structure, and presentation contribute to meaning
- Retrieve and record information from non-fiction
- Participate in discussion about both books that are read to them and those

**LITERACY - WRITING****Transcription**

- Use further prefixes and suffixes and understand how to add them (English Appendix 1)
- Spell further homophones
- Spell words that are often misspelt (English Appendix 1)
- Place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
- Use the first two or three letters of a word to check its spelling in a dictionary
- Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

**Handwriting**

- Use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- Increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

**Composition**

- Plan their writing by:
  - discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
  - discussing and recording ideas
- Draft and write by:
  - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2)
  - organising paragraphs around a theme
  - in narratives, creating settings, characters and plot
  - in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
  - evaluate and edit by:
    - assessing the effectiveness of their own and others' writing and suggesting improvements
    - proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- Proof-read for spelling and punctuation errors
- Read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear

**Vocabulary, Grammar and Punctuation**

- Develop their understanding of the concepts set out in English Appendix 2 by:
  - extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although
  - using the present perfect form of verbs in contrast to the past tense
  - choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition
  - using conjunctions, adverbs and prepositions to express time and cause
  - using fronted adverbials
  - learning the grammar for years 3 and 4 in English Appendix 2
- Indicate grammatical and other features by:
  - using commas after fronted adverbials
  - indicating possession by using the possessive apostrophe with plural nouns
  - using and punctuating direct speech
- Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading.