

CURRICULUM INFORMATION 2024 / 2025

YEAR 6

Dear Parents/Guardians

We are looking forward to a happy and successful new school year. At Thornton, we aim to provide stimulating and exciting activities within the framework of our curriculum, in order to enable your daughter to reach her full potential.

We recognise that the bond between home and school is of vital importance so in order to keep you fully informed, we have enclosed a copy of the relevant Programme of Study for your daughter's Year Group. This contains a broad outline of what we intend to cover with your child throughout the coming Academic Year.

During the year, your daughter will receive written reports and there will be Parental Consultations, when you will have the opportunity to make an appointment to discuss your daughter's progress with her teacher(s), however, if you have any questions or concerns at all, please do not hesitate to contact your child's Form Teacher by telephone or e-mail. They will be only too pleased to arrange a mutually convenient time to meet with you.

The school diary is a very important means of communicating on a daily basis. It would help us if you could find the time to read/check it each evening with your child and sign it each week.

Thank you in advance for your support during the coming Academic Year. We will do our very best to ensure that your daughter feels secure, happy and supported in her learning, and we look forward to meeting you throughout the school year.

With very best wishes

Louise Shaw Head of Thornton College

Curriculum Information

Year 6

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Subject: Art, Craft & Design

Aims and Purposes of Art, Craft and Design

Art, Craft and Design offers opportunities to:

- stimulate children's creativity and imagination by providing visual, tactile and sensory experiences and a unique way of understanding and responding to the world;
- develop children's understanding of colour, form, texture, pattern and their ability to use materials and processes to communicate ideas, feelings and meanings;
- explore with children ideas and meaning in the work of artists, craftspeople and designers, and help them learn about their different roles and about the functions of Art, Craft and Design in their own lives and in different times and cultures;
- help children to learn how to make thoughtful judgements and aesthetic and practical decisions and become actively involved in shaping environments.

Content of Art, Craft and Design at Key Stage 2

Key Stage 2

During Key Stage 2, Art, Craft and Design is about developing children's creativity and imagination by building on their knowledge, skills and understanding of materials and processes through providing more complex activities. Children's experiences help them to develop their understanding of the diverse roles and functions of art and design in the locality and in the wider world.

Children:

- improve their control of materials, tools and techniques and become more confident in using visual and tactile elements, materials and processes to communicate what they see, feel and think;
- increase their critical awareness of the roles and purposes of art in different times and cultures by commenting on works and asking questions like: 'What is this work about?' 'Why was it made for what purpose?' 'What visual and tactile elements are used?' 'How are they combined and organised?' 'What materials and processes where used to make it?' 'When and where was it made?' 'What do I think and feel about it?'

Language and Communication

- exploring ideas about the starting points for their work;
- asking and answering questions about source materials and how these help them to develop their ideas, including recording ideas and annotating work in their sketchbooks;
- finding out about art, craft and design and its context in the wider world through discussion and extracting information from sources such as reference books and the internet;
- discussing and comparing their own and others' work and explaining their own views.

Values and Attitudes

Children have opportunities in Art, Craft and Design to:

- consider their own attitudes and values in relation to images and artefacts and learn to challenge assumptions, stereotypes and prejudice in visual and other forms;
- develop respect for their own and others' work and learn how to offer and receive constructive feedback and praise;
- work with others, listening to and respecting each other's ideas and learning to value different strengths and interests within the group;
- develop a respect for the materials and resources that they use in their work and learn to evaluate critically their own and others' use of these;
- value the natural and made environment, including the distinctiveness of the locality, and learn to evaluate critically the role and function of Art and Design within it.

Helping children Improve their Drawing

Children will be encouraged to practise their drawing skills on a regular basis. They should develop the willingness to make working drawings and to accept that it is good practice to rework drawing (without the need for an eraser) as they observe with increasing accuracy and develop their understanding.

Children will be challenged to draw:

- from observation, imagination and experience using their sketchbooks where appropriate;
- at different scales and on different surfaces;
- in two and three dimensions using different media, for example; wire wool and clay, as well as traditional media;
- for different purposes, for example; to explore ideas, to explain ideas to themselves and others, to record information about what has been observed.

Creative Process:

Children will be encouraged to proactively progress the creative process from initial ideas through to final outcomes by:

- working out ideas, plans and designs;
- developing ideas for their work;
- looking back at and reflecting on their work, reviewing and identifying their progress;
- ongoing recording of their learning and achievement, which they can use to further develop their ideas, skills and understanding.

Children will develop a range of approaches to using their portfolios.

These might include using their portfolios:

- to keep a visual record of their observations made from a range of first-hand sources, such as interesting objects, plant forms, buildings and people. Children should develop and practise the skills of drawing from observation on a regular basis, so that they can increase and sustain their concentration;
- to record a personal response to their experiences and their environmental way of communicating ideas, feelings and interests;
- to analyse the methods and techniques used by different artists, craftspeople and designers;
- for visual and annotated notes about line, tone, colour, pattern and so on, for reference for their own creative work;
- for visual and other notes, including personal comments about artists, craftspeople and designers and about particular works that interest them that they study in school and on visits to museums, galleries and exhibitions.

Subject: Computer Science

Computing in Years 5 and 6 is in discrete lessons. We follow a scheme of work that runs from Year 1 to Year 6 to ensure there is continuity and progression in each academic year.

Aims:

The Computing syllabus is based on the requirements of the 2014 National Curriculum. There are three areas of focus:

- Computational Thinking programming and finding out how digital systems work.
- Digital Literacy being responsible, competent, confident and creative users, especially s concerns the internet.
- E-Safety using technologies safely, respectfully and responsibly and becoming discerning in evaluating digital content.

These areas will be covered throughout the year and be revisited several times.

Course Content:

Students will have an opportunity to:

- design, write and debug programs,
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output,
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs,
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration,
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content,
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information,
- use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Delivery and Assessment:

- Carried out primarily through Firefly (the School's Learning Platform) and One Drive to support remote access.
- Formative assessment during lessons through observation of progression tasks uploaded to Firefly and marked with a percentage of Success Criteria achieved. Each criterion is worth 3 marks, 1 = not achieved, 2 = almost, 3 = achieved. Student is able to see their mark for each objective and their total percentage.
- Summative assessment through Firefly tasks and some Unit Tests.

Subject: Design & Technology

16-week Course

Aims:

We wish to encourage children to:

- Identify, investigate and outline design possibilities
- Design and make prototypes that are fit for purpose
- Analyse and evaluate
- Demonstrate and apply knowledge and understanding of relevant specialist techniques and processes

Course Content

- Safe working practice the design of a graphical safety wall poster.
- The design and manufacture of a cushion with appliquéd/embellished decoration involving surface design and use of hand and/or machine sewing techniques/ embroidery stitches.
- The design and manufacture of a sleep mask involving hand/machine sewing and surface decoration techniques.
- The design and manufacture of a model slipper or shoe from a card net decorated with textiles and embellishments.

To include:

- Project Title page design.
- Study of a Brief.
- Investigation.
- Creative designing from a source.
- Making of templates.
- Properties/structure of textile materials bonded, woven, knitted.
- Use of recycled clothing scraps.
- Step by step flow diagram.
- Designing a title page using ICT
- Illustration and writing up of processes used.
- Testing and Evaluation of product.

The following processes and relevant tools:

- Marking out/pinning.
- Shaping by cutting.
- Obtaining a good surface finish.
- Applique using bonded materials.

- Joining methods bonding/surface stitching and hidden seam stitching.
- Components sequins, eyelets, buttons, beads.
- Fabric decoration methods using lace, ribbon.
- Use of hollow fibre filling.

General design exercises:

- Wrapping paper design using Repeat Patterns.
- Decorated Xmas tree balls.
- Xmas birds.
- Gift box using nets.
- Embellished name design

Projects may vary from year to year depending on student ability, group sizes.

Alternative project titles include:

- Weaving on a small loom using multimedia and a colour theme
- Textile Trinket Keeper
- Padded Coaster
- Greetings card the design and manufacture of a card, for an occasion using lightweight multimedia materials. (Occasions may include – Harvest, Christmas, Easter, Valentines' Day, Mothers'/Fathers' Day.)
- Mobiles
- Paper sculpture shoes, bags.

Assessment

Assessment is carried out at the end of each half term and reports are written twice yearly. Grades are given for Participation, Attainment, Progress and Organisation at the end of each half-term period.

Subject: French

Michaelmas Term

Let's Visit A French Town

This half term, your daughter will apply previous skills and knowledge of topic areas such as places in a town, directions, homes and numbers to develop her speaking and listening abilities. She will have more focused practice using bilingual dictionaries and increase her understanding of word classes and other grammatical features of the language. This half term will include lots of opportunities for using songs, stories, art and drama to make the learning fun, engaging and memorable.

By the end of term, we aim for your daughter to be able to:

- make simple sentences with habiter (to live.)
- listen to and join in a song.
- recognise key words and phrases and respond.
- use gestures to support what they are saying.
- use a bilingual dictionary with support.
- identify places in a French town or city.
- listen for familiar vocabulary.
- recognise ordinal numbers.
- recognise a spelling pattern.

Let's Go Shopping

This half term, your daughter will learn about the shopping experience in France. Your daughter will learn how to use the nuances of colour when describing the colours of clothes and how to use prepositional language. She will learn key phrases for asking the questions needed when going shopping. The half term will conclude with a role-play lesson, where your daughter will take on the role of a shopper and a shopkeeper.

By the end of term, we aim for your daughter to be able to:

- listen and respond to topic vocabulary
- answer questions using the topic vocabulary
- take part in role play as a shopper/shopkeeper, speaking in French
- greet and respond
- use the preposition entre
- write money amounts in French, up to 500 € in multiples of 50.

Lent Term

This is France

This 'This is France!' unit will teach your class key vocabulary related to France and, in particular, Paris. Your class will learn specific vocabulary to describe France's neighbours and positions/distances of a variety of cities. They will learn the French names for famous French landmarks and how to describe what people do when they visit Paris. Also, one lesson focuses on famous French people and children will learn the French names for the areas that they were/are famous for. They will also learn key phrases connected to the themes that run through this unit.

By the end of term, we aim for your daughter to be able to:

- listen and respond to topic vocabulary
- answer questions orally using the topic vocabulary
- write an answer to a sentence using the topic vocabulary
- create sentences independently, using a model sentence
- write numbers in words which are multiples of ten
- describe position up to 4 compass points.

All in a Day

In this 'All in a Day' unit, your class will learn how to tell the time: o'clock, half past, quarter past, quarter to and five minute intervals. They will learn how to use 24 hour times and the way in which the French represent a.m. and p.m. times. The children use airport arrival and departure boards and a school timetable to consolidate and practise the skills learned.

By the end of term, we aim for your daughter to be able to:

- say and write a sentence to tell the time (o'clock and half past)
- understand and use the terms used for a.m. and p.m. du matin, de l'après-midi and du soir
- tell the time in 24 hour time o'clock and half past
- read and interpret timetables in 24 hour times o'clock and half past.

<u>Trinity Term</u>

This term, Year 6 cover two key topics areas during each half term entitled "Bon Appetit!" and "Bon Voyage!" These lessons aim to consolidate your daughter's learning from previous units while also providing additional challenge in preparation for her transition to Year 7.

Each unit comprises opportunities to practise speaking and listening while also introducing some further elements of grammar through reading and writing activities.

"Bon Appetit!" will introduce your daughter to French cuisine through various activities which include writing a recipe; practising ordering from a menu and handling money and writing a restaurant review.

"Bon Voyage!" will introduce your daughter to la Francophonie through activities which include booking a holiday; using a bilingual dictionary and modal verbs to choose what items to take on holiday and understanding and recreating a real-life context through listening to and re-enacting an in-flight safety announcement.

In addition to twice-weekly lessons at school, your daughter will have the opportunity to practise reading, writing, speaking and listening to French on a daily basis through Duolingo For Schools, where her progress and attainment is tracked via an online classroom. This is a compulsory homework from Year 5 onwards but is further incentivised by the opportunity to earn house points and be awarded certificates on a half-termly basis.

Subject: Geography

Through the study of Geography in Upper Key Stage Two, children will develop an increasingly detailed understanding of the world around them. The girls will investigate elements of both their immediate environment whilst also exploring the wider world. Children will expand their awareness of Physical Geography, including locational Geography, whilst also exploring Geography from human and economic perspectives.

The Year 5 and 6 Geography Curriculum at Thornton College aims to meet the requirements of the National Curriculum. The girls will have started to work towards the National Curriculum objectives in Years 3 and 4 during Creative Curriculum and they will continue to explore, embed and consolidate understanding in Years 5 and 6 during discrete Geography lessons. Thus, the girls will continue to develop:

Locational knowledge:

- Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.
- Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and landuse patterns; and understand how some of these aspects have changed over time.
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Place knowledge:

• Understand geographical similarities and differences through the study of Human and Physical Geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.

Human and physical geography:

- Describe and understand key aspects of:
 - Physical Geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.
 - Human Geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.
- Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

In Year 6, children will have discrete History and Geography lessons. They will-rotate between History and Geography topics each half term. During a Geography half-term, the girls will have one 80 minute lesson each week. However, cross-curricula links will be made where possible. They will begin to use globes, atlases and OS Maps with increasing independence and children will experiment with an 8-point compass. There will be opportunities to use, explore and present ideas using computer technology and children will begin to research concepts with increasing independence. The girls will begin to make connections and links between areas of study, notably Science and Mathematics, interpreting data and generating graphs.

The Year 6 Geography Curriculum focuses on the interrelationship between physical, human and economic geography. Throughout the year, children will explore different global environments, making connections and identifying and appreciating similarities and differences between studies.

Michaelmas 1:	Local Area
Lent 1:	Mexico
Trinity 1:	The Peruvian Andes

Subject: History

Through the study of History in Upper Key Stage Two, children will continue to deepen their understanding of past events, societies and movements. The girls will investigate the social, cultural, economic and political histories of both ancient civilisations and modern societies whilst building an understanding of chronology. They will also begin to explore the significance of historical events, analyse, interpret and assess primary and secondary material and pose key questions.

The Year 5 and 6 History Curriculum at Thornton College aims to meet the requirements of the National Curriculum. The girls will have started to work towards the National Curriculum objectives in Years 3 and 4 during Creative Curriculum and they will continue to explore, embed and consolidate understanding in Years 5 and 6 during discrete History lessons. Thus, the girls will continue to develop:

- a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study;
- they should note connections, contrasts and trends over time and develop the appropriate use of historical terms;
- they should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance;
- they should construct informed responses that involve thoughtful selection and organisation of relevant historical information;
- they should understand how our knowledge of the past is constructed from a range of sources.

In Year 6, children will have discrete History and Geography lessons. They will rotate between History and Geography topics each half term. During a History half-term, the girls will have one 80 minute lesson each week. However, cross-curricula links will be made where possible. Children will begin to research concepts and historical periods with increasing independence, using both published texts and the internet to develop their understanding. Children will also be encouraged to make connections between different periods of study, to ask questions and verbalise opinions clearly.

During Year 6, the girls will explore:

Michaelmas 2:	World War One
Lent 2:	The Maya Civilisation
Trinity 2:	Rights and Freedoms

Subject: English

Speaking and Listening

To include:

- General class discussion and instruction related to the whole curriculum.
- Regular discussion time.
- Regular role-play.
- Regular performance.
- Listening to stories and other text.
- Reading aloud.
- A Public Speaking Week will be held annually whereby each pupil will be required to present to their class: a show and tell, a poem of their choosing and a reading from a book of their choosing.

Reading

Children from upper Key Stage 2 are encouraged to read a range of genres throughout their reading regime. Fluency and comprehension – both verbal and written – are the key focuses when developing the girls' reading. At this stage, the children will be encouraged to be more analytical about what they read, thinking about the writer's choices and evaluating them. Cracking Comprehension is used as a tool for teaching this.

Students read books of their choice regularly, in order to foster a love of literature of all genres.

Students visit the school library once per week and make a free choice of two books to take home and share with an adult.

Word reading attainment targets

• apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology) both to read aloud and to understand the meaning of new words that they meet.

Comprehension attainment targets

- maintain positive attitudes to reading and understanding of what they read by:
- continuing to read and discuss an increasingly 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
- increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions

- recommending books that they have read to their peers, giving reasons for their choices
- identifying and discussing themes and conventions in and across a wide range of writing
- making comparisons within and across books
- learning a wider range of poetry by heart
- preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
- understand what they read by:
- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
- asking questions to improve their understanding
- 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
- summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- identifying how language, structure and presentation contribute to meaning
- discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
- distinguish between statements of fact and opinion
- retrieve, record and present information from non-fiction
- participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- provide reasoned justifications for their views.

Writing

Year 6 is marked by growing confidence, control and fluency in writing fiction, nonfiction and poetry. Teachers emphasise the purpose and audience for all forms of writing. They encourage children to be experimental and adventurous and, wherever possible, give them choice and control over their writing. A greater focus on complexity of sentence structures and interesting vocabulary encourages the girls to add sophistication to their writing, making choices about audience and purpose.

Writing attainment targets

- plan their writing by:
- identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- noting and developing initial ideas, drawing on reading and research where necessary
- in writing narratives, considering how authors have developed characters and settings in what students have read, listened to or seen performed
- draft and write by:
- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
- précising longer passages
- using a wide range of devices to build cohesion within and across paragraphs
- using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
- evaluate and edit by:
- assessing the effectiveness of their own and others' writing
- proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- ensuring the consistent and correct use of tense throughout a piece of writing
- ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
- proof-read for spelling and punctuation errors
- perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

Spelling, Punctuation and Grammar

There is a focus on spelling, punctuation and grammar in Year 6 in order to develop writing skills across the curriculum. The children are taught an increasing range of spelling rules, exceptions to those rules and how to apply prefix and suffix knowledge of unfamiliar words. The girls are encouraged to apply the foundations of previous punctuation rules and begin using more complex punctuation such as dashes, brackets and commas for parenthesis and colons to introduce lists. A more in-depth understanding of grammar and how sentence structure can be manipulated will help the girls to improve their editing skills and make informed decisions about the sentence choices they make.

Spelling attainment targets

- use further prefixes and suffixes and understand the guidance for adding them
- spell some words with 'silent' letters [for example, knight, psalm, solemn]
- continue to distinguish between homophones and other words which are often confused
- use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1 of the National Curriculum
- use dictionaries to check the spelling and meaning of words
- use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary
- use a thesaurus.

Punctuation and grammar attainment targets

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

Terminology:

Year 6:		
Word	The difference between vocabulary typical of informal speech and vocabulary appropriate for formal speech and writing [for example, find out – discover; ask for – request; go in – enter]	
	How words are related by meaning as synonyms and antonyms [for example, <i>big, large, little</i>].	
Sentence	Use of the passive to affect the presentation of information in a sentence [for example, <i>I broke the window in the greenhouse</i> versus <i>The window in the greenhouse was broken (by me)</i>].	
	The difference between structures typical of informal speech and structures appropriate for formal speech and writing [for example, the use of question tags: <i>He's your friend, isn't he?</i> , or the use of subjunctive forms such as <i>If <u>I were</u></i> or <u>Were they</u> to come in some very formal writing and speech]	
Text	Linking ideas across paragraphs using a wider range of cohesive devices : repetition of a word or phrase, grammatical connections [for example, the use of adverbials such as <i>on the other hand, in</i> <i>contrast,</i> or <i>as a consequence</i>], and ellipsis	
	Layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text]	
Punctuation	Use of the semi-colon, colon and dash to mark the boundary between independent clauses [for example, <i>It's raining; I'm fed up</i>]	
	Use of the colon to introduce a list and use of semi-colons within lists	
	Punctuation of bullet points to list information	
	How hyphens can be used to avoid ambiguity [for example, man eating shark versus man-eating shark, or recover versus re-cover]	
Terminology for	subject, object	
students	active, passive	
	synonym, antonym	
	ellipsis, hyphen, colon, semi-colon, bullet points	

Handwriting

Children use joined handwriting for all writing, including drafting. They concentrate on increasing handwriting speed and continue to *develop increasing speed* and accuracy in typing. Teachers demonstrate and expect accurate spelling and punctuation, combined with legibility, modelling these three technical aspects of writing as a major aid to meaning, as well as a courtesy to the reader.

Learning Development

The Learning Development Department offers support for individual students either on a regular or occasional basis as the need arises. The Head of Learning Development works closely with pastoral staff, subject specialists and parents to support curriculum access for all and to offer advice and guidance so all students can develop and achieve to their highest potential.

The provision for Special Educational Needs is detailed in the school's Special Educational Needs policy. Parents are welcome to contact the school SENCo, Mrs Woodruff, at any time should they have questions, concerns or suggestions.

Subject: Mathematics

At Thornton, we follow the requirements set out in the 2014 National Curriculum. In all years we are striving to ensure the children become **fluent** in the fundamentals of Mathematics, **reason mathematically** and can **solve problems** by applying their Mathematics to a variety of routine and non-routine problems with increasing sophistication.

The following areas will be covered in Year 6:

Number – Number Place and Value

Students are taught to:

- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems that involve all of the above.

Number – Addition, Subtraction, Multiplication and Division

Students are taught to:

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

Number – Fractions (including decimals and percentages)

Students are taught to:

- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions > 1
- add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, × =]
- divide proper fractions by whole numbers [for example, ÷ 2 =]
- associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,]
- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- multiply one-digit numbers with up to two decimal places by whole numbers
- use written division methods in cases where the answer has up to two decimal places
- solve problems which require answers to be rounded to specified degrees of accuracy
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Ratio and Proportion

Students are taught to:

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Algebra

Students are taught to:

- use simple formulae
- generate and describe linear number sequences
- express missing number problems algebraically
- find pairs of numbers that satisfy an equation with two unknowns
- enumerate possibilities of combinations of two variables.

Measurement

Students are taught to:

- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- recognise when it is possible to use formulae for area and volume of shapes
- calculate the area of parallelograms and triangles
- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].

Geometry – Properties of Shapes

Students are taught to:

- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
- illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry – Position and Direction

Students are taught to:

- describe positions on the full coordinate grid (all four quadrants)
- draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

Statistics

Students are taught to:

- interpret and construct pie charts and line graphs and use these to solve problems
- calculate and interpret the mean as an average.

Subject: Music

All girls develop their knowledge and skills in Music by taking part in activities based around:

- Performance
- Exploring music and Composition
- Listening, Reflecting and Appraising

Key skills will also be explored in the weekly singing lesson where students will learn how to use their voices effectively in a choral context.

Students will develop the following skills:

- Sing confidently in a wide variety of styles with expression
- Communicate the meaning and mood of the song
- Sing a harmony part of a two or three part song with confidence
- Read music confidently to sing a song
- Perform a song from memory with attention to phrasing, dynamics and accuracy of pitch, for a special occasion.

Michaelmas Term

Developing instrumental skills, reading traditional notation and performing

- Develop understanding of note values and note pitches, reading traditional notation.
- Refine keyboard techniques with attention to using correct fingers and hand positions.
- Explore and find chords for those students who need challenging work, including reading two clefs.
- Perform with expression and accuracy.
- Learn to practise effectively, self-evaluating and improving performances.

<u>Lent Term</u>

Exploring Music and Composing

Studying Abdelazer – Rondaeu by Henry Purcell students will be introduced to music with a clear structure. They will create their own compositions based on the listening work. Students will:

• Distinguish differences in timbre and texture between a wide variety of instruments and instrumentation

- Identify and discuss 'what happens when' within simple musical structures
- Recognise and identify features of expression (phrasing, melody, harmony, different dynamics, metre and tempi) in an extract of live or recorded music
- Compare two pieces of instrumental music from different countries/ times and discuss the similarities and differences
- Use musical vocabulary and knowledge to talk about and discuss music from a variety of sources, traditions and cultures, including performances of their own and others' compositions.

<u>Trinity Term</u>

Class Performance – John Adams: Short Ride in a Fast Machine

Studying John Adams', students will be introduced to Classical music. They will perform the music at their own level with their own instruments to create a class performance. Students will:

- Perform on a range of instruments in mixed groups to an audience, with confidence
- Read and play with confidence from conventional notation
- Continue to play by ear on pitched instruments, extending the length of phrases, melodies played.
- Perform with sensitivity to different dynamics, tempi
- Lead/conduct a group of instrumental performers
- Maintain a rhythmic or melodic accompaniment to a song
- Maintain own part on a pitched instrument in a small ensemble
- Perform own compositions to an audience.

Subject: PSHEE

Personal, Social, Health and Economic (PSHE) Education helps students develop the knowledge, skills and attributes they need to keep themselves healthy and safe and prepare for life and work in modern Britain. Evidence shows that PSHE programmes can have a positive impact on both academic and non-academic outcomes for students.

The PSHE provision at Thornton College Junior School is a 'spiral curriculum' meaning that specific learning builds for students as they move through the school, gradually expanding and deepening their knowledge, skills and attributes as it increases in complexity. The learning opportunities that all students will encounter during the academic year have been divided into three core themes: **Health & Wellbeing; Relationships; Living in the Wider World.**

All PSHE teaching takes place in a respectful, safe learning environment and is underpinned by our school ethos and values. The curriculum content complies with the statutory requirements for Primary Relationships and Health Education and is in line with best practice and consultation with the PSHE Association.

Health & Wellbeing:

- Healthy Lifestyle: images in the media and reality, drugs
- Growing & Changing: setting goals, changes at puberty, human reproduction
- Keeping Safe: independence, increased responsibility, resisting pressure, protecting their bodies, where to get help and advice

Relationships

- Feelings & Emotions: confidentiality and when to break a confidence, managing dares
- Healthy Relationships: different types of relationships including loving relationships and unhealthy ones, acceptable and unacceptable physical touch
- Valuing Difference: listening to others, recognising and challenging stereotypes, discrimination and bullying

Living in the Wider World

- Rights & Responsibilities: human rights, rights of child, cultural practices and British law, community, being critical of what is in the media
- Environment: how resources are allocated
- Money: enterprise

Subject: Physical Education

During Key Stage 2 the students have a scheme of work for P.E. based on the following activities:

- Hockey, Netball and Cricket
- Badminton
- Swimming and water safety
- Athletics
- Health-Related Fitness

Through each element children should learn about:

- acquiring and developing skills
- selecting and applying skills, tactics and compositional ideas
- evaluating and improving performance
- working in a variety of different situations to develop their co-operation and team work

Games

In this unit children focus on how to use basic principles of attack and defence to plan strategy and tactics for a game. They work on improving the quality of their skills, using techniques that suit the different types of game.

In all games activities, children think about how to use skills, strategies and tactics to outwit the opposition in the game situation.

Students continue to refine their skills so they can perform them consistently in competitive situations.

Swimming Activities and Water-Safety

In this unit, there is a strong emphasis on stroke technique in order to make the children efficient, safe and confident in the water. There is more focus on butterfly and breaststroke. Contrasting 'fun' activities are also used.

Athletics

In this unit, the children refine the fundamental skills they have worked on previously and gain a greater understanding of the techniques and rules. Some more able students may be introduced to some events usually learnt in the Senior School.

Badminton

Students will become familiar with the court and rules of singles Badminton. They will gain knowledge of some of the basic shots played and will be encouraged to take part in both cooperative and competitive situations.

Subject: Religious Education

For Religious Education we follow the new national 'Religious Education Directory'. It is a spiral curriculum and so the topics covered throughout the year are repeated by each year group but at greater depth as the students progress through the school.

The topics covered are:

- Creation and Covenant
- Prophecy and Promise
- Galilee to Jerusalem
- Desert to Garden
- To the Ends of the Earth
- Dialogue and Encounter.

Subject: Science

Working Scientifically

Building on the concepts, ideas and methods in Year 5, children will have opportunities to become still more independent in devising fair and comparative tests and experiments, controlling variables and thinking about how to make sure their results are reliable. The emphasis this year is on developing increasingly independent scientific thinking and conceptual understanding. The girls will use a range of scientific and everyday equipment to take accurate measurements, and learn how to record and explain their data clearly using a range of formats (introduced in Year 5). They will learn how to use and create their own classification keys when grouping plants and animals. Children will be learning to think critically and evaluate the evidence they get from their own tests and experiments, and from research using secondary sources. The use of ICT in data logging and in recording and presenting ideas from their own investigations and from secondary sources will develop further. They will explain their results and findings in terms of causal relationships (i.e. focusing on likely reasons for the phenomena they observe, and the links between cause and effect). They will also begin to be more confident in identifying the specific scientific evidence that is used to support a particular idea or argument. They will be able to make links between different areas of their learning, and get to grips with more abstract concepts using complex processes, such as modelling.

Michaelmas Term

Animals, including humans - circulatory system, diet and lifestyle.

Building on their work in Years 3 and 4 on human digestion, circulation, muscles and skeleton, children will learn about the human circulatory system (identifying the functions of the heart, blood vessels and blood) and look at how diet, exercise, drugs and lifestyle impact on health. They will compare and contrast the needs of different animals (including humans), and find out about how nutrients and water are transported within our (and animals') bodies. They work scientifically to make drawings and models to show ideas about the circulatory system, and compare these with images from secondary sources. They may also conduct experiments and tests to show the effect of different activities on pulse and breathing rate, suggesting reasons for their findings. They will have an opportunity to learn about scientists whose work has contributed to our understanding of the circulatory system, including Harvey and Galen.

Lent Term

Electricity

To develop their work from Year 4, children construct simple electrical series circuits using a range of components (switches, buzzers, motors, etc.). They can name the parts of a circuit and draw diagrams using recognised symbols. They experiment by adding cells to a circuit, or using cells with a higher voltage, to make a lamp shine brighter, or a buzzer buzz louder. Children will further their understanding by systematically identifying the effect of changing one component at a time in a circuit and designing and making a set of traffic lights or burglar alarm.

Light

Extending their work in Year 3, children do practical experiments and make observations of the way light travels, looking at different effects of light in phenomena such as rainbows, rays of light split by prisms, objects appearing bent in water, etc. They look at how light appears to travel in straight lines, and understand that we can see objects because they reflect light into our eyes. They know that shadows are the same shape as the object that cast them and experiment with shadows by placing objects at different distances from a light source.

<u>Trinity Term</u>

Living things and their habitats

Extending the work in Year 4 on classification, children learn about classifying living things into five 'kingdoms' and animals into vertebrates (reptiles, fish, amphibians, birds and mammals) and invertebrates, using direct observation and explaining their choices. They use classification keys to help with (and to demonstrate) the decision-making process involved. They learn that broad groupings, such as micro-organisms, plants and animals can be subdivided. Through direct observations where possible, they can classify animals into commonly found invertebrates (such as insects, spiders, snails, worms) and vertebrates (fish, amphibians, reptiles, birds and mammals). They learn reasons why living things are placed in one group and not another. Children will find out about the significance of the work of scientists such as Carl Linnaeus, a pioneer of classification.

Evolution and inheritance

Children will be introduced to the idea that characteristics are passed from parent to child, in plants and animals, including humans. They build on their fossil work from Year 3, and look at how plants and animals on Earth adapt to their environment, gradually change over time, and how living things evolve. They learn that offspring are not identical to their parents, and that this variation can give rise to characteristics that help or hinder animals' chances of survival, leading over long periods of time to evolutionary change. Children may also start to learn about Charles Darwin's work and its contribution to our understanding of evolution.

Science Learning Outside the Box (LOB)

Where possible children will carry out *cross-curricular activities* in order to develop further their exploratory and personal learning skills and assess the development of their scientific skills alongside. These tasks, set in familiar contexts, help to develop children's higher order thinking skills.

Learning Outside the Classroom (LOC)

Learning outside the classroom is a vital part of education for students in the 21st century. It is our belief that we should utilise the school and its environment as much as possible. Students are encouraged to explore and utilise the outdoor environment as much as possible as a stimulus for their science learning.