

CURRICULUM INFORMATION 2024 / 2025

YEAR 3

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 3

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Subject: Computing

Computing in Years 3 and 4 is taught in discrete lessons.

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 as concerns the internet.
- Information Technology use technology to create, organise, store, manipulate and retrieve digital content.

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

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
- appreciate how [search] results are selected and ranked.
- use search technologies effectively to present data and information
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- understand the opportunities [networks] offer for communication and collaboration.
- be discerning in evaluating digital content.
- use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Subject: Creative Curriculum

Creative Curriculum at Thornton aims to engage children in the learning processes and expand their skills, knowledge and interests. Creative Curriculum encompasses the study of History, Geography, Art and D.T. It is mapped to the National Curriculum and delivered through a rich variety of learning activities, making creative links between all aspects of learning. The curriculum works on a two-year cycle to foster collaboration amongst the children and a wide range of opportunities for learning.

The learning experience will be broadened through educational visits and visitors in school.

Throughout the curriculum, we will aim to equip the children with life skills as well as knowledge.

The children will be learning to learn by:

- being resilient
- being reflective
- being resourceful
- taking risks
- planning, revising and reviewing
- collaborating and listening
- questioning, imagining and making links
- perseverance

Topics are explored on a two-year cycle.

Cycle A (2024-2025):

Michaelmas Term: Anglo-Saxons and Vikings

Lent Term: World War Two

Trinity Term: Modern Europe

Cycle B (2025-2026):

Michaelmas Term: Inventors

Meet the Artists

Lent Term: The Romans in Britain

Trinity Term: Rainforests

In addition to English, the children will explore topics across the curriculum, working towards the National Curriculum objectives which are detailed next.

The statements below are the National Curriculum objectives for Key Stage Two. Therefore, the children will build upon these skills as they progress through Key Stage Two. Children in Year 3 and 4 will begin to work towards these objectives.

Art and Design

Throughout Key Stage Two:

- Students will be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.
- Students will be taught to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay].
- Students will be taught about great artists, architects and designers in history.

Design and Technology

Throughout Key Stage Two, children will be taught to:

• Design:

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make:

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Evaluate:

- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.

- Technical knowledge:
 - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
 - Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].
 - Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
 - Apply their understanding of computing to program, monitor and control their products.

History

Throughout Key Stage 2:

- Students should 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.

Geography

Throughout Key Stage 2, students will be taught:

- 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 land-use 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.
- Describe and understand key aspects of 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.

Subject: French

Michaelmas Term

All Around Town

This term, your daughter will learn to develop her intercultural understanding by being introduced to the sights of some typical French cities. She will also learn to describe places in a town, count to 100 and give her address in French.

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

- name some of the major cities of France.
- identify and say typical amenities to be found in French towns.
- say and order multiple of ten.
- ask and give a simple address in French.
- locate the correct part of a bilingual dictionary to translate from French –
 English and vice versa.

Lent Term

On the Move

This term, your daughter will learn to develop her conversational skills via some new topics: transport, direction and movement. She will learn to conjugate the high-frequency verb 'to go' and use it in context.

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

- name some types of transport
- use Je... and Tu... correctly in a simple sentence
- respond to simple instructions for direction and movement.
- follow simple directions to find a place on a map.

Trinity Term

Gone Shopping

This term your daughter will learn about the shopping experience in France. She will learn specific vocabulary of fruit, vegetables and clothes. She will learn key phrases for asking the questions needed when going shopping. We 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.

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 an optional homework. Nevertheless, it incentivised by the opportunity to earn house points and be awarded certificates on a half-termly basis.

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

Students read regularly from the Oxford Reading Tree/Collins scheme and take reading books home on a daily basis. Once children can read aloud and comprehend these texts confidently, they become free readers — meaning that they can choose their own books independently from the library as part of their own reading regime.

Students read aloud regularly to the Class Teacher/Assistant, using a range of cues to help them decode the text.

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

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

A wide variety of class stories and texts are read to the children during the year.

Word reading attainment targets

- apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) 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 attainment targets

- 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 they can read for themselves, taking turns and listening to what others say.
- Spelling attainment targets
- use further prefixes and suffixes and understand how to add them
- spell further homophones
- spell words that are often misspelt
- 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 attainment targets

- 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 down strokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

Writing

Students learn the skills of writing discretely and linked to creative curriculum. Good quality books will be used to model how authors construct their own texts.

Writing attainment targets

- 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
- 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.
- 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

- 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 accurately and appropriately when discussing their writing and reading.

Spelling:

- use further prefixes and suffixes and understand how to add them spell further homophones
- spell words that are often misspelt
- 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.

Terminology:

Year 3:	
Word	Formation of nouns using a range of prefixes [for example <i>super</i> –, <i>anti</i> –, <i>auto</i> –]
	Use of the forms a or an according to whether the next word begins with a consonant or a vowel [for example, \underline{a} rock, \underline{an} open box]
	Word families based on common words , showing how words are related in form and meaning [for example, <i>solve</i> , <i>solution</i> , <i>solver</i> , <i>dissolve</i> , <i>insoluble</i>]
Sentence	Expressing time, place and cause using conjunctions [for example, <i>when</i> , <i>before</i> , <i>after</i> , <i>while</i> , <i>so</i> , <i>because</i>], adverbs [for example, <i>then</i> , <i>next</i> , <i>soon</i> , <i>therefore</i>], or prepositions [for example, <i>before</i> , <i>after</i> , <i>during</i> , <i>in</i> , <i>because of</i>]
Text	Introduction to paragraphs as a way to group related material Headings and sub-headings to aid presentation Use of the present perfect form of verbs instead of the simple past [for example, <i>He</i>
Punctuation	has gone out to play contrasted with He went out to play Introduction to inverted commas to punctuate direct speech
Terminology for students	preposition, conjunction word family, prefix clause, subordinate clause direct speech consonant, consonant letter vowel, vowel letter inverted commas (or 'speech marks')

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 3:

Number - Number and Place Value

Students are taught to:

- 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

Students are taught to:

- 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

Students are taught to:

- 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

Students are taught to:

- 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: unit fractions 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 [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]
- compare and order unit fractions, and fractions with the same denominators
- solve problems that involve all of the above.

Measurement

Students are taught to:

- 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 – Properties of Shapes

Students are taught to:

- 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

Students are taught to:

- 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.

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 songs in a variety of styles with confidence, singing an increasing number from memory.
- Show increasing accuracy of pitch and awareness of the shape of a melody.
- Understand that posture, breathing and diction are important.
- Demonstrate an awareness of character or style in performance.
- Pitch notes moving by step (notes adjacent to each other) and by leap (notes with gaps between them).

Michaelmas Term

Further listening

Students will consolidate their listening skills by studying one of BBC's Ten Pieces by Florence Price. This will lead to performances and group compositions using African drums. Students will:

- Listen with concentration to longer pieces / extracts of music.
- Listen to live/recorded extracts of different kinds of music and identify where appropriate
 - a steady beat / no steady beat
 - a specific rhythm pattern
 - the speed (TEMPO) of the music
 - the volume (DYNAMICS)
 - Using appropriate musical terms/language
- Maintain a rhythmic or melodic ostinato simultaneously with a different ostinato and/or steady beat.
- Copy a short melodic phrase by ear on a pitched instrument.

Lent Term

Listening to Music, appraising and composing

Studying Hans Zimmer's Earth, students will be introduced to programme music. They will create a class Rainforest composition to add to Hans Zimmer's Earth. Students will:

- Listen to and describe Music that tells a story, paints a picture or creates a mood.
- Listen to their own compositions and use musical language to describe what happens in them.
- Symbols to represent sound (graphic scores / traditional notation).
- The sounds of different instruments **Timbre** and how they can represent creatures from the forest.
- How the musical elements can be combined to compose descriptive music.

Trinity Term

Learning to perform songs on the Ukulele

- Keep a steady beat on an instrument in a group or individually.
- Play using simple, traditional notation.
- Perform with an awareness of others.
- A simple rhythmic accompaniment to go with a song, using ostinato patterns.
- Music that has a recognisable structure; Beginning, Middle and End or verse/chorus.

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. If you would like any further information about the content of the curriculum, please contact Mrs Sablon.

Health & Wellbeing:

- Healthy Lifestyle: balanced diet, food choices, habits
- Growing & Changing: setting goals, describing/conflicting and managing feelings
- Keeping Safe: school safety, people who help us stay healthy and safe

Relationships

- Feelings & Emotions: recognising feelings in others and responding
- Healthy Relationships: positive, healthy relationships and friendships
- Valuing Difference: recognising and responding to bullying

Living in the Wider World

- Rights & Responsibilities: discussing health and wellbeing issues, community
- Environment: responsibilities, rights and duties
- Money: enterprise, what it means and developing skills in enterprise

Subject: Physical Education

Working with Miss Bates and P.E. staff

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

- Swimming and water safety
- Athletics
- Dance
- Gymnastics
- Games
 - Cricket
 - Netball
 - Hockey

Through each element children should learn about:

- acquiring and developing skills
- selecting and applying skills, tactics and compositional ideas
- knowledge and understanding of fitness and health
- evaluating and improving performance

Games

In this unit children learn how to outwit their opponents and score when playing invasion games. They develop skills in finding and using space to keep the ball.

In all games activities, children think about how to use skills, strategies and tactics to outwit the opposition. In invasion games, they enter their opponent's territory with the "ball" and try to get into good positions for shooting or reaching the goal. They also learn positions and rules for netball, hockey and cricket.

Skills Afternoons / Matches

Where possible students in Year 3 are given the opportunity to join together with other schools to work on skills and game play. Some Year 3 students may also join the Year 4 students in playing matches against other schools. These will generally take place on a Friday afternoon.

Swimming Activities and Water-Safety

In this unit children focus on swimming more fluently, improving their swimming strokes. In all swimming activities, children have to keep afloat and propel themselves through water.

Athletics

In this unit children continue to develop the fundamental skills of running, throwing and jumping using a variety of objects and distances. They also prepare for Sports Day.

Dance

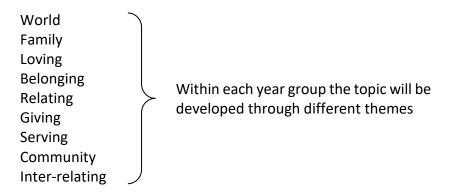
In this unit the children focus on creating and performing short dances that communicate different moods, feelings and ideas. In Dance as a whole, children think about how to use movement to explore and communicate ideas and issues, and their own feelings and thoughts. The children also develop their musicality and the ability to work with a partner. Girls also learn more complex vocabulary steps to add to their prior knowledge; these steps are then used in their own choreography. Throughout this year girls also look at improvisation and the tools that are required to successful improvise in class. In the Lent term, the students have the opportunity to learn and perform the Maypole Dance.

Subject: Religious Education

'Come and See' is the Catholic Primary Religious Education programme through which we teach RE in the Preparatory School.

Through the process of Explore, Reveal and Respond, themes and topics are studied throughout the year.

The year group will explore topics of:



Each topic will be spread over four weeks:

Week 1: Topic is introduced and life experiences are explored and reflected upon

Week 2 & 3: Knowledge and understanding of the Catholic/Christian faith is revealed through Scripture, Tradition, Rites, Prayers and Christian living.

Week 4: Learning is remembered, celebrated and responded to in daily life.

Throughout the year, the topics of Judaism, Hinduism, Islam and Sikhism will be on a rolling program. The students will learn about the customs, beliefs and places of worship of other World Religions.

Subject: Science

Working Scientifically

In this year, the girls will broaden their scientific knowledge, as well as develop the understanding of scientific methods and skills which they began to acquire in Key Stage 1. Children will continue to be encouraged to ask their own scientific questions about the world around them, and, with support, will make decisions about how best to find answers, through observations, sorting objects in different ways, carrying out simple tests and experiments, and research using secondary sources. In particular during this year, children will begin to learn how to construct a fair test. They will also build on the work done in Year 2 on data collection, using an increasingly sophisticated range of equipment to help them, including data loggers. Emphasis will be placed on recording their data using standard units and in a wider range of formats, including notes, charts, graphs and tables. They will begin to learn how to analyse their data, looking for patterns, similarities and differences in order to reach simple conclusions. They will extend this learning as they move into Year 4, beginning to use their data to help them identify new questions for research.

Michaelmas Term

Animals, including humans

Children will continue the work done in Year 2 on the importance of nutrition for animals' health, by looking at the different food groups and finding out about the contribution that each group makes. They will have opportunities to compare and contrast the needs of different animals (including humans) and decide ways of grouping them according to what they eat. They will research different food groups and how they keep us healthy, and design meals based on what they find out. This work will be extended later in Key Stage 2.

Skeletons and Muscles

Building on their work in Year 1 and 2, the girls will find out more about humans. They will explore exercise and the human body, particularly they will explore the role of the skeleton and muscles in some animals for support, protection and movement. Children will work scientifically to group animals in different ways (i.e. whether or not they have skeletons) and compare the ways in which animals move. They will work in the role of radiologists, doctors and patients and will use life-like models, x-rays and ICT to explore the body.

Lent Term

Light

Children will find out how light makes it possible for us to see things. They will learn about shadows and conduct simple experiments to show how the size of a shadow is affected by the distance between the object casting the shadow and the light source.

The Thornton environment will be used to explore the nature of shadows and the grounds will be exploited as shadows, sundials and buildings are investigated.

Forces and Magnets

Children will begin to compare magnetic forces (which can operate at a distance, without direct contact) with other forces, where direct contact is needed. They will learn that magnets have two opposite poles. They will conduct experiments to show how magnets attract or repel each other, depending on which poles are facing, and this will enable them to make accurate predictions of the behaviour of magnets. They will work scientifically by devising a fair test to find out the strength of different magnets and by comparing and recording the way objects move on different surfaces.

Trinity Term

Rocks

Children will observe rocks, including those used in buildings and gravestones, and explore how and why they might have changed over time (using a hand lens or microscopes) to help them to identify and classify rocks according to whether they have grains or crystals, and whether they have fossils in them. They will research and discuss the different kinds of living things whose fossils are found in sedimentary rock and explore how fossils are formed. They will explore different soils and identify similarities and differences between them and investigate what happens when rocks are rubbed together or what changes occur when they are in water.

Plants

Building on the work done in Year 2, the girls will learn more about the parts of a plant, and find out about the specific functions of those different parts (in particular, the role of flowers in a plant's life cycle and the importance of the root system and stem for transporting water and providing support). They will find out more about the things plants need in order to live and grow healthily, and will compare the needs of different plants. They will work scientifically by devising and carrying out simple fair tests to identify the impact of different factors (such as light, water, fertiliser etc.) on plant growth. They will also do simple experiments to demonstrate how water travels within plants. They will grow in independence in caring for their own garden outside their classroom and will use their plants for a range of purposes: to explore patterns of growth; to gather evidence on the conditions needed for growth and to use the plants (when edible) as a source of food.

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.