

ST ANDREW'S, TURI, KENYA

Seeking the Highest for 90 Years

Student Guide

to the Key Stage 3 Curriculum

Years 7 and 8 2022 - 2023



Our Mission Statement: Seeking the Highest

To be the leading international School in Africa, transforming the Hearts, Minds, Bodies and Souls of tomorrow's leaders.

Our Vision

Seeking the highest for every individual with Christ as our guide

Our Values

- Courage
- Integrity
- Compassion





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Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

Welcome to our Key Stage 3 Curriculum Booklet for Years 7 & 8

The Key Stage 3 curriculum was born out of three key principles:

- 1. Focus on the learning rather than passing examinations.
- 2. Take the opportunity to broaden your learning through the wide subject range that students have on offer at IGCSE.
- 3. Ensure a rigorous focus on skills acquisition rather than just knowledge acquisition.

As you leaf through these pages, you will see exciting, innovative programs of study that meet a wide variety of learning and assessment styles. You will see a focus on developing the individual learner, building confidence as well as capacity. You will also find a curriculum that places value on important personal habits such as self-discipline, rigour as well as creativity, collaboration and problem solving.

This guide has been written for you by the Heads of Department and we hope that you find it both a useful and informative guide which helps you to navigate through the year. We have tried to make sure all information is accurate but there may be, on occasions, circumstances that mean changes need to be made.

Any feedback, both positive and suggestions for future improvement will be most welcome.

Ms Holloway Deputy Head Academic



Meet the Team

Head: Mr. Wright

Deputy Head (Academic): Ms. Holloway Assistant Head (Academic): Ms. Bell Deputy Head (Pastoral): Mrs. Scott Assistant Head (Pastoral): Mrs. Luvai Director Co-Curricular: Mr. Jones Head of English: Dr. Waldburger

Head of Maths: Mrs. Nightingale Head of Science: Mr. Hooper Head of Humanities: Ms. Bell

Head of Art and Design: Mrs. Waldburger

Head of Music: Mrs. Luvai Head of MFL: Mrs. Wright Head of Drama: Mrs. Scott Head of Computing: Mr Mutua

Head of Physical Education: Mr. Morgan

Director of Sports: Mr Hooper

Head of Learning Success Centre: Miss. May

Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

The Curriculum

All pupils study a broad curriculum. There are five 55-minute lessons per day.

- English 4
- Mathematics 4
- Science 3
- Humanities 4
- French 2
- PSHEE 0.5
- Art and Design 2
- Drama 1
- Music 1
- Computing 1
- Physical Education 2
- Kiswahili



Punctuality

You need to be in time to lessons. There is a five-minute warning bell at the end of each break. Lateness will be sanctioned by your teachers.

Prep

In Key Stage 3, prep sessions we are aiming to prepare you to be self-disciplined and confident young people who can manage your time. So, prep will be assigned over a week or the length of the assessment. This will give you the opportunity to choose how you are going to organise your schedule to get the work assigned completed.

You have four one-hour evening sessions through the week on a Monday, Tuesday, Wednesday, and Thursday as well as the opportunity to use other time at breaks and before school as you feel necessary.

For those of you who struggle to manage your time effectively, consistently complete prep or assessments punctually and to a satisfactory manner, will have the opportunity to enhance this important skill on a Friday evening in Prep Support.

We feel this is excellent preparation for the more diverse and complex demands of Senior School prep and will help you develop the personal management skills you need to be successful in the future.

Catching up after absence

If you are away from lessons, you are expected to catch up with any classwork and prep activities. Pupils should see each teacher to find out what classwork and prep has been missed. Pupils who miss part of a lesson due to a music or LAMDA lesson must catch up in the same way as any other missed lesson. Pupils should have caught up with any missed work within a week of their absence. Catch-up sessions are implemented and supervised when and where needed.

For extended absence, your parents should contact your tutor who will provide help in liaising with teachers and in finding out how best to catch up.

Equipment for lessons

The following equipment is expected in all lessons. Not having the correct equipment disturbs the lesson and hinders learning.

- Journal
- Exercise book (if applicable)
- Blue pen
- Red pen
- HB Pencils
- Pencil sharpener, eraser, glue stick and ruler
- Pair of compasses, protractor (if applicable)
- Calculator (if applicable)
- Laptop (if applicable)

2022-2023 7



Using the Journal

This will help keep you organised, ensure you meet deadlines and help you set and achieve your goals. Using your Journal effectively will relieve stress, allow you to self-reflect and boost your memory.

- The Journal must be taken to all lessons.
- You should use your Journal to record all prep including the date when it is due.
- Teachers will also note Rewards and Sanctions.
- Tutors will check the Journal on a weekly basis.

Reporting to parents

The School sends an update of your attainment and effort scores at each half-term. Full written reports (including teacher comments) are issued at the end of the Christmas and Trinity Terms. These include credit scores. Reports containing only credit achievements are sent home at the end of Easter Term. These are uploaded onto the parent portal. There are opportunities for your parents to meet your teachers, at the informal Meet the Teacher sessions at VISO as well as formal parent-teacher Learning Conversations (Consultations), online, twice a term. They also can consult with any teacher throughout the year. On these occasions, your tutor is their first port of call.

Target setting

You will take computer tests for GLs in English, Maths and Science in the first few weeks of the academic year. These tests require no special preparation and are generally enjoyable. The test helps the School and yourself to set individual targets to improve your learning.

Who do I contact if I have an academic concern?

Whilst we hope that all pupils make satisfactory progress at the School, we do understand that from time-to-time you may have concerns about your academic progress. In the first instance, please contact either the teacher or your tutor **yourself** to discuss the issue. We want you to be an independent learner and developing the skills to resolve problems is an important life skill. If the concern is not resolved following the discussion, please talk to your tutor. If the problem or concern is still not resolved the Head of Department and then the Assistant Head (Academic) will get involved.

Assessment

Years 7 and 8 pupils are assessed continually throughout the year to accumulate credits in each of their subjects. The information on these can be seen within each topic overview in the following pages. These assessments are diverse and rigorous ensuring you can develop a wide range of skills. At the end of Years 7 and 8, pupils will complete a second GL assessment in English, Mathematics and Science which are set against UK benchmarking.

ART & TECHNOLOGY

'Beauty will save the world'

FYODOR DOSTOEVSKY



ART & TECHNOLOGY

VISION:

In the Art &Technology department we aim to inspire a love of beauty and an appreciation of elegant and efficient design through the exploration of renowned artists, significant designers, and a variety of sustainable and beautiful materials and processes.

STUDENTS WILL:

- Develop ideas and learn to work from design briefs
- Demonstrate critical understanding of sources
- Select and experiment with a variety of materials and processes
- Record ideas, observations and insights as their work unfolds

2022/2023							
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2	
Year 7	Design Technology: Introduction to technology Art: Study of the seven elements of art. Colour theory and drawing.	DT: Design and construction of Christmas hat – collage and form FT: Christmas baking	FT: Intro to wholesome nutrition Art: Exploring pattern and printmaking as well as perspective drawing	DT: Dinky Car design process and carpentry	Art: Sculpture and clay and art history FT: Cooking wholesome foods on camp	DT: Stitching and design as well as creating natural cleaners Art: Introduction to mixed media	
Year 8	DT: Introduction to the design process Art: The eight principles of design and practical art. Colour theory and drawing.	DT: Design and construction of Christmas hats, the vibrant Banana Leaves project FT: Christmas baking	FT: Cooking wholesome food for relief Art: Self- portraits and pen and ink realism - Trees	DT: Recycling and art and constructing 'gelli plates' Art: Paper sculpture and construction in 3D, mixed media studying Pablo Picasso	DT: Crafting a cutting board Art: Turner and landscape painting and cartoons	Art: Printmaking DT: Building shelters	

Above is the outline for the Art & Technology Curriculum



ART & TECHNOLOGY

Year 7 Unit 1: Introduction to Technology and the Seven Elements of Art

Topic overview

The study of Technology is the study of solving material problems via design. In this unit, we will study in theory and in practice, how to approach problems using design and technology. Concomitantly, we will engage with drawing, colour, and the adjacent elements of art - line, colour, shape, space, form, texture and value - which informs both design and humanity's desire for aesthetic beauty.

Assessment (10 credits)

The students will be assessed on their ability to utilize the design process and the artistic elements to create a 3D design using conventions of drawing.

Year 7 Unit 2: Applying the design process and the elements of art to Christmas Hats, Baking and Collage

Topic overview

Students will study examples of Christmas traditions and plan a theme for their hats and baking. The design process will be followed to deliver on their proposals.

Students will learn the history of collage via the work of Matisse and then gain skills in creating art with scissors and negative space.

Assessment (10 credits)

- Hats to be credited for intention and product.
- Collage to be credited for connecting theme with colour and material.

Year 7 Unit 3: An Introduction to Wholesome Nutrition; Exploring Pattern and Printmaking

Topic overview

The basics of nutrition will be explored along with basic roasting and baking and health and safety in the school kitchen. Famous food art will be used as inspiration. Students will design their own recipe book of healthy, basic meals.

Printmaking as a technological component of design and entrepreneurship will be explored. Students will integrate pattern in a project to create a viable product for market.

Assessment (10 credits)

- A recipe book that is clear, healthy, and achievable with attention to neatness and aesthetics.
- A print product from conception, to plan, to design, to market.



ART & TECHNOLOGY

Year 7 Unit 4: Carpentry and Dinky Car Design

Topic overview

Students will prepare for the Dinky Safari by learning the basics of carpentry in the school workshop and then working to shape and customize their own vehicles in the DT room, according to plan, function, and aesthetics.

Cars to be decorated according to marketing principles surrounding brand, colour, and logo.

Assessment (10 credits)

The final Dinky Car – woodwork and decoration.

Year 7 Unit 5: Camp Food, Sculpture and Clay

Topic overview

In conjunction with Scouts, students will plan healthy meals which can be prepared from non-perishables using camp techniques.

Students will be introduced to the history of sculpture and the use and process of clay in 3D art.

Assessment (10 credits)

Final clay piece, along with sketches and planning.

Year 7 Unit 6: Stitching and Design; Introduction to Mixed Media in Art

Topic overview

Students will be introduced to fabric and sewing. A design product based on materials and technique will be formulated and seen through the design process.

Students will be introduced to mixed media in art – the creation of art by means of a variety of materials in such a way that still coheres into a single vision.

Assessment (10 credits)

Mixed media piece to be assessed for deliberate use of material within a singular plan.



ART & TECHNOLOGY

YEAR 8

Year 8 Unit 1: Introduction to Technology and the Seven Elements of Art

Topic overview

The study of Technology is the study of solving material problems via design. In this unit, we will study in theory and in practice, how to approach problems using design and technology. Concomitantly, we will engage with drawing, colour, and the adjacent elements of art, which informs both design and humanity's desire for aesthetic beauty.

Assessment (10 credits)

The students will be assessed on their ability to utilize the design process and the artistic elements to create a 3D design using conventions of drawing.

Year 8 Unit 2: Applying the design process and the elements of art to Christmas Hats, Baking and Textile Design

Topic overview

Students will study examples of Christmas traditions and plan a theme for their hats and baking. The design process will be followed to deliver on their proposals.

Students will create a textile product for a customer brief themed, Vibrant Banana Leaves. The design process, including thumbnail sketches, will be utilised.

Assessment (10 credits)

Hats to be credited for intention and product.

Textiles to be credited for meeting the brief with accuracy and flair.

Year 8 Unit 3: Wholesome Food for Relief; Self-Portraits

Topic overview

The basics of nutrition will be applied to disaster relief services. Cooking with available foodstuffs on scale for nourishment and survival of displaced people will be explored.

The history and craft of self-portraits will be explored through the ages. Psychology, physiognomy, and emotion will be explored via line and colour and shade.

Assessment (10 credits)

A dish and recipe for relief.

A beautiful and meaningful self-portrait.



ART & TECHNOLOGY

Year 8 Unit 4: Recycling and constructing 'gelli plates'; Paper sculpture, mixed media, Pablo Picasso

Topic overview

The technology and social context of recycling will be explored and students will then launch a recycling campaign for the whole school, with a focus on using some recyclable material to create art and gelli plates for printing.

Paper sculpture, used within the context of mixed media, will be explored alongside the revolution of Picasso.

Assessment (10 credits)

Recycling campaign effort and teamwork; recycled product design and execution.

Year 8 Unit 5: Crafting a cutting board; Turner and landscape painting and cartoons

Topic overview

Carpentry skills and an appreciation of school tools and machinery, combined with a design process from conception to marketing, will be drawn together for a project to create bespoke cutting boards. The Romanticism of William Turner and his groundbreaking landscape art will be explored and applied to the landscapes of Kenya.

The art of cartoons will be investigated as a craft and means of storytelling and a comic strip will be designed and drawn.

Assessment (10 credits)

Cutting board product design and execution.

Year 8 Unit 6: Printmaking; Building shelters

Topic overview

Students will make artistic prints depicting their life at the Prep School.

Building shelters for displaced persons, wilderness survivors, using everyday and natural materials will be explored. Its social context and its practicalities.

Assessment (10 credits)

Final shelter piece - design, functionality, aesthetics, teamwork.

COMPUTING

'The future will be made by creators not consumers.'



COMPUTING

VISION:

Pupils of the digital generation will grow to be confident creators and not content consumers of Information Technology. They will use programming and logical thinking strategies to responsibly generate original digital content and explore its use beyond school.

PUPILS WILL:

- Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.
- Analyse problems in computational terms. Practise computer program design, creation, and review, to solve such problems.
- Evaluate and apply information technology. Explore new or unfamiliar technologies analytically, to solve problems.
- Be responsible, competent, confident, and creative users of information and communication technology.

2022/2023						
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2
Year 7	7 Under the Hood of a Computer and History of Computing		How the Web Works		Computation Thinking	
Year 8	Possible Minds (Artificial Intelligence)		Thinking in Ones and Zeros (Binary Notation)		Independent Computing Project	
Year 9	Hardware and Software Components of a Computer System	Introduction to Spreadsheets And Data Analysis	Text-Based Programming in Python	Text-Based Programming in Python	Introduction to Databases	End of Key Stage Assessment

Above is the outline for the Computing Curriculum

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COMPUTING

YEAR 7

Under the Hood of a Computer

Topic Overview

Pupils will look at the internal components of a computer in this unit. They will appreciate technological innovation in the advancement of computing technology; from abacuses and calculators to emerging Nano technology.

Pupils will explore the verb 'to compute', learning what the term 'computer' referred to before the emergence of its electronic counterpart. They will link physical components of modern electronic computers, to the computational cycle of: input, storage, process and output.

Pupils will be able to identify the main internal components of a computer, understanding the role of each part in a computation system. They will then be able to demonstrate how more complex functions involving multiple function operations occur (for instance, multiplication and division).

Assessment (20 credits)

- Evaluating sources and knowledge (classwork, tests and prep)
- Create a 3D Model of their own computer that should allow for their version of Input, Output, Storage and Process (including research and information about various designs).
- Create a historical timeline on the Development of Computing (from the Abacus to Al)
- "I am the most important part of the computer" Debate /Presentation

How the Web Works

Topic Overview

Pupils will look at the way the World Wide Web works from a technical perspective. They will explore issues of content reliability and **e-safety**. Pupils will be challenged to create and upload web pages. They will learn to appreciate that everything on the web is interlinked, equating the virtual **network** to a library.

Pupils will be able to explain how web pages are related, searched, and ranked. They will differentiate between the **World Wide Web** and the **Internet**, appreciating the range of services supplied by the Internet. They will compare server and client machines, outlining their roles and limitations.

Pupils will be able to use basic **HTML** commands to create a web page for a specific audience. They will research source material for 'e-safety'. Pupils will subsequently design a web page using a basic text editor application program and appropriate HTML **tags**.

Assessment (20 credits)



COMPUTING

- Creating a physical representation of a webpage in a mini booklet titled Me.html
- A Complete Webpage on E-Safety
- Progress in the guided learning HTML tutorial (at SoloLearn / Khan Academy/ Codecademy)
- End of Topic Quiz

Computational Thinking

Topic Overview

Pupils will embark on using different programming languages to design and create functioning computer programs. They will discover how **decomposition** makes problems easier to solve, as complex systems are broken down into smaller parts. They will appreciate that complicated activities can be recorded as a **sequence** of simple instructions.

Pupils will design an **algorithm**; developing a sequence of discrete instructions written to solve a problem, ensuring that they are clear, precise, and unambiguous in their implementations.

Pupils will use a **storyboard** tool to **abstract** the stages of a simple quiz. They will decompose a quiz program and match the abstraction steps to a graphical block-based programming language (like *Scratch*). They will then create a **flowchart** algorithm for the simple quiz with *username* and *score* variables. Using the program '*Flowgorithm*', pupils will auto-generate high-level language code in Python.

Throughout the development process, pupils will be challenged to troubleshoot any program code errors that arise (**debugging**).

Assessment (20 credits)

- Evaluating sources and knowledge (classwork, tests, and prep)
- Calculator program (including the documented evolution of algorithm designs).
- Scratch, Python, Flowcharts, Pseudocode and possibly Java code for an interactive scored quiz.
- "What I have learnt" -3minute Presentation with automated transition timings and a recorded voice over (that respects copyright material).

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COMPUTING

YEAR 8

Possible Minds - Al

Topic Overview

Possible Minds is a brief look at **Artificial Intelligence** (Al). Pupils will use computational thinking to simulate intelligence. They will describe some aspects of intelligence and appreciate debates about whether machines can display intelligence.

Pupils will list modern machines that display seemingly intelligent behaviour and discuss how existing artefacts could be improved to make them appear more useful and therefore more intelligent.

In their exploration of artificial intelligence, pupils will design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. They will appreciate that problems need to be broken down into more manageable parts; exploring how selection statements can be used to provide alternate paths in a solution.

Pupils will then sequence and combine a set of selection statements using the Boolean operators **AND** and **OR**. They will be able to use **variables** as a method of recording incremental change; writing algorithms that use selection statements with **Boolean operators**.

Assessment (20 credits)

Complete Scratch Semi-Intelligent Robot program

- Coding Journal that describes the improvements and bugs that emerged at each stage of the development process
- What is intelligence?' worksheet
- Simulated human-machine interaction through a -5minute conversation



COMPUTING

Thinking in Ones and Zeros

Topic Overview

Computer arithmetic is all about binary notation, expressed in terms of ones and zeros. Pupils will explore **Binary Conversion**, **Binary Arithmetic**, and **Logic Circuit Design Basics**. They will justify the use of binary notation in digital devices and will explain why it is important to understand how the binary number systems and the decimal number system relate to each other.

Pupils will understand and use binary digits, such as to be able to convert between binary and decimal notation, as well as perform simple binary addition. They will use Microsoft Word to design a binary quiz for their peers (complete with a marking scheme). This exercise will enable them to apply some advanced word processing features like subscript and superscript, headings and headers, page numbers and comments, indents, tabs and numbering.

Pupils will order the values of each bit of a byte (-8bit binary string), and will be familiar with the terms **bit**, **byte**, and **nibble**, with respect to binary string size and storage capacity.

Pupils will learn about logical gates and their role in creating digital circuitry. They will use **AND**, **OR**, **NAND**, **NOR** and **XOR** gates to develop useful logical circuits.

Assessment (20 credits)

- · Hard copy of Binary Quiz with Marking Scheme
- Logic Gate Truth Table Workbook
- Logic Circuit Adder
- End of topic quiz



COMPUTING

Independent Computing Project

Topic Overview

The purpose of the end of year computing project is to provide pupils with an opportunity to explore and apply the knowledge they have garnered in the subject over their time in preparatory school. Pupils' intellectual abilities and practical skills to solving real, or close to real life computing problems are tested.

The unit offers pupils an opportunity to demonstrate their competence in several aspects of Computer Science and Information Technology like: Web Development, Digital Design, Programming, STEM, new software exploration, Music Composition and Video Editing.

Assessment (20 credits)

- Project Plan: A detailed description of intended goals, achieved targets and obstacles encountered during the project
- Prototype: Beta version of the prototype before testing and modification
- Finished Work: The final completed digital artefact
- Presentation: Video footage / Class presentation
- Interested pupils may apply to join the Tech and E-Safety Committee.
- All KS3 pupils can participate in the Weekend Coding Challenges included in weekend activities
- With consideration to Ministry of Health Guidelines, pupils may be able to take part in the Peponi Young Programmers Competition in Nairobi.

DRAMA

'Acting is behaving truthfully under imaginary circumstances'

SANFORD MEISNER



DRAMA

VISION:

Pupils will grow in self-belief, developing their ability to speak and perform in front of others, lead with confidence and work well as part of a team. These are all skills that will serve them well in later life.

PUPILS WILL:

- Create believable characters
- Think about how to impact an audience
- Use techniques taught to make a script-based piece as engaging as possible.
- Learn how and why to mark a moment
- Perform a monologue
- Devise and improvise as part of a group
- Use a variety of stimuli to create meaningful performances

2022/2023						
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2
Year 7	The Lion, Witch and Wardrobe	Script work	Storytelling (Physical Theatre)	Roald Dahl devising	Titanic	Fairytale devising unit, using props
Year 8	Superheroes	Mystery Unit	Script work	Stanislavski	Shake- speare's Theatre	A Midsummer Night's Dream
Year 9	Intro to Drama	Brecht	Dell'Arte	Intro to Drama	Brecht	Dell'Arte

Above is the outline for the Drama Curriculum

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DRAMA

YEAR 7

The Lion, the Witch and the Wardrobe

Topic overview

Children will use this well-loved story as a basis for devising, physical theatre, movement, voice and characterisation work. They will be encouraged to utilise a number of dramatic techniques for effect. This unit considers World War II, which links with History.

Assessment (10 credits)

To use dramatic techniques taught (such as freeze-frame, cross-cutting and slow motion) to create a
battle sequence. Pupils will be encouraged to think about facial expression, body language and voice
in order to convey a character clearly.

An introduction to Script Work

Topic overview

This unit will encourage children to utilise skills taught in term one by introducing them to script-based work. It will challenge any preconceptions that an actor can simply rely on words to convey meaning; they will need to think carefully about how to influence and affect their audience.

Assessment (10 credits)

• Script-based performance – pupils will think carefully about key points in their scene in order to 'mark a moment'. This will solidify the techniques taught, as they use them for effect.

Roald Dahl devising unit with a focus on practitioners

Topic overview

In this unit, pupils will be introduced to Theatre Practitioners such as Brecht. They will learn about a range of methodologies and the ways in which practitioners impact performance. Following this, they will create a performance, based on the work of Roald Dahl.

Assessment (10 credits)

Pupils will create a performance using Brechtian techniques.



DRAMA

Storytelling

Topic overview

Children will explore ways in which to use voice, movement and facial expression to engage an audience as they tell them a story. These are skills they will use in later life, as they lead meetings and present ideas in their chosen career. In addition to this, pupils will utilize Physical Theatre to bring objects and settings to life.

Assessment (10 credits)

• Pupils will create an engaging storytelling performance (using physical theatre). Credits will also be awarded for working well with their team.

Titanic

Topic overview

Children will explore the story of the Titanic. Through this they will devise, create a monologue and think carefully about how class can be depicted through characterisation.

Assessment (20 credits)

• To write, devise and perform a monologue – this assessment looks to build confidence when performing in front of an audience. Pupils will be supported as they create their own performance. It will challenge their ability to create a believable character and to engage an audience.

YEAR 8

Superheroes

Topic overview

During this topic, pupils will create a superhero world and the characters affiliated with it. They will learn how to mark a moment and will use techniques such as cross-cutting, freeze-frame, slow motion and thought-tracking to bring their superhero's adventures to life.

Assessment (10 credits)

Pupils will create two scenes depicting the superhero's life before and after realising their powers.
 They will focus on how to show contrast within performance; this will include the use of levels, space and status through characterisation.



DRAMA

Mystery

Topic overview

In this unit, pupils will explore stories related to mysteries both in fiction and non-fiction. They will also consider different settings and how these can add to a mystery. Lastly, they will think about which dramatic techniques can be used to add tension to performance as a means of engaging their audience.

Assessment (10 credits)

 Pupils will devise a tension-filled performance which engages the audience by utilising techniques taught.

Stanislavski

Topic overview

Students will learn about Stanislavski and his methods. They will think carefully about how to make their performances and characterisation believable. This will include exploring Given Circumstances, Magic If and will touch upon Emotion Memory.

Assessment (10 credits)

Using Stanislavskian techniques, pupils will create a piece of drama entitled 'The Dinner Party.' They
will use the idea of the 4th wall to make their characters and scenes believable and engaging. The
audience will be encouraged, through the skills used in performance, to empathise with the characters
on stage.

Script Work - focus on Stanislavski

Topic overview

Based on their work in Year 7, pupils will create their own scripts which they will share with others in the class. They will then base their credit performance on these. As in Year 7, they will be encouraged to think beyond the words on the page to ensure they mark moments, through using techniques taught. In addition to this, they will consider whether the methods of Brecht or Stanislavski could create an impact and have a greater effect on their performance.

Assessment (10 credits)

- 5 credits will be awarded for their performance pupils will think carefully about key points in their scene to 'mark a moment'. This will solidify the techniques taught, as they use them for effect. They will also be awarded marks for exploring their ideas, through thinking about the methods of Brecht and Stanislavski.
- 5 credits will be awarded for their written scripts and their teamwork in creating these.



DRAMA

Shakespearian Theatre

Topic overview

In this unit, pupils will be introduced to the work of Shakespeare and the methods he used to create performances in the Globe Theatre. Pupils will consider how to create sound effects, set, and character in a traditional theatre. Alongside this, they will learn about his script work and messages given to his actors within the iambic pentameter.

Assessment (10 credits)

• Using Shakespeare's methods, pupils will create their own performance for an audience.

A Midsummer Night's Dream

Topic overview

Pupils will link with the English department to explore a Midsummer's Night's Dream. They will be encouraged to think about how to use skills taught to portray a fairy kingdom, complex characters, and multiple storylines. They will also work to include comical scenes through the performance of the Mechanicals Scenes.

Assessment (10 credits)

• Pupils will think about set, costume, and character to produce a performance of the Mechanicals' 'show within a show.' They will include the use of comedy to engage and entertain their audience.

ENGLISH

'In the beginning was the Word...'



ENGLISH

VISION:

The English Department exists to foster a love of reading and writing in the English as a home language. Reading and writing for meaning provides one with the avenue to understand the past, the present, and the future; it allows one to commune with the great minds of the past, as well as God Himself. As our students approach adulthood, their greatest currency will be the ability to understand and be understood in a sophisticated, beautiful fashion.

STUDENTS WILL LEARN TO:

- Read for meaning.
- Write with clarity, good grammar and spelling.
- Appreciate aesthetically significant literature.

2021/2022					
	Christmas	Easter	Trinity		
Year 7	'Taking Flight': Composition and War Poetry	War Horse novel study	Migration		
Year 8	The Outsiders novel study	Shakespeare's A Midsummer Night's Dream	Freedom Poetry and Prose		
Year 9	More than a Single Story – An Anthology	Shakespeare's Macbeth	Arthur Miller's A View from the Bridge		

Above is the outline for the English Curriculum



ENGLISH

YEAR 7

Year 7.1: 'A Christmas Carol'

Topic overview

This topic begins by establishing the ground level of each student's ability to spell and write in good grammar. The grammar and comprehension programme based on our textbook will provide 'boot camps' on spelling, punctuation, and grammar.

The unit then turns to the classic novel by Dickens. Themes of character, time, love and greed will be explored.

The film 'The Man Who Invented Christmas' will then be viewed and appreciated in terms of the historical context of Dickens and a consideration of the creative writing process.

Literary writing and creative writing inspired by the novel will be scaffolded and produced.

Assessment (20 credits)

- Comprehension, spelling and grammar assessment. (10 credits)
- Literary appreciation of the novel. (10 credits)

Year 7.2: War Poetry and Short Stories

Topic overview

The unit begins with an introduction to the great poets of human conflict. The students will be taught to enjoy, appreciate, interpret, and evaluate poetry.

From here, they will take this knowledge and produce their own poetry.

Links will be made with History to reflect on the nature of war.

The unit then moves on to the art of constructing a short story, with classic examples as models.

Grammar and spelling work will continue.

Assessment (20 credits)

- Poetic composition. (10 credits)
- Short story appreciation and analysis. (10 credits)



ENGLISH

Year 7.3: 'War Horse'

Topic overview

Following on from the previous unit, we will explore Michael Morpurgo's classic World War I novel, War Horse. Newspaper coverage of the war will be juxtaposed with a literary account. In reading the novel, we will investigate literary techniques involving plot, irony, foreshadowing, emotive writing, and characterization. Reading aloud will also be modeled and practiced. Grammar and spelling work will continue alongside

Assessment (20 credits)

- Literary analysis using PEE format characterisation. (10 credits)
- Literary analysis using PEE format emotive writing. (10 credits)

YEAR 8

Year 8.1: 'The Outsiders'

Topic overview

This topic begins by establishing the ground level of each student's ability to spell and write in good grammar. The grammar and comprehension programme based on Cambridge progression and textbook facilitates this alongside introductory composition assessed by the class teacher.

This novel explores themes such as friendship, loyalty, class and ambition. Students will be encouraged to infer meaning and to comment on characters and themes in an insightful way. In addition to this, they will think about social, historical and cultural context and the effect of this on the plot. The novel will be used as a springboard for writing for different purposes, forms and audiences.

Assessment (20 credits)

- Comprehension, spelling and grammar assessment. (10 credits)
- Literary essay Students will prove their knowledge of the text by writing a response to an exam-style question. (10 credits)



ENGLISH

Year 8.2: Freedom Poetry and Prose

Topic overview

Students will use this theme to explore poetry and prose extracts. They will be encouraged to think about this theme in different contexts, for example, physical freedom and freedom of choice. Students will work from an anthology, thinking carefully about the writer's intention. They will be encouraged to explore ideas through outside classroom lessons and within their own writing. In addition to this, pupils will prepare for Year 9 by responding to essay-based questions, through deeper analysis of techniques used for effect. Grammar and spelling work will continue based on the Cambridge programme.

Assessment (20 credits)

- Poetry comparison task following on from their poetry unit in year 7, students will embed their skills through the comparison of two set poems. This also introduces them to GCSE style exam requirements. (10 credits)
- Freedom composition pupils will choose a form of freedom and create a piece of literature on their chosen topic area to be read to the class. This will, in turn, build confidence when speaking in front of others. (10 credits)

HUMANITIES

'The more you know about the past, the better prepared you are for the future'

THEODORE ROOSEVELT



HUMANITIES

YEAR 7 & 8

	History 7	CR	History 8	CR
Topic	Industrial Rev		WW2	
Christmas 1			Extended Writing	5
Christmas 2	Source Analysis	8	Debate	5
Topic	Slave trade		South Africa	
Easter 1	Extended Writing	5	Source Analysis	5
Easter 2	Debate	5		
Topic	WW1		Conflict in the Congo	
Trinity 1	Source Analysis	5	Source Analysis	8
Trinity 2				

	Geography 7	CR	Geography 8	CR	RS 7	CR	RS 8	CR
Topic	1. Coasts 2. Population		 Plate Tectonics Urban Growth -LEDC 		The Big Story of The Bible		Christian Theology & Apologetics	
Christmas 1	1. <u>Landform</u> / Data	4	1. Resource Interpretation	5				
Christmas 2	2. Resource Interpretation	8					Extended Writing	5
Topic	Economic Activity		Weather & Climate		Church History		Islam	
Easter 1	Resource Interpretation	5	Resource Interpretation	5	Debate	5	Debate	5
Easter 2			Landform / <u>Data</u>	5				
Topic	Rivers		International Dev		Buddhism		Philosophy & Ethics	
Trinity 1	Landform / <u>Data</u>	5			Extended Writing	5		
Trinity 2	Resource Interpretation	5	Landform / <u>Data</u>	8			Class test	4



HUMANITIES

YEAR 9

	History 9	Geography 9	RS 9				
Topic							
Christmas 1	Health and Medicine through History – Prehistoric/Ancient Egypt	Rivers	Philosophy				
Christmas 2	Health and Medicine through History – Ancient Greece/Ancient Rome	Rivers	Holy Books				
Topic							
Easter 1	US Civil Rights movements Black civil rights protests	Migration Globalisation Tourism	Sanctity of Life				
Easter 2	US Civil Rights movements – Youth/Women's rights protests	Migration Globalisation Tourism	Matters of Life and Death				
Topic							
Trinity 1	USA in the 1920s Immigration, Red Scare, and the Depression	Coastal Environments	Worldwide Religions				
Trinity 2	Race relations in the USA in the 1920s. Research Project - Inspirational Leaders	Coastal Environments	Ethics				

ASSESSMENT TYPES

History	Geography	RS
Source Analysis Debate Extended Writing	Resource Interpretation Landform Development or Data collection (field work) Extended Writing	Extended Writing Debate Class Test

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HUMANITIES

Explanation relating to assessment types

Source analysis – this involves examining material which may be in various forms, such as photographs, newspaper articles, textbooks, video, diary accounts or letters, in order to interpret information about an event. Sources may be primary or secondary.

Debate – students are allocated a role as antagonists or protagonists, and they participate in a debate about a question relevant to the topic.

Extended Writing – students are required to complete research in order to gather facts which can be used to support writing about a focus question. Arguments both for and against the question are expected in order to arrive at a reasoned conclusion.

Resource Interpretation – this takes the form of analysing data from a range of possible sources, such as maps, photos, graphs, text and surveys, in order to make judgements.

Landform Development or Data Collection – depending on the topic, students will either complete fieldwork which involves using instruments to collect data, which may then be analysed, or they will document the process involved in the formation of a particular landform.

Class Test – this will involve completing short answer questions testing understanding of the topic content.

HISTORY



HUMANITIES

VISION:

Pupils will grow to be confident, self-disciplined individuals who understand how each person contributes to the development of society.

PUPILS WILL:

- Demonstrate an understanding of chronology
- Explain causes and consequences of historical events
- Explain the differences between ways of life at different times
- Demonstrate historical interpretation of evidence and sources
- Show historical enquiry through studying a range of sources
- Organise, analyse and communicate using the appropriate historical vocabulary

YEAR 7

British Empire and the Industrial Revolution

Topic overview

Pupils will demonstrate their knowledge and understanding of the factors which led to the Industrial Revolution. They will examine the impact it had, then and now, on the world economy, politics, and society. Analysing the causes and effects of the Industrial Revolution in Britain, pupils will communicate a deeper understanding of the more complex issues and implications of rapid industrial development.

Atlantic Slave Trade

Topic overview

During this unit of work pupils, will examine the role of slavery in building the British Empire. They will look at the social, political and economic impact this had on society then and now. Pupils will analyse why slavery came into existence, leading to a focus on how views changed over time resulting in the abolition movement. Pupils will explore different perspectives through research in and outside the classroom to prepare for a debate about the morality of slavery.



HUMANITIES

World War One

Topic overview

During this topic pupils will explore the main causes and events of World War One. They will assess the impact of the war at the time on society, both in Britain and Europe, increasing their depth of factual knowledge and understanding of aspects British history and the wider world. They will extend and deepen their chronological knowledge of history through the exploration of the short- and long-term consequences of the war and become confident in analysing and evaluating source material in the light of subject specific knowledge.

YEAR 8

World War Two

Topic overview

Pupils will study: the causes of World War Two; Appeasement; the rise of Hitler; German and Allied military advances; the Battle of Britain and the effects of war on everyday life in Britain, Europe and beyond. They will use core historical skills of research, critical analysis and evaluation to draw conclusions about the motivations behind the actions of the main leaders of the countries involved. They will consider the impact of this war at the time and how it affected future relations between the East and West.

South Africa and Apartheid

Topic overview

Pupils study the social, economic, and political foundations of Apartheid in South Africa. They will consider the viewpoints of all races involved and evaluate government policies and the impact of these. Pupils will follow the development of South Africa as one nation and study the main protagonists in the establishment of apartheid and those in the struggle against it. Pupils will focus on key concepts in the development of historical perspective, building on the core skills of investigation through enquiry.

Conflict in the Congo

Topic overview

This topic will focus on the examining the rule and control of the Congo by Leopold II and President Mobutu. The impact of each era will be considered in relation to recent conflict and war in the Congo region. Students will also look at the effect of the Rwandan genocide in causing instability in the DRC. Analytical skills will be developed through an examination of sources representing the hardships endured, during the ownership of the Congo by Leopold II.

GEOGRAPHY



HUMANITIES

VISION:

Our curriculum is created to stimulate curiosity about the world and introduce pupils to places, people, and environments. We want them to grow in their understanding of physical and human landscapes and enhance their awareness of global interdependence and sustainable development.

PUPILS WILL:

- Ask geographical questions- skills of enquiry
- Analyse evidence and make decisions
- Evaluate information, opinions, and ideas
- Investigate many sources such as maps, atlases, photographs (both physical and digital)
- Be involved in practical and group work, cooperation, and leadership
- Undertake self-assessment and reflection.



HUMANITIES

YEAR 7

Coastal Landscapes

Topic overview

Pupils begin the course by investigating coastal landscapes. They study the processes of erosion, transportation and deposition found in these areas and illustrate the coastal landforms created by them. Using various case studies from around the world, pupils will analyse the efficacy of coastal defences and consider modern efforts at coastal management, questioning the effects of this on the people living in the area.

Population and Migration

Topic overview

Pupils will examine the worldwide distribution of population and consider the factors which lead to varying levels of density. They will develop understanding of the ways in which population can change over time. Looking at case studies will help to identify some examples of economic, social, political & environmental push and pull factors for migration. These will be used to reflect on why some settlements grow and others do not.

Economic Activity

Topic overview

Pupils will develop an understanding of industry classification, including Primary, Secondary, Tertiary and Quaternary industry. They will look at employment structures and the distribution of jobs between sectors, considering also where jobs are located. Factors affecting the location of industry will be introduced and pupils will use this information to reflect critically on data used to locate factories. They will learn about transnational and multinational companies in a world of globalization, as well as looking at specific case studies relating to farming in the UK and Tanzania.

Basins and River Processes

Topic overview

Pupils will learn about how the water cycle functions and identify the different components in the cycle and the relationship to rivers. Building on the concepts covered in the unit on Coasts they will further develop understanding of the processes of erosion, transportation and deposition which are involved in rivers shaping the land. They will identify different river features and explain how they are formed. Through case studies, the impact and causes of flooding will be examined in various parts of the world.



HUMANITIES

YEAR 8

Plate Tectonics

Topic overview

In this unit, pupils will investigate the structure of the earth. They will learn about tectonic plates, their movements, and boundaries. Using maps and atlases, plates will be located and volcanoes plotted, whilst exploring the link between the two features. Pupils will learn about the formation of volcanoes and the diverse types which exist. Through an eruption simulation, they will look at the impact of volcanoes on human activity. Assessment will focus on the use of map skills in relation to understanding volcanic activity.

Urban Growth

Topic overview

Urban growth will be studied in the context of LEDC countries and comparisons will be made with developed countries. Pupils will explore a range of factors which contribute to the movement of people from rural to urban areas. Using case studies, the problems caused by urban growth will be examined. Pupils will reflect on the effectiveness of some of the solutions employed by agencies in Kenya.

Weather and Climate

Topic overview

Year 8 pupils will analyse Weather and Climate. They will research current methods of measuring weather at both a local and international scale. They will investigate microclimates around school and consider the factors which create these. Using weather instruments, they will collect data from around school and use this information to make judgements about the impact of microclimates on behaviour. The effect of latitude, altitude, proximity to the sea and prevailing wind will be considered in relation to climate.

International Development

Topic overview

Pupils will be introduced to development indicators and the terminology used to measure development. Through a focus on social indicators, pupils will look at differences in Healthcare, Education, Transport and Employment. They will learn about trade and interdependence, exports and imports, trade deficit, trade surplus and single-product economies. The impact of international aid will be considered, with pupils looking at the effects of fair trade and gender equality.

RELIGIOUS STUDIES



HUMANITIES

VISION:

Pupils will grow to be confident, self-disciplined individuals who understand the role that religions play across the world in shaping individuals, cultures, and nations.

PUPILS WILL:

- Demonstrate an understanding of key religious concepts
- Explain similarities and differences between more than one religious tradition
- Demonstrate understanding of how religious beliefs shape religious practices
- Organise, analyse and communicate using the appropriate religious vocabulary



HUMANITIES

YEAR 7

The Big Story of the Bible

Topic overview

In this unit, we will focus on some of the significant events and teachings from both the Old and New Testament. Pupils will look at the Creation and the Fall, leading to a focus on truth, a set of rules for living and the problem of sin. They will explore the concepts of forgiveness, sacrifice, and atonement. The coming of the Messiah and new hope will be studied alongside the role of justice and exile.

Christianity: A History of the Church

Topic overview

During this unit of work students will learn about the story of Christianity, from its origins in ancient Judaism, to the development of the early followers of Jesus, all the way through to the present-day Christian Church. They will analyse the extent to which Christianity has been shaped by Jewish beliefs, and how its inclusivity of non-Jewish followers helped to make it the largest religion in the world today. Through individual study and group work, students will hone their skills of writing, reading, and presenting academically rigorous content.

Buddhism: The Middle Way

Topic overview

During this unit of work, students will learn about the origin and development of Buddhism, often known as the 'Middle Way.' They will learn about the religious context into which Prince Siddhartha Gautama (later, the Buddha) was born. They will analyse the extent to which his religious background influenced his ideas and subsequent philosophy. They will consider why Buddhism ought to be categorized as a religion or a philosophy. Through individual study and group work, students will hone their skills of writing, reading, and presenting academically rigorous content.



HUMANITIES

YEAR 8

Christianity: Christian Theology

Topic overview

During this unit of work, students will learn about the field of Christian Theology. They will read about the core doctrines within Christian theology and how they have been formed over time. They will also consider where conflict has historically arisen within the field of Christian theology, particularly with regards to infant baptism and the concept of predestination. Students will evaluate the relative strengths and weaknesses of arguments from both sides of those theological debates. Through individual study and group work, students will hone their skills of writing, reading, and presenting academically rigorous content.

Islam: The Way of Submission

Topic overview

During this unit of work, students will learn about the origin, development and present day standing of the religion of Islam. They will first consider the religious, social, and cultural context into which Muhammad was born. They will learn about the core teachings of Muhammad and consider the extent to which it can be considered a religion in the tradition of Judaism and Christianity. They will also engage in some comparative religious study, by analyzing the differences between Jesus and Muhammad, and their respective teachings. Through individual study and group work, students will hone their skills of writing, reading, and presenting academically rigorous content.

Philosophy and Ethics

Topic overview

In this unit, students will consider some big questions, such as the nature of God and suffering. They will think critically about the moral dilemmas and perspectives associated with contemporary issues such as euthanasia and capital punishment. A specific study will help them to understand what Plato's Allegory of the Cave is, and the deeper meaning behind this idea. Through individual study and group work, students will hone their skills of writing, reading, and presenting academically rigorous content.

MATHEMATICS

'Mathematics as an expression of the human mind reflects the active will, the contemplative reason and the desire for aesthetic perfection. Its basic elements are logic and intuition, analysis and construction, generality and individuality.'

RICHARD COURANT



MATHEMATICS

VISION:

Our approach to teaching and learning enables pupils to develop a deep understanding of Mathematics. We aim for mastery of mathematical concepts so that pupils can use their knowledge and procedural fluency to solve unfamiliar problems and undertake complex reasoning, using appropriate mathematical vocabulary.

The six core elements of the mastery model are:

- 1. Diagnostic pre-assessment with pre-teaching
- 2. High quality group-based initial instruction
- 3. Progress monitoring through regular formative assessment
- 4. High quality corrective instruction
- 5. Second parallel formative assessment
- 6. Enrichment and extension activities

PUPILS WILL:

- Build on their existing mathematical knowledge
- Use concrete, pictorial, and abstract representations to develop conceptual understanding
- Select and use appropriate calculation strategies to solve increasingly complex problems
- Use algebra to generalise the structure of arithmetic, including to formulate mathematical relationships
- Move freely between different numerical, algebraic, graphical, and diagrammatic representations
- Develop algebraic and graphical fluency
- Use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes, probability, and statistics.
- Extend their understanding of the number system; make connections between number relationships, and their algebraic and graphical representations
- Make and test conjectures about patterns and relationships; look for proofs or counterexamples
- Develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems
- Select appropriate concepts, methods, and techniques to apply to unfamiliar and non-routine problems

Pupils throughout the Mathematics course are given the opportunities to explore investigative Mathematics and to hone their problem solving / critical thinking skills.

Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

MATHEMATICS

YEAR 7

Algebraic Thinking

Topic overview

- Generate terms of a sequence from a term-to-term rule
- Recognise arithmetic sequences
- Recognise geometric sequences and appreciate other sequences arise
- Use algebra to generalise the structure of arithmetic
- · Relationships between operations
- Substitution
- · Rearranging and simplifying expressions
- Use and interpret algebraic notation
- · Generate terms of a sequence
- Produce graphs of linear functions
- Solving linear equations in one variable

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

Place Value and Proportion

Topic overview

- Consolidate understanding of the number system, including decimals
- Use place value for decimals, measures and integers of any size
- Order positive and negative integers, decimals and fractions
- · Work interchangeably with fractions and decimals
- Rounding numbers
- Median and Range
- Interpret and compare numbers in Standard Form
- Equivalence of percentages, fractions and decimals
- Pie Charts

Assessment (10 credits)

- · 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

MATHEMATICS

Applications of Number

Topic overview

- Formal written methods of addition and subtraction with positive integers and decimals
- Relationships between operations, including reverse operations
- Derive and apply formulae to calculate perimeter
- · Construct and interpret tables, charts and diagrams for ungrouped numerical data
- Solving problems with multiplication and division using formal written methods
- Select and use appropriate calculation strategies for more complex problems
- · Concept and vocabulary of divisors, multiples, HCF, LCM
- Change freely between standard units for time, length, area, capacity, mass
- Derive and apply formulae to solve problems involving perimeter and area of triangles, parallelograms and trapezia
- Substitute numerical values into formulae and expressions
- Algebraic methods to solve linear equations
- Using the Mean
- Four operations with integers, decimals, improper and proper fractions
- Interpret fractions and percentages as operators

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

MATHEMATICS

Directed Number and Fractional Thinking

Topic overview

- Calculation strategies to solve increasingly complex problems
- Four operations with positive and negative integers
- Square roots
- Substitution in formulae and expressions
- Concepts and vocabulary of expressions, equations, inequalities, terms and factors
- Simplify and manipulate algebraic expressions
- Conventional notation for priority of operations
- Two-step linear equations
- Numerical, graphical and diagrammatic representations of equivalent fractions
- Four operations with written methods applied to integers, decimals, proper and improper fractions, mixed numbers, all both positive and negative
- Terminating decimals and their corresponding fractions

Assessment (10 credits)

- Quality of class work, notes taken and worked examples
- Quality of Prep
- · End of section assessment based on CE style questions
- Investigative work

Lines and Angles

Topic overview

- Use language and properties to analyse -2D shapes
- Deductive reasoning using geometrical constructions
- Draw and measure line segments and angles
- Interpret scale drawings
- Describe, sketch and draw points, lines, parallel lines, perpendicular lines, right angles and regular polygons
- Standard conventions for labelling sides and angles
- Construct and interpret pie charts
- Identify and construct triangles
- Derive and illustrate properties of plane figures
- Apply properties of angles at a point, on a straight line and vertically opposite
- Apply angle facts, triangle similarity and properties of quadrilaterals to derive results about angles and sides plus obtain simple proofs
- The relationship between parallel lines and alternate and corresponding angles
- Sum of angels in any polygon
- Derive properties of regular polygons

MATHEMATICS

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- 2 credits for MyMaths online tasks
- 2 credits for investigation work

Reasoning with Number

Topic overview

- Extend understanding of the number system and place value including decimals, fractions, powers and roots.
- Reason deductively in number and algebra
- Generate and describe sequences
- · Substitution into expressions
- Record, describe and analyse the frequency of outcomes of simple probability experiments
- Tables, grids and Venn diagrams
- · Generate theoretical sample spaces for single and combined events. Calculate probabilities
- The infinite nature of the sets of integers, real and rational numbers
- Concepts and vocabulary of Prime numbers, multiples, factors, HCF, LCM, prime factorisation including product notation and the unique factorisation property
- Powers and roots
- Make and test conjectures about patterns and relationships

Assessment (10 credits)

- · 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

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Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

MATHEMATICS

YEAR 8

Proportional Reasoning

Topic overview

- Make connections between number relationships and their algebraic graphical representations
- · Scale factors, scale diagrams and maps
- Multiplicative relationships expressed as ratios or fractions
- Express the division of a quantity into parts as a ratio
- Solve problems involving direct and inverse proportion
- Formulating proportional relationships algebraically
- Problems with graphical and algebraic representations of direct and inverse proportion
- Consolidate and extend Y7 knowledge of number system and place value
- Select and use appropriate calculation strategies for complex problems
- Four operations and formal methods applied to integers, fractions and decimals both positive and negative

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

Representations

Topic overview

- Develop algebraic and graphical fluency, including linear and simple quadratic functions
- Make connections between number relationships and their algebraic and graphical representations
- Substitution in formulae and expressions
- Sketch and produce graphs of linear functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane
- Construct and interpret frequency tables, bar charts, pie charts, pictograms
- Describe relationships between two variables using scatter diagrams
- Use precise language and properties to analyse probability and statistics
- Record, describe and analyse simple probability experiments
- Generate theoretical sample spaces for single and combined events. Calculate probabilities

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- 2 credits for MyMaths online tasks
- 2 credits for investigation work

MATHEMATICS

Algebraic Techniques

Topic overview

- Identify variables and express relationships between variables algebraically
- Model situations mathematically and express the results using a range of formal representations
- Substitute numerical values into formulae and expressions, including scientific formulae
- Equations, inequalities, terms and factors
- Simplify and manipulate algebraic expressions to maintain equivalence by collecting like terms, multiplying a single term over a bracket, taking out common factors, expanding products of two or more binomials
- Solving equations
- Generate terms of a sequence from either a term-to-term or a position-to-term rule
- Recognise arithmetic sequences and find the nth term
- Recognise geometric sequences
- Use and interpret algebraic notation, exploring the ideas behind laws of indices
- Substitute values in expressions, rearrange and simplify expressions, solve equations

Assessment (10 credits)

- · 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- · 2 credits for MyMaths online tasks
- 2 credits for investigation work

Developing Number

Topic overview

- Interpret and solve problems including financial mathematics
- · Terminating decimals and their corresponding fractions
- Fractions and percentages as operators
- Standard Index Form: use integer powers and associated real roots
- Basic introduction to negative and fractional indices
- Interpret and compare numbers in standard form
- Use standard units of mass, length, time, money and other measures including decimal quantities
- Decimal places and significant figures to round numbers to an appropriate degree of accuracy
- Estimate answers and calculate possible resulting errors, expressed using inequality notation
- Use a calculator to find accurate answers and interpret appropriately

Assessment (10 credits)

Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

MATHEMATICS

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- 2 credits for MyMaths online tasks
- 2 credits for investigation work

Developing Geometry

Topic overview

- Apply the properties of angles at a point, angles at a point on straight line and vertically opposite angles
- The relationship between parallel lines and alternate and corresponding angles
- Use the sum of angles in a triangle to deduce the angle sum in any polygon and to derive properties of regular polygons
- Standard conventions for labelling sides and angles of a triangle
- Derive and illustrate properties of plane figures
- Derive and use the standard ruler and compass constructions
- Solve problems involving perimeter and area of triangles, parallelograms and trapezia
- Perimeter and area of circles and composite shapes
- Describe, sketch and draw points, lines, parallel lines, perpendicular lines, right angles, regular polygons and other polygons that are reflectively and rotationally symmetric
- · Describe the results of reflections applied to given figures

Assessment (10 credits)

- 3 credits for quality of class work and prep
- 3 credits for the end of unit assessment
- 2 credits for MyMaths online tasks
- 2 credits for investigation work

Reasoning with Data

Topic overview

- Describe, interpret and compare observed distributions of a single variable through appropriate graphical representation involving discrete, continuous and grouped data and appropriate measures of central tendency (mean, median, mode) and spread (range, consideration of outliers)
- Construct and interpret appropriate tables, charts and diagrams

NOTE:

Much of the content in this section will be explored through project work, for students to experience the pitfalls and difficulties of data collection and interpretation.



Assessment (10 credits)

- 3 credits for quality of class work and prep 3 credits for the end of unit assessment
- 2 credits for MyMaths online tasks
- 2 credits for investigation work

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Modern Foreign Languages:

FRENCH

"A language is not just words.
It's a culture, a tradition, a
unification of a community, a
whole history that creates what a
community is. It's all embodied in
a language."

NOAM CHOMSKY



MODERN FOREIGN LANGUAGES

VISION:

Students of French at St Andrew's, Turi, will love the challenge and rewards of learning this beautiful language, not only as a European tongue, but also as a language growing in dominance right across Africa. Our students will appreciate that they are truly global citizens, and that learning French will open many doors for them in the future. They will have the confidence to communicate in French and will feel proud of having done so.

PUPILS WILL:

- Understand and respond to spoken and written language from a variety of authentic sources
- Speak with increasing confidence, fluency, and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- Discover and develop an appreciation of a range of writing
- Commit themselves to always giving of their absolute best and thereby maximising their individual potential within the framework of a process of continuous assessment.
- Take part in cultural language events with enthusiasm and a growing confidence public speaking, Café Phénix, Global Languages Day.... and so much more.

	Christmas 1 & 2	Easter 1 & 2	Trinity 1 & 2
Year 7	Vive les vacances! Holidays	J'adore les fêtes Festivals and Celebrations	À loisir Leisure Time
Year 8	Le monde est petit! Where I live	Le sport en direct Sport and Physical Activity	Mon monde à moi The World around me
Year 9	Projets d'avenir Money and Work	Ma vie en musique Music	Le Meilleur des monde Food, the natural World, and the Environment

Above is the outline for the French Curriculum



MODERN FOREIGN LANGUAGES

YEAR 7

Vive les Vacances!

Topic overview

Students will develop their knowledge of French through the broad topic of 'Holidays'. They will cover school holidays, past holidays, future holidays. They will focus on the perfect tense, in all its forms, the use of negatives, asking and answering questions and how to combine present and perfect tenses in both speech and writing

Assessment (20 credits)

- General Assessment weeks 3 .14-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 4 Listening task 4 credits
- Week 11 Reading task 4 credits

J'adore les fêtes!

Topic overview

Students will develop their knowledge of French through the broad topic of 'Festivals and Celebrations'. They will cover their likes and dislikes, buying food at a market, transactional language, talking about a future school trip and discussing a French-speaking Easter celebration. They will focus on the present tense of regular –IR and –RE verbs, the near future tense and combining the near future and perfect tenses in both speech and writing.

Assessment (20 credits)

- General Assessment weeks 3 .12-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 3 Speaking task 4 credits
- Week 9 Writing task 4 credits

MODERN FOREIGN LANGUAGES

À loisir

Topic overview

Students will develop their knowledge of French through the broad topic of 'Leisure.' They will cover celebrities and TV programs, digital technology, arranging to go to the cinema and buying tickets. They will learn how to talk about their leisure activities, use negation, spot synonyms, learn how to use a bilingual dictionary effectively and will practise how to combine perfect, present and near future tenses in speech and writing. They will focus on using singular and plural adjective agreement, how to form a range of questions and how to look up perfect tense verbs when reading.

Assessment (20 credits)

- General Assessment weeks 3 .11-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 3 Listening task 4 credits
- Week 8 Speaking task 4 credits

YEAR 8

Le monde est petit!

Topic overview

Students will develop their knowledge of French through the broad topic of 'Home and Living!' They will begin by covering descriptions of their home, the weather, what one can do where they live, daily routine and moving house. They will focus on the verb 'pouvoir' with the infinitive form, listening for different persons of the verb, strategies for decoding French words in reading tasks, reflexive verbs, irregular adjectives, and extended writing using all 3 tenses.

Assessment (20 credits)

- General Assessment weeks 3 .14-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 4 Reading task 4 credits
- Week 11 Writing task 4 credits



MODERN FOREIGN LANGUAGES

Le sport en direct

Topic overview

Students will develop their knowledge of French through the broad topic of 'Sport and Physical Activity.' They will talk about many different sports, their sporting participation, and their opinions, asking the way to the stadium, discussing injuries and illness, and how to converse effectively with the doctor. They will interview a sportsperson. They will focus on the comparative, the imperative, the verbal phrase 'il faut,' and how to ask and answer questions using the 3 tenses.

Assessment (20 credits)

- General Assessment weeks 3 .12-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 2 End of Module Test 6 credits
- Week 9 Speaking task 2 credits

Mon monde à moi

Topic overview

Students will develop their knowledge of French through the broad topic of 'My World'. They will cover likes and dislikes, talking about after-school clubs and activities, describing themselves and their friends, birthday celebrations and describing what you did and what you wore. They will focus on verbs in the present tense, in particular 'avoir' and 'être,' the perfect tense and combining the perfect and preset tense in spoken and written form.

Assessment (20 credits)

- General Assessment weeks 3 .11-1 credits each for overall Listening, Reading, Writing and Speaking (=12 credits in total)
- Week 2 End of Module Test 6 credits
- Week 9 Listening task 2 credits

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Modern Foreign Languages:

KISWAHILI

'Natuone ndipo twambe, kusikia si kuona' (Let us see then tell; hearing is not seeing.)



MODERN FOREIGN LANGUAGES

VISION:

Language is a means of communication for every society. In Kenya, Kiswahili is the most dominant language apart from being the national language. Therefore, an opportunity to learn Kiswahili will equip learners with a lifelong communicative skill whether they live and work in Kenya or indeed beyond her borders.

LEARNERS WILL BE ABLE TO:

- Listen and respond competently in Kiswahili
- Speak Kiswahili language fluently
- Read and understand material written in the Kiswahili language
- Express themselves proficiently in written Kiswahili
- Compose artistic work of literature commensurate with their academic level
- Enhance best reading practices
- Love and continue expressing themselves in various literary forms of Kiswahili language after primary school
- Be proud of and develop Kiswahili language as a medium of communication
- Honour and promote the use of grammatically correct Kiswahili in life
- Value, enjoy and be proud of Kiswahili as a national and international language
- Identify and participate in finding solutions to emerging issues pertaining to and affecting the community such as health and HIV/AIDS, equity, gender, the environment, justice, and child labour.

2021/2022									
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2			
Year 7	Sounds Vowels and Consonants	Proverbs Numbers Prefixes and Suffix	At School Tenses	How fit Are You?	Sports and Professions	Animals			
Year 8	Holidays Weather Pronouns	Housing and Accommodation Transport	Directions Nouns and Noun Classes	Letter writing	States of Being Conjunctions	Comparatives Passive Verbs			
Year 9	Home and Abroad	Education and Employment	Personal Life and Relationships	The World Around Us	Social Activities, Fitness and Health	Examination Skills			

Above is the outline for the Kiswahili Curriculum

MODERN FOREIGN LANGUAGES

YEAR 7

Listening & Speaking

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- greet and respond to greetings
- understand and appropriately use various polite/courteous expressions
- At school: conversations
- Welcome home manners and etiquette

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- · Class participation

Reading

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e., listening, speaking, reading, and writing.

Learners will be able to:

- Reading comprehension health and hygiene, welcome home, sleep and rest, sentences with complex sounds
- Comprehension passages and questions

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

Student Guide to the Key Stage 3 Curriculum

Years 7 and 8

MODERN FOREIGN LANGUAGES

Writing

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e., listening, speaking, reading, and writing.

Learners will be able to:

- Composition writing me and my family
- Dictation

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

Grammar

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Use relative marker –PO
- Use 'to have' and 'to be'
- Use various tenses correctly
- Use possessive pronouns
- Use reported speech
- Use quantifiers
- Understand noun class PA-PA
- Use conjunctions
- Use modifiers INGI, INGINE

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

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MODERN FOREIGN LANGUAGES

Vocabulary

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Use proverbs
- Use numbers percentages, decimals
- · Name school subjects, sports, professions
- Name various body parts
- Name various times of the day
- Use sayings
- Name various colours, foods and drinks
- Sing/recite the Kenyan national anthem

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

Pupils will build on their understanding from Year 7 as they go into Year 8 and will be given opportunities to explore a range of topics that look at the social and cultural context of the language.

YEAR 8

Listening & Speaking

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Use interrogative words
- Listening comprehension environment; holiday/vacation

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation



MODERN FOREIGN LANGUAGES

Reading

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Reading comprehension environment, on holiday/vacations plans, weather (forecast), activities
- Comprehension passages and questions
- Simple poems in Kiswahili (Ushairi)
- Short stories

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

Writing

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Sentence formation
- Question formation
- Dictation
- Letter writing (official and friendly)
- Composition writing environment, vacation

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

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MODERN FOREIGN LANGUAGES

Grammar

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Use subject and object prefixes
- Use conditional markers
- Use locatives correctly
- Understand noun class MU MU
- Use demonstratives
- Use prepositions
- Use reversives
- Use negations
- Use subjectives
- Use comparatives
- Understand and use passive verbs
- Understand and use relative marker –AMBA

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

Vocabulary

Topic overview

Since what is required in the international schools is to ensure that the learners can communicate in Kiswahili this unit is core in reaching the four language skills i.e. listening, speaking, reading, and writing.

Learners will be able to:

- Use holiday/vacation vocabulary
- Name and use vocabulary concerning the environment
- Name various types of housing and accommodation
- Name various forms of transport
- Name various compass points
- Name various general sports and sports professions
- Use terms of endearment

Assessment (10 credits)

- Evaluating knowledge (classwork, tests)
- Class participation

MUSIC

'There's nothing remarkable about it. All one has to do is hit the right keys at the right time and the instrument plays.'

JOHANN SEBASTIAN BACH



MUSIC

VISION:

Pupils will grow to be confident, self-disciplined individuals that understand how each person contributes to the development of society and their personal impact on it.

PUPILS WILL:

- Learn to appreciate Music from diverse cultures and from contrasting times in History.
- Demonstrate an understanding of terms and signs specific to music theory
- Compose simple melodies with understanding of the musical elements, using basic staff notation
- Improvise based on different scale structures.
- Performing with a heightened sense of musicianship, making practical use of The Elements of Music

	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2
Year 7	Music Literacy: Staff Notation and Time Signatures 1	Building Bricks	I've got Rhythm	Form and Structure	Keyboard Skills	Sonority Clty
Year 8	Music Literacy: Staff Notation and Time Signatures 2	Offbeat	Variations	All That Jazz 1	All About The Bass	Saharan Sounds
Year 9	Music Literacy	All That Jazz 2	Musical Periods	Vocal Music	World Music (East Africa)	Playing and Performance Composition and Arrangement

Above is the outline for the Music Curriculum



MUSIC

YEAR 7

Music Literacy: Staff Notation and Time Signatures 1

Topic overview

Pupils will review Note values and Tied notes. Single dotted Notes. Simple Time Signatures, bar-lines and the grouping of the notes in simple 3,2 and 4 time.

They will revisit the stave, (Treble (G) and bass (F) clef staff notation. Names of notes on the stave, including middle C in both clefs. Accidentals (Sharp, flat and natural signs) and their cancellation.

Assessment (10 credits)

- Written assessment (Grade 2 / 1 Music Theory Exam-Style Questions) 7 credits
- Class Participation 3 credits

Building Bricks

Topic overview

Pupils learn about Pitch, Dynamics, Duration, Tempo, Texture, Timbre or Sonority, Articulation and Silence and are introduced to Graphic Notation and Graphic Scores. It is hoped that this unit will develop pupil's understanding of the Elements of Music and provide pupils with a foundation of musical vocabulary for use at Key Stage 3 which can be developed for GCSE Music.

After a common two introductory lessons where pupils are introduced to the Elements of Music and Graphic Scores, there is an opportunity for composing and evaluating baseline assessment in response to either Britten's "Four Sea Interludes" from 'Peter Grimes' or Mussorgsky's "Pictures at an Exhibition." The final two lessons are given over to an opportunity for performing baseline assessment using Beethoven's "Ode to Joy" from his 'Symphony No.9' while allowing options to administer either of the Musical Contexts Year 7 Baseline Assessment Listening Tests over one or both lessons.

Assessment (10 credits)

- End of topic baseline assessment 7 credits
- Class Participation 3 credits



MUSIC

I've Got Rhythm

Topic overview

A sense of pulse is fundamental, a prerequisite of almost all musical activity. As such, it needs to be understood from the outset and then developed and strongly reinforced throughout Key Stage 3. This unit introduces or reintroduces the concept of pulse through a variety of experiences which include pulse games and other rhythmic activities, the creation of patterns, including ostinati, and repetitive rhythmic textures – cyclic and polyrhythms, listening activities and the composition and performance of class and group rhythm pieces.

Through composing and performing, pupils are introduced to rhythm grids and rhythm grid notation which can be extended to include single line rhythm notation using the note values of a semibreve, minim, crotchet, quaver and pair of quavers.

Accents are introduced as an articulation marking providing variety to a regular pulse along with how pulse patterns can be grouped into two, three and four-beat patterns forming a basis of time signatures, bars and bar lines and conducting patterns in 4/3 ,4/2 and 4/4 times. The characteristic 4/2 pulse pattern can be explored in the genre of the March and the 4/3 pulse pattern in the Waltz.

The unit has an optional pathway into using junk percussion (Stomp! and Weapons of Sound) to explore further rhythm work.

Assessment (10 credits)

- End of topic quiz 7 credits
- Class Participation 3 credits



MUSIC

Form and Structure

Topic overview

This unit begins by establishing what is "Form and Structure" in music and why Form and Structure is important. Through performing, composing, improvising, and listening and appraising, pupils then explore four different musical structures: Question and Answer Phrases, Binary Form, Ternary Form and Rondo Form.

Pupils begin with an exploration into Question and Answer phrases as one of the simplest types of musical structures, relating this to Call and Response singing and how musical Question and Answer phrases balance with each other to form a complete structure. Binary and Ternary Forms are then explored with an emphasis on how musical contrast is achieved between "A" and "B" sections revising the Elements of Music. Rondo Form is explored as a type of recurring musical structure with pupils adding pentatonic improvisations as "Episodes" between a whole-class "A" section.

There is an option to end the unit with pupils creating a "free composition" in a style/genre of their choice to clearly illustrate and demonstrate either Binary, Ternary or Rondo Form to a Year 6 class audience.

Throughout the unit, pupils listen to examples of music based on Binary, Ternary and Rondo Forms and emphasis is placed on revising treble clef staff notation.

Assessment (10 credits)

- Free Composition Demonstrating either Binary, Ternary or Rondo Form 7 credits
- · Class Participation 3 credits

Keyboard Skills

Topic overview



MUSIC

This unit is all about effective keyboard performance techniques including basic treble clef staff notation. The unit begins with a general introduction and "Keyboard Treasure Hunt" around a standard classroom keyboard which is a good chance to navigate basic keyboard functions, establish good playing routines and rectify and troubleshoot any potential technical problems.

Pupils learn about other keyboard instruments such as the Harpsichord, Celesta, Accordion, Organ, Clavichord, Piano (upright and grand) and Synthesisers before establishing the importance of correct playing position and posture and the importance of keyboard warm-ups.

Pupils explore the layout of the keyboard in terms of white and black keys and their note names; sharps and flats as enharmonic equivalents and explore how to "read music" in the form of simple melodies and melodies from popular songs from treble clef staff notation. They then move on to add a second part of basic chords with the left hand.

Since this unit is primarily performance based, there are optional pathways to perform and compose either a round for keyboard ensemble or to explore short musical clichés for keyboard.

The final lesson(s) have been left as "Independent Practice" where, it is hoped, that through their skills, knowledge and understanding of 'good keyboard practice and playing technique,' pupils will take responsibility for their own learning of a either a solo, paired or small ensemble keyboard piece which can be performed at the end of the unit. If the unit is being delivered prior to Christmas, then the final "Independent Practice" lesson(s) could be spent rehearsing and performing a keyboard arrangement of a Christmas song or arrangement.

Assessment (10 credits)

- Performance of a Keyboard Arrangement of a Christmas Song 7 credits
- Class Participation 3 credits



MUSIC

Sonority City

Topic overview

This unit develops pupils' knowledge and understanding about orchestral instruments and families/ sections of orchestral instruments. Pupils learn about the construction, sound production and timbres/ sonorities of different orchestral instruments, the layout, grouping and the instruments which belong to each section of a modern symphony orchestra.

Key to this unit is pupil's understanding of the terms: TIMBRE AND SONORITY with a general introduction to the orchestra followed by exploring one orchestral section or family per lesson. There is an optional lesson pathway to allow pupils to explore fanfares and the harmonic series when looking at brass and percussion instruments in more detail.

This unit is enhanced by pupil's being able to explore and perform on traditional orchestral instruments "as a class orchestra," but with an awareness of limitations on resources, suitable keyboard voices can be used or any pupils who play orchestral instruments could be encouraged to perform on these during lessons.

Assessment (10 credits)

- 'Class Orchestra' Performance 7 credits
- Class Participation 3 credits

Pupils in Year 8 will continue to develop their skills working towards a group advanced ensemble by the end of Year 8. Pupils can also extend their learning and develop their skills through the extensive co-curricular provision in music.

YEAR 8

Music Literacy: Staff Notation and Time Signatures 2

Topic overview

Simple time signatures of 8/3 ,2/4 ,2/3 ,2/2 and the grouping of notes and rests within these times. Triplets, and triplet note groups with rests.

Extension of the stave to include two ledger lines below and above the treble and bass clef staves.

Assessment (10 credits)

- Written assessment (Grade 2 Music Theory Exam-Style Questions) 7 credits
- Class Participation 3 credits



MUSIC

Offbeat

Topic overview

This unit begins by exploring the origins of Reggae music from Mento, Ska and Rock Steady and looks at the famous Reggae musician, Bob Marley, and his influence on a worldwide audience.

The unit uses two Reggae songs as case studies to explore the musical features of the genre: "Yellow Bird": a Caribbean song, and "Three Little Birds".

Pupils learn about the different textural elements that make up a Reggae song: bass line riffs, melodic hooks, offbeat chords, syncopated rhythms and the vocal melody line.

Pupils' harmonic language is extended and developed constructing chords I, II, IV and V in F Major ("Yellow Bird") and chords I, IV and V in A Major ("Three Little Birds), performing these in the traditional offbeat Reggae style.

The unit ends with the option of an extended Reggae arrangement of "Yellow Bird" and a brief exploration into the themes of Reggae lyrics with pupils creating their own short set of lyrics using Jamaican speech-style on a specific subject e.g. Black Lives Matter, School etc. or by taking a well-known melody or song (of their choice) and researching the lyrics, chords etc. and creating a Reggae arrangement of it using the different textural layers explored during the unit.

Assessment (10 credits)

- Performance of Reggae Arrangement

 7 credits
- Class Participation 3 credits



MUSIC

Variations

Topic overview

In this unit, pupils will explore repeated musical patterns: Hooks and Riffs, through Western Classical and Popular Music. They shall explore the use of hooks and riffs in the treble and bass clefs in classical mu The unit begins by exploring basic ways to vary an existing theme using the elements of music and simple musical devices in terms of changing: pitch (octave), timbre and sonority, articulation, tempo, dynamics, rhythm and adding: pedal, drone, ostinato, rhythm, decoration (passing notes).

This is then developed by progressively exploring and using more complex variation techniques including: augmentation, diminution (revision of note values), canon/round and adding a counter melody, before pupils learn how to vary a theme using changes in tonality and investigate how inversion, retrograde and retrograde inversion can be applied to a theme as more advanced variation techniques.

Three themes are given (merely as suggestions): two traditionally used themes when exploring variations: Frère Jacques (single line melody) and Twinkle, Twinkle (single line melody with chord markings) and for something more 'modern', the theme from Faded by Alan Walker (-2part melody and accompaniment).

The unit ends with optional lesson pathways of an 'Extended Theme and Variations Project' (continuing work towards a completed and refined set of theme and variations or by exploring another of the themes or using a more complex theme from the media and using skills, knowledge and understanding of variation techniques from the unit, using this theme to create a set of refined variations), or by exploring Ground Bass Variations.

Assessment (10 credits)

- Extended Theme and Variations Project 7 credits
- · Class Participation 3 credits



MUSIC

All That Jazz 1

Topic overview

This unit develops pupil's understanding of the key musical features of Jazz and Blues, exploring chords, chord patterns and how improvisation is used within Jazz and Blues genres.

The history, origins and development of the Blues and diverse types and styles of Jazz can be interspersed throughout the unit in as much depth as the teacher deems appropriate. Instruments, timbres, and sonorities used in Jazz and Blues are also explored and the different roles between Frontline and Rhythm Section instruments within Jazz and Swing/Big Bands.

The characteristic -12Bar Blues chord pattern makes a traditional starting point for the unit with pupils learning chords I, IV and V as triads in C Major before pupils extend these into seventh chords triads and turn these into a Walking Bass Line. The Blues Scale introduces a new melodic resource on which to improvise using ostinato, riffs and fills within the -12Bar Blues.

The (adapted) Swing/Big Band piece "In the Mood" provides a case study into the -12Bar Blues and textural layers of Swing and includes performance and improvisation activities consolidating knowledge, skills and understanding of Jazz and Blues from previous lessons.

The unit ends with optional lesson pathways to either explore Modal Jazz, Ragtime ("The Entertainer") or a Jazz-inspired song ("All That Jazz" from 'Chicago') in more detail.

Assessment (10 credits)

- Jazz Improvisation Performance 7 credits
- Engagement in lessons 3 credits



MUSIC

All About the Bass

Topic overview

Bass Clef Reading and Notation forms the foundation of this unit which explores a range of commonly used Bass Line Patterns within a variety of diverse types, styles, and genres of music from different times and places.

Pupils begin by exploring the various meanings of the term 'bass' before looking at the Bass Clef and the names of the notes in the lines, spaces and ledger lines on the Bass Stave. Instruments and voices which use the Bass Clef are referred to throughout the unit.

Bass Line Riffs, as short, memorable, repeated Bass Line Patterns are explored as pupils realise and perform some famous Bass Line Riffs from Bass Clef Notation from the genres of Rap and/or Hip-Hop. Pupils then explore Walking Bass Line Patterns in the genres of Jazz, Blues, Rhythm and Blues and Rock and Roll, constructing a Walking Bass Line using Chords I, IV and V using notes of the chords (root, third and fifth) and 'extra' Passing Notes, performing a Rock and Roll-style song constructed on a Walking Bass Line and using Bass Line Riffs.

The concept of prolonging a Bass Line chord by performing the notes separately, using Arpeggios, Broken Chords and Alberti Bass Line patterns, are explored through a range of music from different genres including Classical and Modern Solo Piano Music, Surf Rock, Popular Songs and Rock and Roll, all with short, structured performing, composing, and listening and appraising activities.

Finally, pupils explore "pedals", and how a Bass Line note can be sustained or repeated over an extended period, as a pedal note, exploring their use in Baroque Music, Organ and Keyboard Toccatas, Jazz, Popular Song and Film Music.

Assessment (10 credits)

- SOUNDTRAP Bassline Arrangement Project 7 credits
- · Class Participation 3 credits



MUSIC

Saharan Sounds

Topic overview

This unit explores the main rhythmic musical features and devices used in African music, particularly the African drumming tradition of West Africa.

Pupils explore the different African Drum performance techniques and the effect this has on the timbre and sonority of the sounds produced. They then move on to perform and create, by composing and improvising simple rhythms and, using repetition, turn these into cyclic rhythms. These are then combined and overlapped to create polyrhythms and a polyrhythmic texture: a characteristic of much African music. Pupils explore the effect of syncopation on rhythms learning about its offbeat feel and its emphasis on weaker beats before exploring how call and response is used in African music, again through creating, composing, performing, and improvising their own call and response rhythms and the role of the Master Drummer.

Pupils explore African musical instruments and the different timbres and sonorities that these produce before combining their learning of cyclic and polyrhythms, syncopation and call and response into an African-inspired piece. Single line rhythm notation and note values are revised from prior learning and extended through knowledge of dotted and tied notes.

Assessment (10 credits)

- Performance of an African Inspired Piece 7 credits
- Class Participation 3 credits

PHYSICAL EDUCATION

'In order for man to succeed in life, God provided him with two means, education and physical activity. Not separately, one for the soul and the other for the body, but for the two together. With these means, man can attain perfection.'

PLATO

PHYSICAL EDUCATION

VISION:

The PE Department at St. Andrew's aims to empower pupils to be strong in order to be helpful. Fitness is not an irrelevant chore to complete in order to stay healthy but rather that which frees us to live whole lives in the world to serve others.

PUPILS WILL:

- Develop competence to excel in a broad range of physical activities
- Are physically active for sustained periods of time
- Engage in competitive sports and activities
- Lead healthy, active lives.

2021/2022									
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2			
Year 7	Athletics	Swimming & Rounders	Water Survival & Tennis	Badminton	Basketball	Gymnastics			
Year 8	Athletics	Swimming & Cricket	Water Polo &Tennis	Tennis / Badminton	Basketball	Team- Building			
Year 9	Athletics	Cricket / Basketball	Hockey	Rugby / Volleyball / Basketball / Football	Rugby / Netball / Tennis / Badminton	Key Stage 3 terminal assessment			

Above is the outline for the Physical Education Curriculum



PHYSICAL EDUCATION

YEAR 7

Athletics

Topic overview

Pupils will learn and acquire basic techniques in the following disciplines: 100m/200m / 800m/1500m; long jump, triple jump and high jump; javelin, discuss and shot-put. Pupils will also have the opportunity to develop skills in officiating, developing their knowledge of the main rules of each event and strengthening their ability to measure/time and record for each event.

Assessment (10 credits)

- Teacher assessment of student's performance in practical situation.
- · Assessment of student's attainment and progress with times and distances achieved.
- Reflection task on own athletics performance and how to improve further.

Cricket

Topic overview

In this cricket unit, pupils will demonstrate an understanding of the rules of cricket. They will also develop their striking, bowling and fielding skills.

Assessment (6 credits)

- Practical assessment of striking, bowling and fielding skills.
- · Written assessment on rules of cricket.

Swimming

Topic overview

In this swimming unit, pupils will develop their stroke technique across the four different strokes and analyse both their own and their peers' techniques in order to improve performance.

Assessment (4 credits)

- Teacher assessment of student's performance in practical situation.
- Assessment of student's attainment and progress with times in different strokes.



PHYSICAL EDUCATION

Human Movement

Topic overview

In this topic spanning across both Year 7 and 8 pupils will learn and develop human movement skills that will help improve their mobility and strength. These skills start with basic ground movements such as getups and crawling and progress to more advanced jumping, climbing and vaulting movements.

Assessment (20 credits)

• Teacher assessment of student's performance in practical situation.

Tennis

Topic overview

Pupils will learn and be able to demonstrate forehand and backhand shot with a focus on developing their feet positioning and shoulder / arm movement. Pupils will learn how to serve correctly, focusing on the ball toss, feet positioning and shoulder / arm movement. Pupils will strengthen their understanding of the rules in Tennis including what the different lines and terminology mean.

Assessment (5 credits)

- Teacher assessment of student's performance in practical situation.
- Assessment through skills tests.
- Quiz on rules of tennis

Swimming – Water Safety

Topic overview

In this water safety unit, pupils will demonstrate an understanding of the principles behind Personal Survival techniques and skills individually and in combination. Will focus on developing water treading skills, movement using the H.E.L.P and HUDDLE positions with their own body and when supporting partner/s. Pupils incorporate control of movements, to retain body heat and creatively develop effective methods of using any floatation aids. Pupils will evaluate and assess skills to improve personal survival.

Assessment (5 credits)

- Teacher assessment of student's performance in practical situation.
- Personal survival assessment theory



PHYSICAL EDUCATION

Rugby

Topic overview

In this unit pupils will learn basic rugby passing, kicking and evasion skills. Pupils will also develop their understanding of the basic rules of the game and the scoring system.

Assessment (5 credits)

- The following assessment strategies will be used:
- Teacher assessment of student's performance in practical situation
- · Assessment through skills tests
- Quiz on rules of rugby.

Basketball

Topic overview

In this unit, pupils will learn and demonstrate control of the ball with one hand while moving; accuracy of pass making use of chest, bounce and overhead pass and making use of correct technique with accuracy. Pupils will develop knowledge of the rules of the game and the scoring system.

Assessment (10 credits)

- The following assessment strategies will be used:
- Teacher assessment of student's performance in practical situation
- Assessment through skills tests
- · Quiz on rules of basketball

YEAR 8

Athletics

Topic overview

Pupils will learn and acquire basic techniques in the following disciplines: 100m/200m / 800m/1500m; long jump, triple jump and high jump; javelin, discuss and shot-put. Pupils will also have the opportunity to develop skills in officiating, developing their knowledge of the main rules of each event and strengthening their ability to measure/time and record for each event.

Assessment (10 credits)

- Teacher assessment of student's performance in practical situation.
- · Assessment of student's attainment and progress with times and distances achieved.
- Reflection task on own athletics performance and how to improve further.



PHYSICAL EDUCATION

Cricket

Topic overview

In this cricket unit, pupils will demonstrate an understanding of the rules of cricket. They will also develop their striking, bowling and fielding skills.

Assessment (6 credits)

- Practical assessment of striking, bowling and fielding skills.
- Written assessment on rules of cricket.

Swimming

Topic overview

In this swimming unit, pupils will further develop their stroke technique across the four different strokes and analyse both their own and their peers' techniques in order to improve performance. Pupils will also develop their swimming endurance.

Assessment (4 credits)

- Teacher assessment of student's performance in practical situation.
- Assessment of student's attainment and progress with times in different strokes.

Human Movement

Topic overview

In this topic spanning across both Year 7 and 8 pupils will learn and develop human movement skills that will help improve their mobility and strength. These skills start with basic ground movements such as getups and crawling and progress to more advanced jumping, climbing and vaulting movements.

Assessment (20 credits)

Teacher assessment of student's performance in practical situation.



PHYSICAL EDUCATION

Water-polo

Topic overview

Pupils will be introduced to water polo and develop understanding of the main rules and techniques of sport.

Assessment (5 credits)

- Teacher assessment of student's performance in practical situation.
- Quiz on rules of the sport.

Badminton

Topic overview

In this unit, pupils will acquire and develop skills in grips, high serve, low serve, high lift, overhead clear and the smash. They will also develop their footwork and movement. Pupils will demonstrate understanding of the basic rules of badminton including the scoring system.

Assessment (5 credits)

- The following assessment strategies will be used:
- Teacher assessment of student's performance in practical situation.
- · Assessment through skills tests.
- Quiz on rules of badminton.

Netball

Topic overview

In this unit, pupils will learn and demonstrate different netball passes and develop their movement on the court. Pupils will develop knowledge of the rules of the game and different position roles and movements on the court.

Assessment (5 credits)

- The following assessment strategies will be used:
- Teacher assessment of student's performance in practical situation.
- Assessment through skills tests.
- Case study on rules of netball.

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PHYSICAL EDUCATION

Team Building

Topic overview

In this unit, pupils will learn and describe the meaning of leadership and teamwork as well as developing their ability to work as part of a team. Pupils will develop trust and confidence in team while working in a group. Additionally, they will learn and develop effective means of communication, both verbal and nonverbal. They will also develop leadership qualities and problem-solving capabilities.

Assessment (5 credits)

- Formative assessment: observation of pupils in practical situations
- Question and answer of key leadership and teamwork principles

SCIENCE

'Every form of art is another way of seeing the world - another perspective, another window. And Science – that's the most spectacular window of all. You can see the entire universe from there.'

CLAUDIA GRAY



SCIENCE

VISION:

The Science Department at St. Andrews Preparatory School strives for teaching excellence in every one of our pupils.

Our Science curriculum is based on the AQA Oxford Activate series which a is a proven and researched scheme of work, whilst being engaging and exciting. It provides our pupils with the foundations for understanding the world through the specific disciplines of Biology, Chemistry and Physics, and provides a solid grounding for success at Key Stage 4, whilst fostering a love for Science and a scientific curiosity of the world around them.

PUPILS WILL:

- Develop scientific knowledge.
- Develop appropriate mathematical skills, and science literacy.
- Develop understanding of the nature, processes, and methods of science through scientific enquiry and practical experimentation in high quality laboratories.

2022/23										
	Christmas 1	Christmas 2	Easter 1	Easter 2	Trinity 1	Trinity 2				
Year 7	Introduction to Science, H&S Forces	Cells, Particles	Body systems	Elements, Sound	Reactions, Light	Reproduction				
Year 8	Periodic Table, Electricity & Magnetism	Electricity & Magnetism, Health & Lifestyle	Separation techniques, Energy	Acids & Alkalis	Space, Ecosystem processes	The Earth				

Above is the outline for the Science Curriculum.



SCIENCE

YEAR 7

Introduction to Science, Health & Safety

Topic overview

Pupils will be introduced, and practice, safe working within a Science laboratory; this will include using a Bunsen burner and some basic chemical reactions to foster confidence.

They will then learn about making a scientific hypothesis, and how to gather data. Pupils will then plan an experiment, learn how to write a methodology and understand the three variables involved in an experiment: control, dependent and independent. Once this is done, pupils will conduct their planned experiment, collect data and evaluate it accordingly to confirm their hypothesis.

Assessment

Assessment at each stage of the experiment cycle

Forces

Topic overview

Pupils will be introduced to forces by learning what forces do and how they often interact in pairs. This will include differentiating between contact forces (friction and air resistance) versus non-contact forces (gravity). They will then learn about how forces deform objects, which will include elasticity and Hooke's law. Contact forces will be learnt about in more depth, specifically friction and water resistance and how they can be reduced through lubrication and streamlining. This be followed by non-contact forces, specifically magnetic and electrostatic forces, as well as gravity; pupils will learn about gravitation field strength, how it differs according to which planet/moon one is on, as well as how weight is a force (caused by gravity) versus mass.

Assessment (6 credits)

Two end of topic assessments (1 written and 1 computerised)

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Cells

Topic overview

Pupils will initially learn that cells are the building blocks of life and that all living organisms are made of cells. Due to their size, pupils will spend time learning about how to use a microscope and apply their knowledge to observing cells and recording observations and magnifications. Pupils will then learn about animal and plant cells, as well as specialised cells, followed by diffusion of particles from a high concentration to a low concentration and how that causes water to move into or out of a cell. Lastly, they will learn about unicellular organisms (one celled organisms), specifically amoebas and euglenas - we will !try to find if any exist in our local pond, using a microscope

(credits 7) Assessment

(computerised 1 written and 1) Two end of topic assessments

Particles

Topic overview

Materials are made up of particles and pupils will use the particle model to explain why different materials have different properties, understand the three states and the properties of a substance in each of the three states. They will continue to use the particle model to learn about freezing melting, boiling, sublimation and evaporation and interpret data to assess a material's state.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Body systems

Topic overview

Pupils will learn about tissues, organs and organ systems and their hierarchy within a multicellular organism. They will then look more deeply into the gas exchange system and how breathing happens, the components of gas that we breathe in and out and how parts of the system are adapted to their functions. Pupils will describe the structure of the skeleton and its functions, as well as understanding the purpose of bone marrow. They will then look more deeply into joints and muscles – how they enable movement, and describing their constituent parts. This will be confirmed by dissecting chicken legs and to confirm understanding.

Assessment (6 credits)

Two end of topic assessments (1 written and 1 computerised)



SCIENCE

Elements

Topic overview

In this section of Chemistry, pupils will be able to state what an element is and learn to use the Periodic Table to recognise some of the common element symbols. Pupils will then go deeper into what materials are composed of at the atomic level, and compare the properties of one atom of an elements versus the properties of many atoms. They will then learn what happens when atoms of two or more elements join together, and be able to explain why compounds have different properties to the elements that they are comprised of. Pupils will also learn to write the chemical names for some simple compounds, and then write and interpret chemical formulae.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Sound

Topic overview

Pupils will start this module with learning that energy is transferred through waves, the different types of waves and what happens when they hit barriers and superpose. They will learn that sound travels as a sound wave as a result of a vibration, and then be able to explain why sound travels at different speeds through different materials. Knowing what the speed of sound is they will be able to contrast it with the speed of light. Pupils will then analyse sound as a transverse wave and understand how loudness related to a wave's amplitude, and pitch relates to a wave's frequency. Havig learnt about frequencies, they will learn about infrasound and ultrasound and how human's audible range of hearing compares with different animals. Lastly pupils will be able to describe how the ear works and enables the receipt of sound waves to be changed into electrical signals; they will also be able to contrast the ear with how a microphone works.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)



SCIENCE

Reactions

Topic overview

Having learnt about atoms in the previous chemistry module, pupils will carry out chemical reactions to understand what happens to atoms in chemical reactions, as well as being able to understand the difference between a physical change and a chemical reaction. Pupils will then learn to represent chemical reactions as a word equations and identify reactants and products. They will then learn about specific chemical reactions, namely oxidation reactions and thermal decomposition reactions. In oxidation reactions, burning is focussed on as are different fuel types. In thermal decomposition reactions, pupils will undertake experiments to measure the rate of decomposition of different compounds. Having learnt about word equations t represent chemical reactions, pupils will learn about conservation of mass and how balance symbol equations accordingly. Lastly, pupils will learn about exothermic and endothermic reactions and apply their knowledge to different chemical reactions they will conduct.

Assessment (6 credits)

Two end of topic assessments (1 written and 1 computerised)

Light

Topic overview

In this section of Physics, pupils will learn about what light is, what happens to it as it travels and interacts with different mediums, what it can travel through and how fast it travels. They will experiment with light sources and different materials to understand the law of reflection, refraction and how lenses work. Knowing how lenses work will enable pupils to understand how the eye works as well as the camera, and then be able to compare and contrast both.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)



SCIENCE

Reproduction

Topic overview

Pupils will initially learn about adolescence and puberty, the differences between them and the major physical changes that are associated with puberty. Pupils will then learn about the function and features of the male and female reproductive systems, whereafter they will learn about gametes and the process by which they travel to enable fertilisation. Pupils will then continue to learn about the process of gestation and how the fertilised egg develops into a baby; this will include the function of the placenta, umbilical cord and fluid sac within the uterus. The menstrual cycle is then learnt about, as well as the methods by which fertilisation can be prevented. Reproduction will then shift focus from humans to plants, and pupils will learn about the functions and features of a flower, the process of pollination and how wind and animal pollinated plants differ. Pupils will then learn how fertilisation takes place within a plant, and how seeds and fruit develop. The life of the seed is then studied, in terms of its requirements for germination, and how it is initially dispersed.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

YEAR 8

Periodic Table

Topic overview

Pupils will learn what the periodic table is and how it is simply set-up in terms of metals and non-metals, groups and periods. They will then be able to use patterns to predict properties of elements and compare these patterns across different groups and periods. Using data, pupils will describe patterns in Groups 7 ,1 and 0 and predict properties of further elements.

Assessment (6 credits)

Two end of topic assessments (1 written and 1 computerised)

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SCIENCE

Electricity & Magnetism

Topic overview

Pupils will initially learn about what a charge is and how objects can become charged, interact when charged and that there is an electric field around a charged object. They will then learn about a moving charge, that current is the amount of charge flowing per second and how to measure it. Continuing with moving charge, pupils will learn where the 'push', to make a charge move, comes from and that this is called a potential difference and how to measure it. Throughout this module, pupils will be building circuits to apply and test their knowledge. They will be taught the difference between series and parallel circuits and learn about resistance within a circuit and how to calculate it. Pupils will then learn about magnets and how they also cause a magnetic field. They will finally combine their knowledge of electricity and magnetism to learn about, and build, an electromagnet.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Health & Lifestyle

Topic overview

Pupils will initially learn about what a healthy diet is comprised of, what are the primary food groups and be able to explain what role they have in the body. They will then test different food types for starch, lipids, sugars and proteins using a variety of experimental techniques, building on their hypothesis writing and observation skills. Pupils will then learn about unhealthy diets, and what is, and causes, malnourishment. The digestive system will then be analysed as to how it is structured, how it works, how nutrients move into the blood, and the role of enzymes and bacteria. Lastly, pupils will learn about the effects of drugs, tobacco and alcohol on health, behaviour, conception and pregnancy.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Separation techniques

Topic overview

Pupils will initially learn to describe pure substances, mixtures, solutions and solubility. This will be assisted by different demonstrations and pupils' experiments, such as assessing how temperature affects solubility. Pupils will then learn about filtration, evaporation, distillation and chromatography, and use all of these techniques to separate mixtures and solutions.

Assessment (6 credits)

Two end of topic assessments (1 written and 1 computerised)



SCIENCE

Energy

Topic overview

Pupils will initially learn about energy within food, and that its unit is joules. This introduces the concept that energy is the ability to do work and that it can be stored. They will then learn about 8 energy types and that energy can only be stored or transferred, it cannot be created or destroyed (the law of conservation of energy). Pupils will learn about the difference between thermal energy and temperature, use the particle model to understand what happens when solids are heated and thermal equilibrium, whilst removing common misconceptions on heat and cold. Energy transfer methods will then be studied, particularly the transfer methods of conduction, convection and radiation as energy is moved from one thermal store to another. Energy resources will be studied, specifically learning the difference, and examples, of non-renewable (fossil fuels) versus renewable resources. Pupils will then learn about the difference between energy and power, and how energy usage is measured in homes. Lastly, pupils will study the energy transfer method of 'work', using the equation to calculate work done in different scenarios and how simple machines (e.g. gears) can make it easier for humans to do work.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Acids & Alkalis

Topic overview

Pupils will initially learn about the difference between acids and alkalis and be able to describe the definition of concentrate versus dilute. They will then learn indicators and how they can indicate acidic and alkaline solutions. Neutralisation will then be explored, and how acids and alkalis can be neutralised as well as the real-life applications of this knowledge. Lastly, pupils will learn about making salts from the reaction between acids and a metal element or compound.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Space

Topic overview

Pupils will initially learn about objects that are in the night sky and the differences between them – planets, stars, meteors, satellites, comets, galaxies. They will then focus on our own solar system, learning differences between the planets. Pupils will learn about the earth, moon, sun relationship in terms of orbits and the determination of day and night, months, years and seasons. Lastly the moon's phases will be studied and eclipses, both solar and lunar.

Assessment (6 credits)



SCIENCE

Two end of topic assessments (1 written and 1 computerised)

Ecosystem Processes

Topic overview

This module will initially focus on plants, specifically learning about photosynthesis and linking that to the structure of leaves. Pupils will learn how to capture cells from the bottom layer of a leaf and, using a microscope, identify stomata. Pupils will then learn about the necessity for minerals, within soil, for a plant to maintain healthy growth. Chemosynthesis, the ability for certain plants to use chemicals as a source of energy instead of light, will be examined and contrasted with photosynthesis. Pupils will then move onto human systems, specifically learning about both aerobic and anaerobic respiration. Food chains and webs will then be explored, specifically the change in energy between web/chain levels, bioaccumulation of toxins and how webs can be disrupted. Lastly pupils will learn about ecosystems and how different organisms co-exist and identify niches.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

Earth

Topic overview

Pupils will initially learn about the structure of the earth and the atmosphere. They will then learn about different rock types (igneous, sedimentary, metamorphic) and the rock cycle describing how each are formed. They will then learn about the carbon cycle, understanding why carbon dioxide is vital to the atmosphere and where carbon is stored. This will link into climate change, learning about its causes and impacts. Lastly, pupils will learn about recycling, its advantages and disadvantages.

Assessment (7 credits)

Two end of topic assessments (1 written and 1 computerised)

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www.standrewsturi.com

Private Bag 20106, Molo, Kenya.

Prep School

General Enquiries: officeprep@turimail.co.ke Tel: +254 (0)722 209750 or +254 (0)20 2025709









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