Year 9 : Term 5 Curriculum Plan

CORBY Technical School

Subject	8th June	15th June	22nd June	29th June	6th July	13th July
Maths	**Mr Horne & Mr Jackson** **Laws of Indices** In this learning loop you will review the laws of indices. You will be able to simplify negative and fractional indices **Standard Form** In this learning loop you will recap multiplying and dividing in standard form You will also add and subtract in standard form ensuring that all calculations/answers are in standard form **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Laws of Indices** In this learning loop you will recap the laws of indices. You will understand the laws regarding multiplying, dividing and indices with brackets. You will use a combination of these rules to work backwards to find missing powers **Standard Form** In this learning loop you will recap how to convert small and large numbers to and from standard form **Mrs Wynn** **Factors & Multiples** In this learning loop you will recap and identify factors and multiples of numbers. Knowing your times tables is essential to be able to	**Mr Horne & Mr Jackson** **Surds** In this learning loop, you will recap surds and know how to multiply and divide with surds. This lesson will also be a review of the methods used to simplify surds **Estimating** In this learning loop you will review rounding to significant figures. This then leads on to using significant figures to estimate complex calculations. Estimation is an important skill. **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Rounding 1** In this learning loop you will recap rounding to whole numbers, 10, 100 and 100a and a given number of decimal places You will use this skill in many calculations in Mathematics **Rounding 2** In this learning loop you will round to a given number of significant figures. Rounding to significant figures is an important skill needed when estimating or checking answers. **Mrs Wynn** **Rounding 1**	**Mr Horne & Mr Jackson** **Upper & Lower Bounds** In this learning loop you will be finding upper and lower bounds for rounded numbers. You will calculate with upper and lower bounds, including more complex worded questions **Recurring Fractions** In this learning loop you will convert recurring decimals to fractions where every digit in the decimal is recurring. You will also convert recurring decimals to fractions where only some of the decimals are recurring **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Surds** In this learning loop, you will recap surds. You will multiply and divide single surds and surds that have been multiplied by a whole number **Calculating with Surds** In this learning loop you will simplify surds and simplify surds in order to add and subtract surds **Mrs Wynn** **Square & Cube Numbers** In this learning loop you will recap on square and cube numbers. You will recognise and identify square and cube numbers. You will calculate with square and cube numbers **Laws of Indices** In this learning loop you will recap how to write numbers in index form. You will know how to evaluate numbers to the power of 0 and 1	**Mr Horne & Mr Jackson** **Inequalities** In this learning loop you will identify values defined by an inequality and represent inequalities on a number line. You will represent multiple inequalities on a number line to determine overlapping regions. **Inequalities on a Graph** In this learning loop you will recap how to draw equations of straight lines. You will identify regions enclosed by two or more inequalities **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Inequalities** In this learning loop you will identify integer values defined by an inequality and represent inequalities on a number line. **Solving Inequalities** In this learning loop you will solve inequalities with unknowns on one side. You will solve inequalities with unknowns on both sides using inverse operations and represent these inequalities on a number line **Mrs Wynn** **Collecting 'like' terms** In this learning loop you will recap how to simplify basic	**Mr Horne & Mr Jackson** **Factorising Quadratics** In this learning loop you will recap factorising quadratics into single brackets, in the form $ax^2 + bx + c$ where 'a' is equal to 1 and greater than 1 **Solving Quadratics** In this learning loop you will solve quadratic equations by factorising into single or double brackets **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Factorising Expressions** In this learning loop you will recap factorising linear expressions with one factor. You will then factorise linear expressions with more than one factor **Factorising Quadratics** In this learning loop you will recap factorising quadratics into single brackets, in the form $ax^2 + bx + c$ where 'a' is equal to 1 with both negative and positive terms **Mrs Wynn** **One step Equations** In this learning loop you will solve one-step equations using inverse operations. **Two Step Equations** In this learning loop you will solve equations involving all	**Mr Horne & Mr Jackson** **Simultaneous Equations** In this learning loop you will solve simultaneous equations where neither equation needs changing and where you will eliminate a variable by either adding or subtracting one variable from another **Simultaneous Equations** In this learning loop you will solve simultaneous equations where both equations need changing in order to have a matching variable **Mrs Van der Lith, Mrs Ferns & Mr Lee** **Simultaneous Equations** In this learning loop You will solve simultaneous equations where neither equation need changing. You will eliminate a variable by either adding the two equations together or subtracting one from the other **Rearranging formulae** In this learning loop You will change the subject using inverse operations. You will change the subject of simple formulae using one and two steps **Mrs Wynn** **Sequences 1**

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	understand how to find factors and multiples **Prime Numbers** In this learning loop you will understand prime numbers. You will learn what a prime number is and apply that knowledge to worded problems	In this learning loop you will recap rounding to an appropriate degree of accuracy. You will round to whole numbers, the nearest 10, 100 and 1000 . You will also round to a given number of decimal places. **Rounding 2** In this learning loop you will understand significant figures. You will round to a given number of significant figures. This skill helps when estimating and checking answers		expressions by collecting like terms. You will collect both negative and positive like terms **Simplifying Expressions** In this learning loop you will simplify basic expressions by multiplication	four operations, negative numbers and fractions, using inverse operations.	In this learning loop you will recap on sequences and patters. You will create a linear sequence form pictures **Sequences 2** In this learning loop you will know how to identify the term to term rule from a sequence
English	**Defining the Gothic** In this introductory lesson we will learn about the essential information you need to know before we start studying Gothic Literature. We will be exploring a definition of what Gothic is in order to develop your understanding of this in the lesson. **Gothic Conventions** In this lesson we will learn about the essential information you need to know about the typical conventions of this genre before we start studying Gothic Literature. We will be exploring what these conventions are in order to develop your understanding.	**Gothic Characters** In this lesson we will look at some typical Gothic characters to build on your understanding of the features of a Gothic text **Gothic Themes** In this lesson we will look at some typical Gothic themes. We will then tie together our understanding of Gothic conventions, characters and themes, by completing a piece of Gothic creative writing.	**The importance of context for understanding historical texts** In this lesson we will look at context around women in the Victorian era and apply that knowledge when analysing the depiction of Porphyria in Robert Browning's *Porphyria's Lover* **Applying context in analysing language** In this lesson we will look at the next section of *Porphyria's Lover* and apply that knowledge when analysing the depiction of Porphyria.	**Developing and justifying an opinion** In this lesson we will imagine that you are bringing a case against the narrator for murder. You will need to first establish your opinion about whether the narrator has a defence to this charge or not and then use the poem as justification for your opinion. **Writing a detailed and analytical opinion** In this lesson we will look at alternative interpretations of the narrator in the poem before you write up a detailed analysis exploring these alternatives.	**Understanding the 'uncanny' and how it applies to Gothic literature** In this lesson we will look at a famous psychoanalyst, Sigmund Freud: who he was, why he was famous and then understand and apply his theory of "The Uncanny" to Gothic literature we have already looked at. **The creation of Frankenstein and applying the 'uncanny'** Building on the work from the previous lesson on the 'uncanny', we will look at Mary Shelley and her inspiration for her famous novel Frankenstein and read a section from the story to apply our knowledge of "The Uncanny".	**Analysing language in Frankenstein** We will look at the famous novel Frankenstein and read a section from the story to apply our language analysis skills, in particular focusing on using analytical phrasing when writing up our responses. **Understanding authorial intent and how to use this to develop analysis** We will look at the famous novelist Charles Dickens and the concept of authorial intent and apply this. We will consider, in particular, why he may have chosen to incorporate elements of the Gothic in his writing for an intended purpose.

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Science	**Biology Lesson: Eukaryotes and Prokaryotes** In this lesson we are going to look at the main structures found in both Eukaroytic and prokaryotic cells with a view to comparing some of these features. **Chemistry Lesson: Atoms, elements and compounds** In this lesson we are going to explore the ideas behind the modern structure of the atom, learn how to find elements on the periodic table and how to classify a substance as an element, compound or a mixture. **Physics Lesson: History of the Atom** In this lesson we will look at how our understanding of the atom has developed over time.	**Biology Lesson: Specialised Cells** In this lesson we will be looking at how animal and plant cells can specialise to perform specific functions within an organism. **Chemistry Lesson: Separating mixtures** In this lesson we are going to look into techniques used to separate different mixtures. We will look into when to use filtration, chromatography and crystallization. **Physics Lesson: Atomic Structure and Subatomic Particles** In this lesson we will describe the nuclear model of the atom and look at the subatomic particles within an atom.	**Biology Lesson: : Microscopes** In this lesson we will be investigating the differences between visible light microscopes and electron microscopes focussing on the differences in resolution and magnification. **Chemistry Lesson: Isotopes** In this lesson we are going to explore the nuclear model of the atom and learn what an isotope is and how we can identify isotopes. Additionally we will recap how to calculate the number of neutrons, protons and electrons of an atom. **Physics Lesson: Working Scientifically - Variables** In this lesson we will look at independent, depended and control variable and how to identify them.	**Biology Lesson: Calculating magnification** In this lesson we will be developing our understanding of microscopes further and looking at how to calculate image sizes, object sizes and magnification of images. **Chemistry Lesson: Electron Configuration** In this lesson we are going to look at how electrons are arranged within an atom. We are going to look at how many electrons fills an energy level or shell and who to draw the arrangement for the first 20 elements. **Physics Lesson: Working Scientifically – Maths Skills, Significant Figures; Means and Standard Form** In this lesson you will learn/practice some maths skills for science. This will include mean calculations, including checking for anomalies, as well as significant figures and standard form.	**Biology Lesson: Cell Division** In this lesson we will be exploring the process of mitosis in body cells and how this is used for growth, repair and replacement. We will look at the three main stages of the cell cycle and the key features of each stage. **Chemistry Lesson: History of the periodic table** In this lesson we will be exploring how scientists came to represent the periodic table as it now is by looking at key developmental steps and the scientists involved. We will focus on the input from Mendeleev and how we know he was correct. **Physics Lesson: Working Scientifically: Command Words** In this lesson we will look at different data sets and analyse them. We will focus on different command words and practise what is expected when being asked to describe, explain, compare or evaluate data.	**Biology Lesson: Stem cells** In this lesson we will explore the differences between embryonic and adult stem cells in humans. We will also discuss the benefits of stem cells in plants both economically and for research purposes. **Chemistry Lesson: History of the Atom** In this lesson we will learn how the model of the atom has evolved to the current model we use today. We will look at Daltons, JJ Thompson, Rutherford and Bohr's model and how these theories connect in to our current accepted model. **Physics Lesson: Working Scientifically – Continuous and Categorical Data** This lesson will take a focus on some of the key skills of working scientifically. We will address the concepts of continuous and categoric variables before looking at key principles for drawing and interpreting graphs of data.

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Spanish	**<u>Using the present tense to describe family:</u>** This week we will be revising use of the present tense and family vocabulary. We will then use this to introduce and describe someone else in Spanish.	**<u>Using the present tense to talk about free time:</u>** This week we will be revising use of the present tense and free time vocabulary. We will then use the present tense to describe our hobbies.	**<u>Using the present tense and justifying opinions:</u>** This week we will learn how to give justified opinions on free time isolation activities using an opinion phrase, an infinitive and an adjective.	**<u>Using the past tense to talk about holidays:</u>** This week we will revise the past tense and holidays vocabulary. We will then give opinions about previous holidays.	**<u>Using the past tense to talk about holidays part 2:</u>** This week we will recap how to talk about where we went on holiday last year and how to give our opinion in the past tense. We will also learn how to add more detail to our basic past tense opinion.	**<u>Using the past tense to talk about holidays part 3:</u>** This week we will recap how to say where we went on holiday last year and how to give a detailed opinion in the past tense. We will also recap our knowledge of Latin American countries and broaden our knowledge of key Spanish cities.
Geography	**What is development:** In this lesson, you will learn what development means and how we can rank and compare countries globally. You will understand the difference between standard of living and quality of life and the significance of these indicators in comparing lifestyles across the world.	**Development indicators:** In this lesson, you will learn the names and definitions of many important development indicators. You will understand the difference between economic and social indicators and how these make comparing countries more accurate and evidence-based.	**What factors influence development:** In this lesson, you will learn all about different factors that can influence development. You will understand that these influences can help a country to develop but some others could make the development process more difficult.	**What is the global pattern of development?:** In this lesson, you will learn about the current global pattern of development using some of the key indicators covered in lesson 2. You will then move onto reflecting on how much progress has been made in key areas such as average life expectancy and ensuring all children complete their primary education.	**How has the UK developed over time?** In this lesson, we will learn about how the UK has developed over time. We will consider different factors which shaped our development and then summarise the changes which still exist in levels of development across the UK today.	**How does uneven development impact on quality of life?** In this lesson, we will learn about the link between development and quality of life. We will consider different indicators of development and how these vary across the globe and even within countries, which create inequality.
History	**Why were Britain and Russia enemies?** This is the first lesson of a new unit about the Russian Revolution. This lesson explores the relationship between Britain and the Soviet Union and looks at why they were enemies during the 1960s. Students will understand what the Soviet Union was and the concerns in the world at the time.	**Tsarist Russia** This lesson introduces students to the Russian Revolution. This lesson will focus on Tsarist Russia and why they were opposed by the Bolsheviks. Students will understand the differences faced between the Monarchy and its people.	**1917** This lesson will focus on the Russian Revolution looking at the events that took place and the changes that were made. The focus will be on the working class movement to overthrow the Tsar Nicholas II. This will also introduce key players of the Bolsheviks. Students will then have an understanding of how the Soviet Union was created.	**The October Revolution** This lesson will focus on the continuation and escalation of the Russian Revolution. Students will learn about the social revolution that took part and the establishment of the Communist system.	**The Civil War** This lesson will focus on the aftermath of the Russian Revolution. It will focus on the time period from 1918-1923 when Civil War occurred due to opposition groups forming against Lenin. Students will learn about the opposition groups that formed the Whites and the Bolsheviks the Reds.	**Social Policies** This lesson will focus on the changes made to social policies in Russia throughout the 1920s. It will look at the limitations of media, social rights, education and what it meant to live in a Totalitarian state.

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Art	**War & Conflict - Mind map of themes** This is the first lesson to begin our project on 'War and Conflict'. We will be researching ideas and looking at examples of conflict. We will consider how they have been described and what images are associated. We will plan and create a detailed mind-map.	**Creating a response** We are going to create an art work using pencil, coffee and household objects, which links to our theme of war and conflict.	**Pen Study** In today's lesson we are going to create a pen study that links to our theme of 'War and Conflict'.	**Collage** In today's lesson we are creating a collage which links to our theme of 'War and Conflict'.	**Zentangle Work** In today's lesson we are going to create a Zentangle inspired artwork which links to our theme of war and conflict.	**Text as art** In today's lesson we are creating a Text artwork which links to our theme of 'War and Conflict'.
Computer Science	**Units** In this lesson we will introduce the topic of binary. Students will learn why computers use binary numbers, the different units numbers use and how to calculate and convert between the different binary units.	**Binary Conversions** In this lesson, we will learn how to convert a denary number to and from binary. We will learn how to convert up to a byte of binary to denary.	**Hexadecimal conversion** In this lesson we will learn to Convert between binary, denary and hexadecimal numbers and explore the benefits of and reason for using all three number systems	**Characters** In this lesson we will be exploring the difference between different character sets. We will look how characters set are created and the uses for each character set.	**Images** In this lesson we will be exploring how images are constructed using a computer. How images are represented by binary and how image sizes are calculated.	**Sound** In this lesson we be exploring how sound is sampled by a computer, the difference between an analogue and digital sound and what factors effect a sounds file size.
Creative iMedia	**Reviewing mood boards** In this lesson students will learn the importance of review pre-production mood boards. They will learn the key conventions of a mood board and how to criticise it and suggest improvements.	**Reviewing mind maps** In this lesson students will learn the importance of review pre-production mind maps. They will learn the key conventions of a mind maps and how to criticise it and suggest improvements.	**Camera shots** In this lesson we will learn the differences between camera shots, camera angles and camera movements as well as knowing key examples for each type.	**Reviewing Scripts** In this lesson students will learn the importance of review pre-production scripts. They will learn the key conventions of a scripts and how to criticise it and suggest improvements.	**Reviewing Storyboards** In this lesson students will learn the importance of review pre-production storyboard. They will learn the key conventions of a storyboard and how to criticise it and suggest improvements.	**Reading a client brief** In this lesson we will learn the importance of reading a client brief, what may be include in a client brief and how to meet the clients expectation.
Design Technology	**Extreme Design** In this first lesson you will learn about extreme designs and how they are tested using a variety of CAD/ CAM processes	**Mechanical Systems** We are going to learn the basics of mechanical systems. E.g. Types of motion, cams and followers.	**Design and Technology: Microcontrollers** In this lesson we are going to learn the basics of microcontrollers. Using key terms such as input, process and output relating to real world examples.	**Product Development** We are going to learn about how designers create new solutions to problems and how they change existing designs.	**Design and Technology: Product lifecycle** In today's lesson we are going to learn the basics of product life cycles.	**Design and Technology: Evaluating Design Ideas** In today's lesson we are looking at how you would evaluate your design ideas.

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Drama	**How to tackle a monologue** In this lesson we will look at some of the key considerations when faced with a monologue for the first time. We will specifically focus on physicality and vocal work. **Rehearsing a monologue** In this lesson you will choose a monologue and rehearse it using the pointers we looked at in the previous lesson. You will also begin to evaluate your performance.	**Revision: Stanislavski** In this lesson we will begin our revision of the key practitioners we learned about at the start of the year – starting with Stanislavski. **Applying the techniques of Stanislavski** In this lesson you will be guided through the ways in which you can apply the key techniques of Stanislavski to a text.	**Revision: Brecht** In this lesson we will move on to the next key practitioner – Brecht. We will re-cap his key principles, and what his philosophy was for the theatre. **Applying Brechtian Techniques** In this lesson we will consider the ways in which a text can be made 'Brechtian' through the use of his techniques. We will compare and contrast a Brechtian text with a non-Brechtian text	**Revision: Artaud** In this lesson we will move on to revise our third key practitioner – Artaud. We will consider what he believed to be the purpose of theatre, and the effect he wanted theatre to have on an audience **Applying Artaudian Techniques** In this lesson we will get creative and think about how we would create an Artaudian inspired scene, using his key principles.	**Rehearsing a monologue using Stanislavski techniques** In this lesson we will look at a monologue that is traditionally performed using the conventions of Naturalism, and consider how we can apply Stanislavski's techniques to the monologue. **Self-evaluation of my performance** In this lesson you will self-evaluate your performance, and consider the effectiveness of the Stanislavski techniques used. We will consider how these techniques can help an actor engage with a text in a meaningful way.	**How to write a Brechtian monologue** In this lesson we will get creative and create our own monologue, inspired by Brechtian techniques. This will involve writing a monologue and incorporating ideas of how Brecht wanted performers to interact with an audience. **Rehearsing, performing and evaluating my Brechtian monologue** In this lesson you will use the monologue you wrote in the previous lesson, and move it from the page to the stage. This will involve thinking about the role of the actor when performing in a Brechtian way – and considering how it is different from a Stanislavski-inspired performance.
Engineering	**Extreme Design** In this first lesson you will learn about extreme designs and how they are tested using a variety of CAD/ CAM processes	**Mechanical Systems** We are going to learn the basics of mechanical systems. E.g. Types of motion, cams and followers.	**Design and Technology: Microcontrollers** In this lesson we are going to learn the basics of microcontrollers. Using key terms such as input, process and output relating to real world examples.	**Product Development** We are going to learn about how designers create new solutions to problems and how they change existing designs.	**Design and Technology: Product lifecycle** In today's lesson we are going to learn the basics of product life cycles.	**Design and Technology: Evaluating Design Ideas** In today's lesson we are looking at how you would evaluate your design ideas.
Food & Nutrition	**Enzymes and food poisoning** This is the first lesson in revisiting topics throughout the academic year. We will be looking at Enzymes and the	**Food safety, key temperatures, danger zones and safe probe use** We are going to learn about keeping safe in a food and	**Food Choice; religion and culture, vegetarianism, veganism and world cuisine** In today's lesson we are going to learn about the many different food	**Food Choice: special diets, allergies and intolerances** In today's lesson we are going to extend our knowledge of food choices. E.g. Special	**Micro and macro nutrients, Energy balance and age related issues**	**Practical challenge related to nutrients and age** In today's lesson there will be a practical challenged which is related to nutrients and

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	many different types of food poisoning.	nutrition room, understanding key temperatures and knowing what are the danger zones.	choices. E.g. Due to religion and culture, vegetarianism etc.	diets, allergies and intolerances.	We are going to learn the basics of micro and macro nutrients based on energy balance and how it could relate to issues with age.	what is needed for a particular age of a person.
Media	Revision of SCEMES Revising the different elements of sound for analysis of moving image texts. Watch examples of the different elements. Discussion of how to apply when writing in essays.	Revision of editing Examples of each type of editing Discussion on how to apply in essays	Revision of cinematography and events/themes/atmosphere Revision of the key terminology and meanings Discussion of how to apply when analysing moving image texts.	Revision of mise-en-scene and special effects Revision of key terminology and meanings Discussion of how to apply to texts	Revision of key concepts in RAILING Revision of Narrative theories Discussion of application of the theories	Revision of key terminology, focussing on demographics and psychographics Discussion on how to apply
Sociology	**Functionalism** In this lesson students will look at what functionalism is again and gain some more background information which will aide their learning for future topics.	**Marxism** In this lesson students will look at what Marxism is again and gain some more background information which will aide their learning for future topics.	**Marxism** In this lesson students will look at what Marxism is again and gain some more background information which will aide their learning for future topics.	**New Right** In this lesson students will look at what New Right is and gain some more background information which will aide their learning for future topics.	**Feminism** In this lesson students will look at what functionalism is again and gain some more background information which will aide their learning for future topics.	**Interactionism** In this lesson students will look at what functionalism is and gain some more background information which will aide their learning for future topics.
RSCS	**Stress and well being** In this lesson we will be exploring what 'stress' and 'wellbeing' are. We will be learning why it is important to maintain our wellbeing and minimise stress and ways in which we can do this.	**Working from home during lockdown** In this lesson, we will explore how to effectively work from home during lockdown, by considering how to tackle some of the main difficulties experienced when working from home.	**Online safety and social media** In this lesson we will be exploring how to stay safe online, specifically on social media websites. We will be learning why it is important to consider what you are posting online and potential consequences of not doing this.	**Grooming** In this lesson, we will investigate what 'grooming' is and why it is dangerous. To understand this, we will look into the different types of grooming and explore a real-life case of grooming.	**Cyber Bullying** In this lesson, we'll explore what cyber bullying is and the different types of cyber bullying that can be experienced.	**Money & Budgeting** In this lesson we look into the topic of money and budgeting including investigating key terms linked to this topic.

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PE	**Circuit training** To be able to explain the advantages and disadvantages to circuit training Students will get a content recap, followed by mini task, active task and self-marking quiz	**Fartlek** To be able to identify the differences between Fartlek and continuous training. Students watch to descriptive videos, complete workout and complete self-marking quiz.	**Heart Rate** To be able to identify the long- and short-term effects of exercise on your heart rate. Students watch the PowerPoint, complete the home workout and complete the assignment set on teams.	**HIIT** Describe what HIIT Training is and complete a HIIT workout. Students will get a content recap, followed by mini task, active task and self-marking quiz	**Pyramid** To be able to describe what pyramid training is and how it can be used as part of a health and fitness programme. Students to watch the PowerPoint, complete the workout and the self marking quiz.	**Warm up and cool down** To be able to describe the psychological and physiological changes that occur in the body. Students watch to descriptive videos, complete work out and complete self-marking quiz.