



<b>Synopsis</b>	
Students will develop an understanding of how technology is used to create music in the 21st century. They will investigate the key figures and events that have revolutionised the music industry and helped shape the way music is represented. Students will use a variety of computer science techniques to explore how music can be manipulated and shaped using software. By the end of the project, students will produce a piece of digitalised music.	
<b>Key content – knowledge and skills</b>	<b>National Curriculum aims and subject content descriptors</b>
<p><b>Computing:</b> Knowledge of how technological devices are used to create and manipulate music to achieve alternative sound output. Knowledge of how algorithms are used to solve problems using flowcharts. Students will apply coding techniques using block programming language to develop skills in rearranging sound through the use of music software. Knowledge of how sound is represented digitally in binary.</p> <p><b>Music:</b> Knowledge of the significance of music and how it has evolved overtime from the pre-historic eras to the present time and how it has and continues to influence civilisations and cultures. Identify musical elements such as devices, tonalities, structures, styles, genres and tempo in music genres. Develop skills in notation reading and writing and an understanding of how contextual influences effect music.</p>	<p><b>Computing:</b> COa1; COa2; COa3; COla4 COsc1; COsc2; COsc3; COsc5; COsc6; COsc7</p> <p><b>Music:</b> MUa1; MUa2; MUa3 MUsc2; MUsc3; MUsc4; MUsc6</p>
<b>Key assessment points</b>	
<p>Week 1: Pupils will produce an analysis of several music genres and discuss the style of music (musical elements), the musicians that partake in this genre and why they are successful and list examples of songs and reasons why the genre is liked by audiences.</p> <p>Week 2: Students to Write an essay to answer the question: 'why is technology important in the process of making music'. They will assess the hardware and software technology used to make music, analyse why technology is much relied upon by the music industry and how other factors have seen the popularity of music technology increase over time.</p> <p>Week 4: Produce a time line of the history of music technology and how it has evolved overtime. Identify key dates in time when technology was used in music.</p> <p>Week 5: Answer a past exam question to provide opportunity for extended writing.</p> <p>Week 6/7: Final project submission of final music piece. Final project test.</p>	
<b>Out of lesson learning</b>	
<p>A full day trip to a recording studio for students to be exposed to an environment where music is produced. Students will gain first-hand experience in understanding how technology, software and devices are used to create music from writing lyrics to recording sound. Alternatively, pupils will attend the Horniman Museum to explore the history of music instruments to learn how they vary in different continents.</p>	
<b>Resources</b>	
<p>Activity sheets to support learning and assess pupils understanding. Help-sheets and guidance notes for completing assessment tasks and requirements for the final report. The use of computers to access coding software, madewithcode (music mixer and beat) and GarageBand, preinstalled on Mac books, to create the final music piece for the project. The use of music notation worksheets. The use of hardware to record sound. Exam practice question paper.</p> <p><a href="https://www.madewithcode.com/projects/music/">https://www.madewithcode.com/projects/music/</a></p>	

## Medium term plan

<b>Christian ethos</b>
Both the curriculum and group work should develop in students a responsible moral attitude, for example embracing differences in cultures in terms of musical styles and musical preferences. Explore how Christian/Catholics used music to express their love for God.
<b>British values</b>
Students will develop an understanding of the importance of the rule of law when studying British laws governing copyright and fair use act. The project will also explore the importance of freedom of speech and expression through music and technology.

## Weekly overview

Week	Focus
1	<p>Introduction to Tune in programmer: Explain the outcome of the project and overall aim. Explore the history of blues and Jazz music and how it contributed to the emergence of other music genres. Understand the relationship between music and civilizations and how culture and tradition influence music. Pupils will define 'music' and take a quiz to establish how much they know about music. They will explore different music genres investigate how each genre was established and how it impacted civilization as at the time of its emergence.</p> <p>Trip to recording studio or Horniman museum to understand how technology is used to create music. Alternatively, to explore the evolution of musical instruments from around the world.</p> <p>For homework, pupils will write an analysis of five music genres to assess their popularity, influence style.</p>
2	<p>The history of music: Pupils will explore the history of music from the pre-historic, ancient, medieval, renaissance, baroque, romantic and classical era that led to music in the 20<sup>th</sup> century. Pupils will listen to music and instruments from the eras and explain the style and sound.</p> <p>Pupils will also develop an understanding of the earliest known forms of musical expression and compare the efficiency of instruments to today's instruments.</p> <p>Pupils will write an essay to answer the question: 'Why is technology important in the process of making music?'.</p>
3	<p>Writing Music: pupils will learn about rhythmic notation and pitch notation.</p> <p>Computing/Music: Pupils will learn about music sampling and why it is widely used by musicians. They will also learn how sampling is performed digitally and apply the concept through challenge worksheets. Pupils will learn about binary and denary numbers to understand how computers process information, in particularly sound. They will learn to convert binary into denary numbers and vice versa.</p> <p>Pupils will learn about algorithms and how they are used to solve problems through worked examples.</p>

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	<p>Assessment: pupils will complete a mini test to test their understanding of binary and algorithms.</p> <p>Pupils will use madewithcode to create an audible sound using block coding.</p>
4	<p>Pupils will begin to plan their final music assessment and will be given a breakdown of the requirements and what they will be assessed on. They will begin to think about a theme to base their music on and begin to write their lyrics. Pupils will be given a breakdown of the final report requirements and what they will be expected to produce to form their report:</p> <ul style="list-style-type: none"><li>- Well written lyrics based on their chosen theme</li><li>- A flowchart to demonstrate how they created their final music piece</li><li>- Screen shots to demonstrate how they have applied different features of GarageBand</li><li>- The final music piece</li></ul> <p>GarageBand: Pupils will begin to familiarise themselves with GarageBand by exploring the music application and begin to create a beat.</p> <p>Homework: pupils will produce a time line of the history of music and how it evolved overtime from ancient times to the present day. Identify key points in time when technology was used in music.</p> <p>Pupils will answer an exam questions from a Computer Science past peper.</p>
5	<p>Pupils will continue to work on their GarageBand music and will be provided with assistance. They will be shown how to use GarageBand features to accomplish what they need to in order to create their music. Pupils will be given guidance on how to write lyrics, take screen shots and organise their final report.</p> <p>Pupils will be given a revision session to advise on topics to focus on for the test.</p> <p>Recording: Pupils will take turns recording their vocals.</p>
6	<p>Make final additions to music pieces. Pupils to present their work and explain how they have applied all the concepts discussed in the project to create their music. Pupils will be given the opportunity to perform their music live to meet the project specification of an omega grade.</p> <p>Assessment: Pupils will sit a 1 hour test to assess their understanding of the project.</p> <p>Poster: Pupils will create a poster to sum up the project and what they have learnt.</p>