

	Music	Science	Design Technology	Computing	Geography
Programme of Study	<p>Improvise and compose music for a range of purposes using the interrelated dimensions of music.</p> <p>Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians.</p> <p>Use and understand staff and other musical notations.</p> <p>Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression.</p> <p>Improvise and compose music for a range of purposes using the interrelated dimensions of music.</p> <p>Improvise and compose music for a range of purposes using the interrelated dimensions of music.</p>	<p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>Use test results to make predictions to set up further comparative and fair tests.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	<p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).</p> <p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p>	<p>Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.</p>

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Year 5 Learning Intention (skills)	<p>Create a composition that combines layers of sound and vocalisations and shows an awareness of pitch, tempo, rhythm, melody and dynamics</p> <p>Use descriptive words and relevant musical vocabulary when talking about the elements of live or recorded music within a piece.</p> <p>Use musical notation to perform and write music</p> <p>Compose and perform a short piece of music, using a range of musical techniques, including an ostinato.</p> <p>Create a composition that combines layers of sound and vocalisations and shows an awareness of pitch, tempo, rhythm, melody and dynamics.</p> <p>.</p>	<p>Compare and group everyday materials by their properties, including hardness, solubility, transparency, conductivity (electrical and thermal) and magnetism.</p> <p>Separate mixtures by filtering, sieving and evaporating.</p> <p>Use relevant scientific vocabulary to report on their findings, answer questions and justify their conclusions based on evidence collected, identify improvements, further questions and predictions.</p> <p>Explain, following observation, that some substances (solutes) will dissolve in liquid (solvents) to form a solution and the solute can be recovered by evaporating off the solvent.</p> <p>Within a group, decide which observations to make, when and for how long, and make systematic and careful observations, using them to make comparisons, identify changes, classify and make links between cause and effect.</p> <p>Plan and carry out a range of enquiries, including writing methods, identifying variables and making predictions based on prior knowledge and understanding.</p>	<p>Use electrical circuits of increasing complexity in their models or products, showing an understanding of control.</p> <p>Use pattern pieces and computer-aided design packages to design a product.</p>	<p>Apply computing skills to create content using unfamiliar programs or apps.</p> <p>Design, write and debug simple sequences of instructions (algorithms), including IF, THEN and OTHERWISE commands, to decide if something is true or false.</p>	<p>Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy. View progression</p>

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Year 5 Knowledge	<p>Effective compositions involve using a variety of instruments, different pitches, repeated and contrasting rhythms, melodies and harmonies and dynamics.</p> <p>Musical vocabulary includes pitch, rhythm, pulse, duration, structure, dynamics, harmony, tempo, timbre and texture.</p> <p>In musical notation, time signatures tell musicians how many beats are in a bar. For example the time signature 4/4 shows that there are four crotchet beats in a bar. In a piece of music written in 4/4, there may be eight quavers, four crotchets, two minims, one semibreve or a combination that add up to the total of four crotchet beats.</p> <p>An ostinato is a short melody that is played over and over again. A rhythmic ostinato is a short, constantly repeated rhythmic pattern. Other musical techniques are pitch (high or low), tempo (speed) and dynamics (loudness).</p> <p>Effective compositions involve using a variety of instruments, different pitches, repeated and contrasting rhythms, melodies and harmonies and dynamics.</p>	<p>Materials can be grouped according to their basic physical properties. Properties include hardness, solubility, transparency, conductivity (electrical and thermal) and magnetism.</p> <p>Some mixtures can be separated by filtering, sieving and evaporating. Sieving can be used to separate large solids from liquids and some solids from other solids. Filtering can be used to separate small solids from liquids. Evaporating can be used to separate dissolved solids from liquids.</p> <p>The results are information, such as measurements or observations, that have been collected during an investigation. A conclusion is an explanation of what has been discovered using evidence collected.</p> <p>Some materials (solutes) will dissolve in liquid (solvents) to form a solution. The solute can be recovered by evaporating off the solvent by heating.</p> <p>An observation involves looking closely at objects, materials and living things. Accurate observations can be made repeatedly or at regular intervals to identify changes over time.</p> <p>A method is a set of clear instructions for how to carry out a scientific investigation. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding.</p>	<p>Electrical circuits can be controlled by a simple on/off switch, or by a variable resistor that can adjust the size of the current in the circuit. Real-life examples are a dimmer switch for lights or volume control on a stereo.</p> <p>A pattern piece is a drawing or shape used to guide how to make something. There are many different computer-aided design packages for designing products.</p>	<p>Using prior knowledge and experience of computing skills can be applied to create content using unfamiliar programs or apps.</p> <p>Sequences of instructions (algorithms) that contain IF, THEN and OTHERWISE statements are called selections. The computer will complete operations based on whether the conditions of these selections are met or not.</p>	<p>Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.</p>