

Upper Key Stage 2 - computing



Year 5

ijam	iprogram	ioffice
<ul style="list-style-type: none"> • To be able to know where Hip-Hop originated from. • To be able to explain what sampling is. • To be able to know what a hook is and why it is important to a song. • To be able to understand that rap is a vocal style first used in Hip-Hop music. • To be able to know the two different types of Hip-Hop: Nu Skool and Old Skool. • To be able to know what a hype man is and can explain their role. • To be able to write a rap stemming from personal experience. • To be able to know the advantages and disadvantages of using samples. • To be able to explain why good raps are inspired by personal experiences. • To be able to perform their rap to the class. 	<ul style="list-style-type: none"> • To be able to create basic shapes using Blockly on Hopscotch. • To be able to understand that programs can have issues called bugs. • To be able to know that debugging is removing the bugs and therefore fixing algorithms. • To be able to debug three out of five of the provided programs. • To be able to understand conditionals and that they are needed to create different types of controls to create games. • To be able to debug the Sphero code and run the program successfully. • To be able to know that a variable allows a number to change while a program is running. • To be able to create controls for a main character in an Endless Runner type game. • To be able to debug all five of the provided programs. • To be able to create a complex version of an Endless Runner game with lives, scores and more features. 	<ul style="list-style-type: none"> • To be able to know what a cell is on a spreadsheet. • To be able to use formulae to solve simple maths equations. • To be able to create a chart and a graph. • To be able to use the filter tool in a spreadsheet. • To be able to group and organise data. • To be able to know the alternative symbols for multiplication and division and use them in simple formulae. • To be able to add a total column. • To be able to use formulae to calculate the cost of a movie. • To be able to use the auto-sum tool with the fill tool to quickly complete maths equations. • To be able to create multiplication tables.
<p>Hip-hop, genre, Hook, mixing, fade, rap, old school, nu school</p>	<p>Algorithm, conditional, variable, David, branch, real-world programming</p>	<p>Workbook call back formula, spreadsheet, total, cells, column, inputting, rows, data, filter</p>

Upper Key Stage 2 - computing



Year 5

icreate	icommunicate	itech
<ul style="list-style-type: none"> • To be able to explain what 2D animation is. • To be able to understand how squash and stretch changes how something looks when it is animated. • To be able to draw 3D shapes without assistance. • To be able to explain confidently how to create a flip-book animation. • To be able to what vector art is. • To be able to change a motion path by editing the nodes. • To be able to animate a character spinning in a circle. • To be able to explain the difference between animation and motion paths. • To be able to animate facial expressions onto their character. • To be able to change how extreme they use the squash and stretch technique to visually represent the weight of different objects. 	<ul style="list-style-type: none"> • To be able to understand the role branding plays when selling a product or service. • To be able to explain what a tagline is. • To be able to know what information is included in a radio advert. • To be able to identify different ways they can distribute their work. • To be able to create a TV advert while working to a brief. • To be able to explain the differences between a tagline and slogan. • To be able to explain the advantages of different distribution methods. • To be able to create a sonic logo without assistance. • To be able to add their visual branding onto their advertisements in post-production. • To be able to discuss the factors that need to be considered before choosing the right method of advertisement. 	<ul style="list-style-type: none"> • To be able to name industries where robotics have helped increase productivity. • To be able to know that Java and Blockly are programming languages. • To be able to look at simple code and explain what it will do. • To be able to code a simple presentation guide path. • To be able to identify errors in their code after it has failed.
<p>Flipbook, squash and stretch, 2D, composite, hand, drawn, motion, pathways, vector art</p>	<p>Branding, brief, design, brief, jingle, visual, branding, sonic, branding, marketing, target, marketing, select taxing, distribution, slogan, customer, consumer</p>	<p>Robotics, industry, external device, pitch, yaw, roll, efficiency, gyroscope, motor, ballast, accelerate, microprocessor, conditionals, interpret</p>

Upper Key Stage 2 - computing



Year 6

iJam	iProgram	iOffice
<ul style="list-style-type: none"> To be able to explain the difference between sampling and remixing. To be able to understand that beatboxing isn't confined to mimicking drum sounds. To be able to what a vocal stem is. To be able to name three different ways to remix a song. To be able to remix a song using sounds from a specific genre. To be able to remix two songs by playing them at the same time, with the same tempo. To be able to create a beatbox consisting of five or more layers all in time with each other. To be able to use smart instruments to play the chords of the song they are remixing. To be able to remix the drop of one song to play as the build of another song ends. To be able to use three different remixing methods in their final projects. 	<ul style="list-style-type: none"> To be able to know the difference between Blockly and Swift. To be able to code simple geometric shapes on Hopscotch. To be able to understand how the conditional 'When is Tapped' works. To be able to include the feature 'Last Touch' into their code. To be able to understand how variables and the function 'Check Once If' are linked. To be able to write code using at least two functions to control an external object. To be able to write at least two functions in JavaScript. To be able to code a melody using various rhythms and notes. To be able to code a 'Rock, Paper, Scissors' program with two characters. To be able to code an external robot using JavaScript to successfully complete a physical course. 	<ul style="list-style-type: none"> To be able to define the word extrapolation. To be able to know what a data bank is and why they are useful. To be able to know what CV stands for and why it is used. To be able to understand why the information in a CV has to be true. To be able to explain what a job advert is and what is included in it. To be able to create their own CV whilst following a template. To be able to add a header and footer to their CV. To be able to back up decisions based on data within the data bank. To be able to edit their CV to suit their specific style. To be able to list the consequences someone might face if the contents of their CV are false.
<p>Genre, filters, mixing, fade, instrumentation, remix, beatboxing, tempo</p>	<p>Blockly, swift, function, algorithm, conditional, last touch, create a clone, variable, check once if,, JavaScript</p>	<p>CV, extrapolate, build, order, hyperlink, data, employer, presentation, candidate, employee, data, bank</p>

Upper Key Stage 2 - computing



Year 6

icreate	icommunicate	itech
<ul style="list-style-type: none"> • To be able to name different crew roles on a film set. • To be able to use master scene editing. • To be able to define and create a gif. • To be able to define cinemograph. • To be able to manipulate 3D models on all three axes. • To be able to import their work into a galloping gallery. • To be able to use master scene angles in their project. • To be able to create gigs with timed animations included. • To be able to code text in their work. • To be able to animate a storyboard. 	<ul style="list-style-type: none"> • To be able to know what units are used to measure graphics and colour. • To be able to explain what a design brief is and why it is used. • To be able to know what a WYSIWYG web design program is. • To be able to clearly structure, write and send an email. • To be able to create a game whilst following a design brief. • To be able to explain how HTML is used to code websites. • To be able to explain the advantages and disadvantages of HTML against WYSIWYG. • To be able to effectively implement the Four C's when designing their game. • To be able to change the colour and font of text without assistance. • To be able to discuss the pros and cons of technology in graphic design. 	<ul style="list-style-type: none"> • To be able to name industries where robotics have helped increase productivity. • To be able to know that Java and Blockly are programming languages. • To be able to look at simple code and explain what it will do. • To be able to code a simple presentation guide path. • To be able to identify errors in their code after it has failed.
<p>Camera angles, master scene, storyboard, content, GIF, long/mid/close-up shot, fast cutting, multimedia, cinemograph</p>	<p>HTML, pixels, RGB colour, WYS/WYG, design, brief, foresees, head of banner, navigation, bar, target, audience, market research, focus group</p>	<p>Robotics, industry, external device, pitch, yaw, roll, efficiency, gyroscope, motor, ballast, accelerate, microprocessor, conditionals, interpret</p>