Victoria Lane Academy ICT Curriculum Overview

Digital Footprint

Victoria Lane Academy ICT Curriculum Overview—Year 1 and Year 2
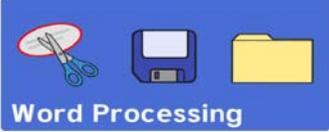
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Word Processing Skills Children will learn basic word processing skills including: how to type with two hands, use the shift, space and enter key properly, and edit work by using the backspace, delete and arrow keys.	Computer Skills Children will learn basic computer skills. Children will learn how to use a computer mouse or a trackpad and how to switch on and shut down a computer. They will apply their mouse or trackpad skills in a series of challenges.	Painting Children will use a simple painting program to paint with different colours and brushes, create shapes, fill areas, undo and redo and add text.		Programming with ScratchJr This is an introduction to computer programming. Scratch Junior begins to develop a sense of creating, debugging and logical reasoning, which are required for further programming later on in school.	Using and Applying Children are given an opportunity to use the skills they have developed during the year. This will concentrate primarily on Word Processing, Computer Skills and Painting activities
Year 2	Presentation Skills **This unit focuses on important computer skills needed for safe and effective computer use and introduce some further skills concerning the use of folders, searching for files and printing. Children will learn the skills needed to create a simple presentation.**	Preparing for Turtle Logo **This unit has two main aims, to enable children to create, test and debug algorithms, and preparing children to use the language of Turtle Logo. Children will use Be-Bot robots to secure their understanding.**	Computer Art **This unit will build on Year 1 painting skills. The children will have the opportunity to learn about reproducing the painting styles of great artists using computer programs.**	Programming Turtle Logo and Scratch **This unit uses basic commands in Logo to move and draw using the turtle on screen, and then further develop algorithms using the "repeat" command. These skills are then developed by teaching children to create algorithms in Scratch..**	Using the Internet **This unit introduces children to using the Internet safely and with a purpose. Children are shown how to search the Internet using one word; how to make sense of the returned results; how to use "for kids" to return more suitable results; how to follow links and return to the search results.**	Using and Applying **Skills taught throughout the year are reinforced and linked them together with a common theme e.g. Castles. Children are given the opportunity to use their skills in a new context and apply them within software they are familiar with in order to complete a final project.**

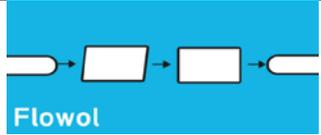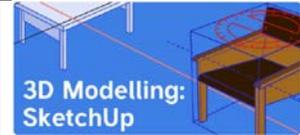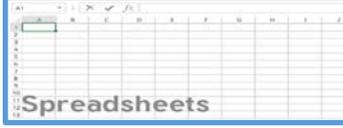# Victoria Lane Academy ICT Curriculum Overview—Year 3 and Year 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Word Processing** — This unit builds on the skills learned in previous years. Children will learn to use various features for formatting text. These lessons include a home learning task, challenge cards, posters and help cards.	**Programming Turtle Logo and Scratch** — Following on from Year 2 units, children use the basic commands in Logo to move and draw using the turtle on screen, and then use "repeat" command. These skills are then developed by teaching children to create algorithms in Scratch using a selection of blocks.	**Drawing and Desktop Publishing** — Children will learn to draw, order, group and manipulate objects to make a picture. They will also learn to evaluate and create effective layouts, combining text and images.	**Internet Research and Communication** — This unit is focused on Internet research. Children will the importance of word order when searching. They will also start to examine the results returned and how to distinguish between a reliable and unreliable website or webpage	**Presentation Skills** — Children will develop their skills in the use of presentation software. New skills will include the use of themes, animations and hyperlinks as well as adding audio and video.	**Using and Applying Skills** — Children will apply their skills working in a group to develop a presentation about our school. Each week will re-visit elements taught throughout the year with extra challenges for some!
Year 4	**Scratch: Questions & Quizzes** — Children will use Scratch to write quizzes by combining questions. While specific skills in Scratch are taught, the unit aims to teach children the wider programming skills of solving problems, testing, debugging, improving and evaluating.	**Programming Turtle Logo** — This Programming Turtle Logo unit will teach children how to create an algorithm to program a procedure. Children are reminded of the basic commands and how to repeat alongside a variable. They will program their own procedures, use colour and set the position of the turtle using coordinates.	**Animation** — Children will learn the basic principles and techniques of simple animation. Beginning with the history of animation, children research some of the early animation techniques. The lessons then compare a range of animation software and children incorporate the different techniques into their own animation.	**Photo Stories** — Using existing images or photos taken in advance, children spend three lessons learning skills in Publisher and a further three lessons using Movie Maker. The intended finished result is to present a 'photo story' using their still images.	**Word Processing** — This unit builds on the skills learned in previous years. Children will learn to use various features for formatting text. These lessons include a home learning task, challenge cards, posters and help cards.	**Using and Applying Skills** — Children are challenged to create their own cartoon character and then write and create a visual story using the skills learned during the year.

Victoria Lane Academy ICT Curriculum Overview—Year 5 and Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	**Scratch: Developing Games** This unit builds on the previous unit in Year 4 (Questions and Quizzes) using Scratch to build and edit algorithms for simple games. The unit is designed to help children develop their skills in writing their own algorithms as well as editing and debugging existing codes.	**Flowol** Children are introduced to flowcharts and how they are used to program and control devices using Flowol software, which includes simulations of real life automatic computer systems. Children are taught to build sequences of instructions, control multiple outputs and structure algorithms with decisions and inputs.	**Radio Station** This unit allows children to use software and digital devices for recording sound. Based around the theme of a Radio Station, it is designed to encourage a creative approach that includes interviewing, making adverts and using jingles. Opportunities are included for children to present, listen, review and evaluate their own content.	**Internet Research and Webpage Design** Children will learn how use to some of the other advanced search features in Google, such as fill in the blanks; and how to create a webpage with a layout of their choosing which includes images and links to other webpages. Children are encouraged to consider related e-safety issues such as use of logins and passwords, and the use of images and photos	**3D Modelling: SketchUp** In this unit the children extend their drawing skills to create 3D models based on using the software SketchUp Make. Children will learn how to create simple and complex 3D models. They will be able to add detail and manipulate 3D models using a variety of tools.	**Using and Applying Skills** Children are challenged to use the internet to research the ultimate bedroom for a 10 year old. They must then use software to design and present that information to their peers.
Year 6	**Scratch: Animated Stories** The unit is designed to help children in continuing to develop their skills in writing their own algorithms as well as editing and debugging existing codes. New skills are introduced to structure code and animate characters and scenes, gradually building to create a short animated story.	**Website Design** The children will have the opportunity to learn how to create an entire website by first researching what makes a good website. They will create a sitemap which will enable them to create a multi-page website. They will learn to link pages internally and externally.	**Spreadsheets** Children are given an understanding of spreadsheets and how they can be used. Initially children learn skills in formatting and entering specific formulas before using spreadsheets to solve specific problems. Examples include number calculations, sports tables, test scores and budgeting.	**Kodu Programming** This unit introduces children to programming with Kodu, a simple visual programming language made specifically for creating games. Kodu is a very visual package allowing quick and effective development of games	**Film-Making** This aim of this unit is to allow children to explore various aspects of film-making. In doing so, they must choose and use appropriate software in order to complete tasks such as writing a script, researching information, filming and editing.	**Using and Applying Skills** Children are challenged to research computer games/apps, design and code their own game using Scratch or Kodu and then promote it using appropriate software.