Streetsbrook Infant & Early Years Academy

Computing Curriculum Overview

Year 2

The computing curriculum across KS1 is supported by Teach Computing created by the National Centre for Computing Education (NCCE). Every lesson starts with an 'Izzy iPad' question or scenario. During this time children and class teachers discuss online safety and promote appropriate use of technology.

Autumn 1	**Computing systems and networks** **Information Technology around us.** • Identifying IT and how its responsible use improves our world in school and beyond. • How is information technology (IT) being used for good in our lives? • Explore how IT benefits society in places such as shops, libraries, and hospitals. • Discussing the responsible use of technology, and how to make smart choices when using it
Autumn 2	**Creating media** **Digital photography** • Capturing and changing digital photographs for different purposes. • Learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. • Use this knowledge to recognise that images they see may not be real
Spring 1	**Programming A** **Robot algorithms** • Creating and debugging programs, and using logical reasoning to make predictions. • Develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. • Use given commands in different orders to investigate how the order affects the outcome • Develop artwork and test it for use in a program. • Design algorithms and then test those algorithms as programs and debug them.
Spring 2	**Data and information** **Pictograms** • Collecting data in tally charts and using attributes to organise and present data on a computer. • This unit introduces the learners to the term 'data'. Learners will begin to understand what data means and how this can be collected in the form of a tally chart. • Learn the term 'attribute' and use this to help them organise data. • Present data in the form of pictograms and finally block diagrams.

	• Use the data presented to answer questions.
Summer 1	**<u>Creating media</u>** **Digital music** • Use a computer as a tool to explore rhythms and melodies, before creating a musical composition. • Explore how music can make them think and feel. • Make patterns and use those patterns to make music with both percussion instruments and digital tools. • Create different rhythms and tunes, using the movement of animals for inspiration. • Share creations and compare creating music digitally and non-digitally
Summer 2	**<u>Programming B</u>** **Programming quizzes** • Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. • Recap learning from the Year 1 Scratch Junior unit ‘Programming B - Programming animations’. • Begin to understand that sequences of commands have an outcome and make predictions based on their learning. • Use and modify designs to create their own quiz questions in ScratchJr and realise these designs in ScratchJr using blocks of code. • Evaluate their work and make improvements to their programming projects.