Computing Curriculum Project Overview

Cycle A & B			
Phase	**Autumn**	**Spring**	**Summer**
EYFS	In EYFS pupils are taught: • About technology in the home • Programming of Beebots • Using an IWB • Use of Internet for information gathering and internet safety		
Year 1	**1) Computing systems and networks – Technology around us** Recognising technology in school and using it responsibly. Software – Paint	**2) Creating media – Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally. Software – Microsoft Paint	**3) Data & information – Grouping data** Exploring object labels, then using them to sort and group objects by properties. Software – Microsoft Powerpoint **4) Programming – Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes. Software – fixed-movement floor robot
Year 2	**1) Computing systems and networks – IT around us** Identifying IT and how its responsible use improves our world in school and beyond. Software – Microsoft Powerpoint	**2) Creating media – Digital photography** Capturing and changing digital photographs for different purposes. Software – iPad app	**3) Data & information – Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer. Software – Purplemash Pictogram **4) Programming – Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions. Software - fixed-movement floor robot

Computing Curriculum Project Overview

Cycle A & B			
Phase	**Autumn**	**Spring**	**Summer**
Year 3	**1) Computing systems and networks – Connecting Computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	**2) Creating media – Stop-frame animation** Capturing and editing digital still images to produce a stop-frame animation that tells a story.	**3) Data & information – Branching Databases** Building and using branching databases to group objects using yes/no questions. **4) Programming – Sequencing sounds** Creating sequences in a block-based programming language to make music.
Year 4	**1) Computing systems and networks – The Internet** Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	**2) Creating media – Audio Production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**3) Data & information – Data Logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation. **4) Programming – Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5	**1) Computing systems and networks – Systems & searching** Recognising IT systems in the world and how some can enable searching on the internet.	**2) Creating media – Video Production** Planning, capturing, and editing video to produce a short film.	**3) Data & information – Flat-file databases** Using a database to order data and create charts to answer questions. **4) Programming – Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.
Year 6	**1) Computing systems and networks - Communication and collaboration** Exploring how data is transferred by working collaboratively online.	**2) Creating media – Web-page creation** Designing and creating webpages, considering copyright, aesthetics and navigation.	**3) Data & information – Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data. **4) Programming – Sensing movement** Designing and coding a project that captures inputs from a physical device.