St Robert Southwell Catholic Primary School
Aiming For Excellence - Being The Best We Can Be

Progression of skills in Computing

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Programming and Problem solving	**Pupils will be able to:** 1. Move a programmable toy in different directions, by giving and following instructions 2. combine commands to follow a route 3. explore outcomes when a instructions are given in different orders 4. explain what an algorithm is 5. describe and write algorithms to complete specific tasks 6. describe how non-digital algorithms be used, e.g. a set of instructions in maths or literacy for a specific purpose Programme/Recourses: Bee-Bots	**Pupils will be able to:** 1. plan out and enter a sequence of commands to carry out specific tasks 2. reorder a sequence of instructions and correct errors in programs (debug) 3. problem solve and correct errors to achieve the outcome correctly 4. test and correct a set of give instructions 5. explain what a program is 6. predict the outcome of a program Programme/Recourses: Scratch	**Pupils will be able to:** 1. Refine a program by using the repeat command 2. Create a procedure (group of commands) to do a specific task, draw a specific shape 3. Solve problems by breaking them into smaller parts 4. use programming software / apps to create procedures and use within a longer program 5. plan out program and break into smaller steps when tackling the structure, incorporating procedures Programme/Recourses: Scratch	**Pupils will be able to:** 1. use if…then command within a series of instructions 2. test existing programs to see how they could be improved 3. investigate existing programs, evaluating them and consider how they could be improved 4. write a program for a specific purpose, incorporating features such as inputs, repetition and procedures 5. Design and write a program / game / animation for a given purpose including specific programming features Programme/Recourses: Scratch	**Pupils will be able to:** 1. plan and test my algorithms and programs, detecting and correcting errors as needed 2. use variables in programs 3. design and write a program that controls or simulates physical systems and sensors e.g. the light goes on when the light level drops, or the alarm goes off when a burglar opens the door Programme/Recourses:	**Pupils will be able to:** 1. design and create a game, app and / or model, incorporating variables and different forms of input and output 2. test, debug and modify a program to improve it Programme/Recourses: Ipads
Digital Literacy and Research	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. use letters, basic punctuation, spacebar and enter key to type words and sentences quickly 2. use backspace to make corrections 3. use shift key for punctuation *Using the internet to research:* 1. explore a website using buttons, menus and hyperlinks 2. use the 'back' button 3. read words, look at pictures and watch videos on a website to find information	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. edit and improve my work by changing, adding or removing words 2. change the font size, colour and style to change my work *Using the internet to research:* 1. find out facts by navigating websites 2. know each website has a unique address 3. navigate to a website via favourites and typing in address 4. know not all the information found on the internet will be accurate or useful 5. use a search engine to find facts using key word search	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. use cut, copy and paste to reorder content 2. use and resize graphics within my work 3. use spell check to aid my writing 4. type text and insert images onto pages 5. add text effects and move items around to find the best layout *Using the internet to research:* 1. type in a URL to find a website 2. search online for images and information safely 3. how to talk about the reliability of information on the internet	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. use different layouts and effects (such as text box, columns, tables, justification, borders, background colour) to refine and improve my work 2. add a background colour to improve my work 3. add slide transitions and animation effects *Using the internet to research:* 1. use more complex search criteria to narrow down my search 2. know that not all websites are accurate and can check information using a different site 3. make notes from information found on websites to present my findings 4. know what plagiarism is and when I can use the work of others	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. develop consistency across the document 2. add multimedia elements, e.g. sounds, animation 3. trigger animations or link to other slides when objects are pressed *Using the internet to research:* 1. know the information found on some sites will be biased 2. know that images and text found on websites is subject to copyright 3. know how to credit the use of websites in my work, and why this should be done	**Pupils will be able to:** *Using Word Processor or PowerPoint:* 1. discuss and evaluate documents, and make amendments as needed 2. create a consistent design for presentation, and present to others *Using the internet to research:* 1. understand how computer networks work, including the internet 2. understand the difference between the internet and an internet service, e.g. the world wide web, VOIP 3. use search engines effectively, and I know how search results are selected and ranked

Following Jesus' footsteps and inspired by St Robert Southwell we work hard, aim high and treat everyone with honesty and gentleness.

E-Safety	Pupils will know:	Pupils will know:	Pupils will know:	Pupils will know:	Pupils will know:	Pupils will know:
	1. that they need to follow rules to keep safe online 2. what private information is and that they shouldn't share it online 3. what to do if they come across inappropriate content "If in doubt, click out"	1. what to do if I find something inappropriate online, & where to go for help know how to stay safe by going to appropriate websites 2. that the messages or images I put online leaves a trail 3. how to behave safely and respectfully online 4. what to do if they come across inappropriate content "If in doubt, click out"	1. how to present the information and share it with others 2. how to send and reply to online messages, such as email, respectfully 3. how to add and open attachments 4. why we need to keep passwords safe and secure 5. how to talk about the reliability of information on the internet 6. know not to open messages and attachments from strangers 7. what to do if they come across inappropriate content "If in doubt, click out"	1. how and why you need to keep personal information private 2. to display yourself appropriately online, e.g. avatar, code name 3. how to act appropriately & respectfully online 4. how to deal with cyberbullying 5. know what plagiarism is and when I can use the work of others 6. what to do if they come across inappropriate content "If in doubt, click out"	1. that information I put online leaves a trail, or digital footprint 2. how and why to create secure passwords for online accounts 3. what spam is, and how to deal with it 4. know the information found on some sites will be biased 5. know that images and text found on websites is subject to copyright 6. know the information found on some sites will be biased 7. different ways of reporting concerns about content	1. that information I put online leaves a trail, or digital footprint 2. how and why to create secure passwords for online accounts 3. what spam is, and how to deal with it 4. that some websites have age restrictions, and why these might be in place 5. how to describe the opportunities computer networks and the internet offer for communication and collaboration 6. know that images and text found on websites is subject to copyright 7. the different ways to report concerns about content & contact
Using IT beyond Across the curriculum / Creating content	Taking photos and reviewing them Using a paint programme – click and drag Mapping using Bee-Bots	Using word to make a poster – insert text and a picture Make a video review Collect data	Using Publisher to make a booklet or leaflet Research safely & reliably online	Using PowerPoint to make a presentation Send and receive email	Using Excel to make a chart/graph using data collected through research Make a soundtrack	Make a video advert Record a podcast