Computing – Year 1

Computing intent		Vocabulary	
Aims	• can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems • can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems • are responsible, competent, confident and creative users of information and communication technology.	technology, computer, mouse, trackpad, keyboard, screen, double-click, typing paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program.	
	Knowledge and skills	**Useful Units**	**Outcomes**
Digital Literacy	• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. • recognise common uses of information technology beyond school	Technology around us Digital painting Moving a robot	Understand technology and how it can help us in our everyday lives. Use a range of tools to create a digital painting Program a robots using individual commands
Information Technology	• use technology purposefully to create, organise, store, manipulate and retrieve digital content	Technology around us Digital painting Moving a robot	**Cross-curricular links** **Education for a Connected World links** Managing Online Information • I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened. Self-image and Identity • If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help. Health, well-being and lifestyle • I can explain rules to keep myself safe when using technology both in and beyond the home. Copyright and ownership
Computer Science	• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • use logical reasoning to predict the behaviour of simple programs • create and debug simple programs	Technology around us Digital painting Moving a robot	

			• I can save my work under a suitable title or name so that others know it belongs to me (e.g. filename, name on content). **Art** • to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination **Maths** **Measure** ● sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] **Geometry - position and direction** ● describe position, direction and movement, including whole, half, quarter and three-quarter turns