Computing - Year 2

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.	Information technology (IT), computer, barcode, scanner/scan instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing	
	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	IT arounds us Robot algorithms Pictograms	Developed understanding of technology and how it can help us in our everyday lives Design and program robots using sequenced instructions and given commands Collect, organise and present data electronically
Information Technology	• use technology purposefully to create, organise, store, manipulate and retrieve digital content	IT arounds us Robot algorithms Pictograms	**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	IT arounds us Robot algorithms Pictograms	

			• 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 turn. Building on Year 1 number and place value: • Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: 'equal to', 'more than', 'less than' ('fewer'), 'most', 'least' Year 2 • interpret and construct simple pictograms, tally charts, block diagrams and simple tables • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions about totalling and comparing categorical data