



# Subject Curriculum Map and Rationale

## Computing

# Computing in the Early Years Foundation Stage

EYFS	Development Matters 3&4 Years will learn to:	Development Matters Children in Reception will learn to:	Statutory Framework Early Learning Goals
<b>Personal, Social and Emotional Development</b>	Remember rules without needing an adult to remind them.	Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly.
<b>Physical Development</b>	Match their developing physical skills to tasks and activities in the setting.	Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	
<b>Expressive Arts and Design</b>		Explore, use and refine a variety of artistic effects to express their ideas and feelings.	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
<b>Understanding the world</b>	Explore how things work.		
<b>Topics</b>	<p><b>Autumn</b> Who is a good friend? Once upon a time</p>	<p><b>Spring</b> What happens when we are asleep? Ready, Steady, Grow</p>	<p><b>Summer</b> Are we there yet? Fun in the sun!</p>

# Computing Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Just Paint and Write - All about me	Collect Photographs and Paint Pictures	Gathering Data and Creating Charts	Simple Algorithms and Programs	Create Simple Programs	Project Evolve
Year 2	Ways to Past Information	Art of Animation	Create a Topic-based E-book	Sequencing Simple Algorithms and Programs	Collecting, Organising and Presenting Data	Project Evolve
Year 3	Organising, Creating and Presenting	QR Codes	Creating a Branching Database	Write a program - Part 1	Write a program - Part 2	Project Evolve
Year 4	Multimedia Fact File	Creating Simple Databases	What is Computer Technology	Scratch Programming - Part 1	On the Move Programming - Part 2	Project Evolve
Year 5	Infographics	Computers for Communication and Collaboration	Creating and Using Spreadsheets	Programming - Making Games		Project Evolve
Year 6	The Internet and the World Wide Web	Understanding Big Data	Analyse and Interpret Data	Artificial Intelligence and Machine Learning		Game Design

# Computing Rationale

The computing skills taught at Guardian Angels equips pupils to use computational thinking and creativity to understand the principles of information and computation, how digital systems work and programming. Lessons are well planned and sequenced through a spiral curriculum that builds upon what has gone before and prepares pupils for what comes next. The units from year to year have been sequenced to include the consolidation and extension of skills and knowledge. Key learning outcomes are identified for each unit to explain what pupils need to know about the current topic to ensure that they are prepared to understand and succeed in the next topic.

Waypoints have been set out as learning outcomes for each lesson and identified on the planning documents as pupil outcomes. These show what pupils need to know, or should be able to demonstrate, as a skill by the end of each lesson in order to understand and succeed in subsequent lessons and to progress on to the next phase of learning when the topic is revisited at a later stage. They will also help the teacher check pupils' understanding through formative assessment to inform teaching and make necessary adjustments to planning if objectives have not been met or to identify and correct misunderstanding. These outcomes will also support pupils to embed knowledge and support teachers in feedback to move learning forward and produce clear next steps for pupils.

From year to year, key skills are revisited and built upon to ensure consolidation and progression. Reference is also made to the world of work and highlights the types of jobs/roles that use the skills being taught to give the learning a real-world context and purpose.

Expected end points for the end of KS1, end of LKS2 and end of UKS2 have been identified to determine the key milestones in terms of skill progression upon which summative assessment should focus.

