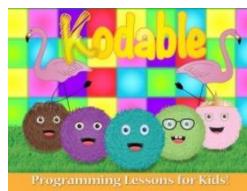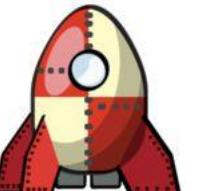# Curriculum Overview: Computing

Computing at Morningside

Ensuring every Morningside child is a confident and safe digital citizen

Our computing curriculum aims to evolve at the same rate as the digital world around us and teaches children to be ready for and to embrace these changes. Updated annually, our children learn how to confidently use the internet and digital devices to enhance their learning, share with others and develop computational thinking skills. Units are either *Computer Science* or *Information Technology* based, and each lesson incorporates digital citizenship to ensure children have the skills to remain safe online, both in and out of school. Digital learning is not exclusive to computing lessons; key skills children are taught so that children can apply these into their learning across the curriculum and beyond school.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Programmable Toys** • Directional language • Precise instructions	**We are TV chefs** • Filming – tablets • Selecting and editing • Saving to a cloud	**Kodable** • **Visual algorithms** • **'when' and change of direction** • **LGFL**	**We are Meteorologists** • Photos – tablets • Cloud storage • Importing into documents	**Hour of Code** • **Pre- reader Express**	**We are Historians** • Research • Safe searches • Word processing • Saving and sharing
Year 2	**Code.org** • Word level algorithms • Repeat • Conditional statements	**We are Newsreaders** • filming – tablets • editing iMovie • Sharing	**Espresso Coding** • **Varying inputs** • **Changing direction** • **Making objects disappear**	**We are Animators** • Stop frame animation • Adding text	**Scratch Junior** • 'if' and 'repeat' statements • Debugging	**We are E-Book Authors** • Adding photos • Adding text • Sharing and editing

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Code.org** • Sequences • Loops • Debugging	**We are Time Travellers** • Research • Filming • Adding text • Blogging	**Code.org** • Conditional statements • Creating stories • Debugging	**We are Presenters** • Research • Data collection and analysis • Presenting	**Lego WeDo** • Creating Lego models • Programming them to move • Motion sensors	**We are App Developers** • Creating own art • Adding images • Creating text • Adding links • Publishing
Year 4	**Scratch** • Adding and programming sprites • Changing backgrounds	**We are Opinion Pollsters** • Online surveys • Analysing results • Publishing findings • Email	**Scratch** • Variables • Consumes • Constraints • Broadcasting • Robots	**We are Producers** • Film and photography • Editing • Digital footprint • Publishing	**Scratch & Lego** • Using Scratch to programme Lego WeDo models • Free Coding	**We are Animators** • Planning • Modelling • Animation • Editing

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	**Microsoft Kodu** • Introduction • Creating characters and background • Predicting behaviour	**We are Travel Agents** • EBook • Publishing • Multimedia • Email	**Microsoft Kodu** • Variables • Changing behaviours • Shifting perspectives	**We are Time travellers** • Filming • Types of shot • Research • publishing	**Python** • Coding with Python • Printing • Editing • Debugging	**We are App Developers** • Creating apps • Importing pictures and text • Publishing and advertising
Year 6	**Python and physical computing** • Inside a computer • Building computers • Coding with Python	**We are Publishers** • Research • Choosing appropriate software for a purpose • Publishing • App design	**Search Engines & HTML** • Safe searching • How results are selected and ordered • Web crawlers	**We are Animators** • Camera angles and special effects • Editing • Publishing	**SATS Revision**	**HTML and the Internet** • Creating Webpages with HTML and CSS • IP addresses • Networks • Search Engines