

Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Remember rules without needing an adult to remind them.
	Physical Development		<ul style="list-style-type: none"> Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		<ul style="list-style-type: none"> Explore how things work.
Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none"> Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> -sensible amounts of 'screen time'.
	Physical Development		<ul style="list-style-type: none"> Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Expressive Arts and Design		<ul style="list-style-type: none"> Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> 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.
	Expressive Arts and Design	Creating with Materials	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
At Wigginton Primary we expect pupils to:			<ul style="list-style-type: none"> Listen to music - Take a photograph with a camera or tablet - Play games on the interactive whiteboard -Exploring an old typewriter or other mechanical toys -Use a Beebot -Watch a video clip – Explore how things work

Wigginton Primary Progression of Skills – Computing

Key Stage 1

Unit summaries

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 1	<p>Technology around us</p> <p>Recognising technology in school and using it responsibly.</p>	<p>Digital painting</p> <p>Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.</p>	<p>Moving a robot</p> <p>Writing short algorithms and programs for floor robots, and predicting program outcomes.</p>	<p>Grouping data</p> <p>Exploring object labels, then using them to sort and group objects by properties.</p>	<p>Digital writing</p> <p>Using a computer to create and format text, before comparing to writing non-digitally.</p>	<p>Programming animations</p> <p>Designing and programming the movement of a character on screen to tell stories.</p>
Year 2	<p>Information technology around us</p> <p>Identifying IT and how its responsible use improves our world in school and beyond.</p>	<p>Digital photography</p> <p>Capturing and changing digital photographs for different purposes.</p>	<p>Robot algorithms</p> <p>Creating and debugging programs, and using logical reasoning to make predictions.</p>	<p>Pictograms</p> <p>Collecting data in tally charts and using attributes to organise and present data on a computer.</p>	<p>Making music</p> <p>Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.</p>	<p>Programming quizzes</p> <p>Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.</p>

Lower Key Stage 2

Unit summaries

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 3	<p>Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.</p>	<p>Stop-frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story.</p>	<p>Sequencing sounds Creating sequences in a block-based programming language to make music.</p>	<p>Branching databases Building and using branching databases to group objects using yes/no questions.</p>	<p>Desktop publishing Creating documents by modifying text, images, and page layouts for a specified purpose.</p>	<p>Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions.</p>
Year 4	<p>The internet Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.</p>	<p>Audio editing Capturing and editing audio to produce a podcast, ensuring that copyright is considered.</p>	<p>Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes.</p>	<p>Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation.</p>	<p>Photo editing Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.</p>	<p>Repetition in games Using a block-based programming language to explore count-controlled and infinite loops when creating a game.</p>

Upper Key Stage 2

Unit summaries

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 5	Sharing information Identifying and exploring how information is shared between digital systems.	Video editing Planning, capturing, and editing video to produce a short film.	Selection in physical computing Exploring conditions and selection using a programmable microcontroller.	Flat-file databases Using a database to order data and create charts to answer questions.	Vector drawing Creating images in a drawing program by using layers and groups of objects.	Selection in quizzes Exploring selection in programming to design and code an interactive quiz.
Year 6	Internet communication Recognising how the WWW can be used to communicate and be searched to find information.	Webpage creation Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	Variables in games Exploring variables when designing and coding a game.	Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data.	3D modelling Planning, developing, and evaluating 3D computer models of physical objects.	Sensing Designing and coding a project that captures inputs from a physical device.



Wigginton Primary School Computing Vocabulary Progression Reception - Yr6

Computing is split into 5 different categories: **E-Safety**, **Programming**, Multimedia, **Technology in Our Lives** and **Date Handling**. Below is the vocabulary progression from Reception until they leave us in Year 6.

E-Safety				
Reception	Year 1	Year 2	Year 3 and Year 4	Year 5 and Year 6
Choices Internet iPad	R u l e s C o m p u t e r P e r s o n a	A l l i a n c e s	E-safety rules Secure passwords Report abuse button Gaming Blogs Online Identity Emails	R e s p o n s i b l e o n l i n e

	o n a r l i n f o r m a t i o n S h a r i n g	p r o p r i e t y S c h e m e D i g i t a l l i n g	n e c o m m u n i c a t i o n I n f o r m e d i c a l c h o i c e s V i
--	---	--	--



d
i
a
C
o
n
c
e
r
n
s

Programming						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Equipment Buttons Movement	Instructions Buttons Beebots Patterns Program	Forward Backward Right-angle turn Algorithm Sequence Debug Predict Clockwise Anti-clock wise	Sequence instructions Sequence debugging Test + improve Logo commands Sequence programming Repetition	Type + edit logo commands Sensors Open-ended problems Bugs in programs Complex programming	Explore procedures Refine procedures Variable Hardware + software control Change inputs Different outputs Articulate solutions Commands	Predicting outputs Plan, program, test & review a program Program writing Control mimics + devices Sensors Measure input Create variables Link errors
Multimedia						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Screen iPad Images Photo	Videos Sounds Interior camera Exterior camera Edit Tools	Effects Animation Documents Google Docs Index finger typing Enter/return Caps lock Backspace	Multimedia Presentations Alignment Brush size Repeats Reflections Green screening Amend Copy Paste	Creating + modifying Specific purpose Photo modifying Keyboard shortcuts Bullet points Spell check Constructive feedback	Online sharing Multimedia effects Multimedia modification Transitions Hyperlinks Editing tools Refining	Appropriate online tools Audience Atmosphere Structure Copyright Information collection HTML code Storing
-----------------------------------	---	---	---	---	--	--

Technology in Our Lives

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technology Share Create Internet Camera	Purpose Online tools Communicate	Communication Purposes Website content Manipulate Retrieve	Devices Computer parts Collaborate Appropriate online communication Search tools Appropriate websites Owner Google Drive	Online networks Information collection Reliability Owners	Computing devices Internet parts Collaboration Responsibility Searching strategies Webpages	Information movement Connecting devices Different audiences Research strategies Search result rankings Acknowledge resources

Data Handling

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
-----------	--------	--------	--------	--------	--------	--------



Teach
Computing

Collect Set of photos Count Organise	Data Pictogram Digitally	Questions Data collection Graphs Charts Save Retrieve	Questioning Database Construct Contribute Recording data Data logger Present data	Database creation Database searches Inaccurate data	Spreadsheets Complex searches (and/or: </>) Problem solving Present answers Analyse information Question data Interpret	Generate Process Interpret Store Present information Plausibility Appropriate data tool Interrogate Investigations
---	--------------------------------	--	---	---	---	--