

## **Tarvin Primary School**

# Computing National Curriculum Mapping



# National Curriculum Mapping

#### How this document works:

This is a whole school overview, demonstrating where the objectives, laid out in the National Curriculum, are covered.

<u>EYFS</u>

This table demonstrates how each unit of work links to the Early Learning Goals and the Development Matters 2021 statements.

#### <u>KS1 & 2</u>

These tables identify the National Curriculum objectives for each year group and how they are mapped to each unit taught.

### <u>EYFS</u>

Early Years Foundation Stage	Early years outcomes: Prime Areas	Early years outcomes: Specific Areas
(Reception)	Development Matters 2021 statements	Development Matters 2021 statements
	Early Learning Goals	Early Learning Goals
Unit of Work		
Computer systems and networks:	Develop their fine motor skills so that they can use a range of tools	Physical development
Using a computer	completely, safely, and confidently.	Personal, Social and Emotional Development
	Know and talk about the different factors that support their overall	
	health and wellbeing:	
	- Sensible amount of screentime	
Programming: All about	Safely use and explore a variety of materials, tools, and techniques,	Expressive Arts and Design
instructions	experimenting with colour, design, texture, form and function	Creating with Materials
	Be confident to try new activities and show independence, resilience,	Managing self
	and perseverance in the face of challenge.	Personal, Social and Emotional Development
	Explain the reasons for rules, know right from wrong and try to behave	
	accordingly.	
Computer systems and networks:	Safely use and explore a variety of materials, tools, and techniques,	Expressive Arts and Design
Exploring hardware	experimenting with colour, design, texture, form and function	Creating with Materials
Programming: Bee-Bots	Safely use and explore a variety of materials, tools, and techniques,	Expressive Arts and Design
	experimenting with colour, design, texture, form and function	Creating with Materials
	Be confident to try new activities and show independence, resilience,	Managing self
	and perseverance in the face of challenge.	Personal, Social and Emotional Development
	Explain the reasons for rules, know right from wrong and try to behave	
	accordingly.	
Data Handling: Introduction to	Be confident to try new activities and show independence, resilience,	Managing self
data	and perseverance in the face of challenge.	Personal, Social and Emotional Development
	Explain the reasons for rules, know right from wrong and try to behave	
	accordingly.	

## <u>KS1</u>

National Curriculum Objectives	Programming : Bee-Bots	Creating Media: Digital Imagery	Data Handling: Introduction to Data	Programming : Scratch jnr	Creating Media: Stop Motion	Data Handling: International Space Station	Computer system and networks: Improving mouse skills	Programming : Algorithms unplugged	Skills Showcase: Rocket to the moon	Computer systems and networks: What is a computer?	Programming : Algorithms and debugging	Computer systems and networks: Word processing
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	~			~	~			~	✓		~	
create and debug simple programs	$\checkmark$			✓	~			~	$\checkmark$		$\checkmark$	
use logical reasoning to predict the behaviour of simple programs	~			~	~			~	$\checkmark$		~	
use technology purposefully to create, organise, store, manipulate and retrieve digital content	~	~	~	~	~	~	✓	~	~	~	✓	~
recognise common uses of information technology beyond school		~	$\checkmark$			~			$\checkmark$	~		$\checkmark$

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.	×	V		~	~	~	~	~	

### <u>LKS2</u>

National Curriculum Objectives	Computer systems and networks: Network and the internet	Data Handling: Comparison card databases	Computing systems and networks: Journey inside a computer	Computer systems and networks: Collaborative Learning	Data Handling: Investigating Weather	Skills Showcase: HTML	Computing systems and networks: Emailing	Programming : Scratch	Creating Media: Video Trailers	Creating Media : Website Design	Programming : Further coding with Scratch	Programming : Computation al thinking
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts										~	~	~
use sequence, selection, and repetition in programs; work with variables and various forms of input and output								~	~	~	~	
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs								✓		~	~	<b>~</b>
understand computer networks including the internet; how they can provide multiple services,	~	~	~	✓	~	~			✓	V		

such as the world wide web; and the opportunities they offer for communication and collaboration							~					
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	✓	~	~	~	V	~	V		~	~		~
select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	V	✓	✓	~	~	~	~	V	~	~		~
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	✓	1	1	✓	~	~	~	Ý	~	~	✓	×

<u>UKS2</u>												
National Curriculum Objectives	Programming : Music	Creating Media: Stop motion animation	Computer systems and networks: search engines	Data Handling: Big Data 1	Data Handling: Big Data 2	Programming : Introduction to Python	Programming : Micro: Bit	Data Handling: Mars Rover 1	Skills Showcase: Mars Rover 2	Computing systems and networks: Bletchley Park	Creating Media: History of Computers	Skills Showcase: Inventing a product
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	V	✓				~	V		~	✓		~
use sequence, selection, and repetition in programs; work with variables and various forms of input and output	V	~				~	~		✓	<ul> <li>✓</li> </ul>		~
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	✓	~				✓	~		✓	✓		~
understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	✓ ·		✓	✓	✓	<ul> <li>✓</li> </ul>	✓	✓	✓	✓ 	✓	✓
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	~		<ul> <li>✓</li> </ul>	✓	✓			✓ 	✓	✓	✓	✓

select, use and combine a		✓		✓	✓			✓	✓	✓	✓	✓
variety of software												
(including internet												
services) on a range of												
digital devices to design												
and create a range of												
programs, systems and												
content that accomplish												
given goals, including												
collecting, analysing,												
evaluating and presenting												
data and information										,		
use technology safely,	$\checkmark$	$\checkmark$	$\checkmark$	~	~	~	~	~	~	$\checkmark$	$\checkmark$	$\checkmark$
respectfully and												
responsibly; recognise												
acceptable/unacceptable												
behaviour; identify a range												
of ways to report concerns												
about content and contact.												