

Computing Curriculum Map



Term 1

Term 2

Term 3

Term 4

Term 5

Term 6

RECEPTION

Unit Title:
Introduction to Digital Technology

Focus:
Introduces the basic concepts and skills of using a computer and other digital devices.

Unit Title:
Single Sequence Robotics

Focus:
Introduces basic programming through robot activities.

Unit Title:
Using Devices Safely

Focus:
Introduces the importance of responsible and safe practices when interacting with digital devices and online content.

Unit Title:
Sorting and Saving

Focus:
Introduces the concepts of data organisation through hands-on activities.

Unit Title:
Organising Algorithms

Focus:
Builds upon previous programming foundations by introducing the concept of algorithms and their application in solving problems.

Unit Title:
Using an Art Program

Focus:
Introduces digital art tools and techniques, encouraging creativity and self-expression.

YEAR 1

Unit Title:
Introduction to Digital Technology

Focus:
Building a foundational understanding of computers and their uses.

Unit Title:
Single Sequence Robotics

Focus:
Introducing practical application of programming and robotics.

Unit Title:
Safe Choices

Focus:
Responsible and safe digital device usage.

Unit Title:
Sorting and Saving

Focus:
Basic data management concepts.

Unit Title:
Navigating Algorithms

Focus:
Exploring the logic and structure behind instructions.

Unit Title:
A Creative Journey into Digital Media

Focus:
Exploring digital media and developing creative skills.

YEAR 2

Unit Title:
Exploring Digital Devices

Focus:
Introducing digital devices, basic input methods, and the benefits of technology in Year 2.

Unit Title:
Robotics with Probots

Focus:
Learning programming concepts and problem-solving skills through robotics using Probots in Year 2.

Unit Title:
Navigating Online Safety

Focus:
Responsible digital citizenship, and how to identify and address potential online risks.

Unit Title:
Exploring Data with Spreadsheets

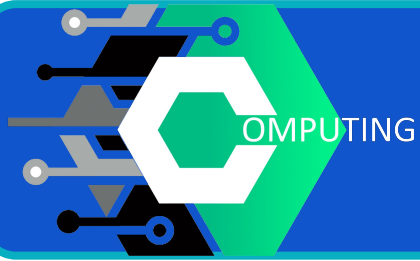
Focus:
Learning to use spreadsheets to collect, organize, and analyse data

Unit Title:
Building Programs with Scratch

Focus:
Learning programming fundamentals using Scratch

Unit Title:
Building Systems with Scratch

Focus:
Learning systems and multiple instructions



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Term 2

Term 3

Term 4

Term 5

Term 6

YEAR 3

Unit Title:
Understanding the World Wide Web and Internet

Focus:
Exploring the nature of the World Wide Web, search engines, internet history, data transmission, and how search results are selected.

Unit Title:
Programming Robots with Variables

Focus:
The ability to control robots using variables, allowing for flexibility and customization in programming tasks.

Unit Title:
Digital Defense: Protect Yourself Online

Focus:
Reporting concerns, dealing with strangers, understanding age ratings, and recognising the difference between bullying and cyberbullying.

Unit Title:
Spreadsheet Basics

Focus:
An understanding of spreadsheet operations, including data analysis, cell identification, and formula usage.

Unit Title:
Digital Storytelling with Scratch

Focus:
Using Scratch to create digital stories, including character animation, sprite interaction, and resource gathering.

Unit Title:
Capturing the World with a Camera

Focus:
Analysing and emulate artistic styles, improve photographic composition, and explore the use of patterns in photography.

YEAR 4

Unit Title:
The Digital Landscape: Understanding Internet Technology

Focus:
Overviewing the internet technology, including its evolution, network structures, connectivity options, and energy consumption.

Unit Title:
Robotics Programming: From Simple to Complex

Focus:
The ability to program robots for various tasks, from basic functions to more complex problem-solving, with an emphasis on efficiency.

Unit Title:
Digital Citizenship: Navigating the Online World

Focus:
Understanding and practicing responsible online behaviour, including safety measures, managing digital identity, and respecting intellectual property rights.

Unit Title:
Spreadsheet Organization: Mastering Formatting and Filters

Focus:
The ability to effectively organize and analyse spreadsheet data using formatting and filtering techniques.

Unit Title:
Algorithmic Thinking: Problem Solving with Flowcharts

Focus:
The ability to use flowcharts as a tool for problem-solving, including creating, analyzing, and optimizing algorithms for various tasks.

Unit Title:
Photographic Expression: Mastering Techniques

Focus:
The ability to use various photographic techniques to capture and convey emotions, experiment with composition, and create unique and impactful images.

YEAR 5

Unit Title:
Hardware Essentials: Understanding Computer Components

Focus:
An understanding of computer hardware, including its evolution, key components, and the relationship between hardware and software.

Unit Title:
Ohbot Robotics: Building Intelligent Machines

Focus:
Exploring the capabilities of Ohbot robots, including identifying components, programming autonomy, using selection and variables, and creating humanoid behaviours.

Unit Title:
Navigating Social Media: A Responsible User's Guide

Focus:
Understanding the potential impact of social media on individuals and society, while promoting responsible online behavior, including safety measures and reputation management.

Unit Title:
Digital Design with CAD: Building Virtual Structures

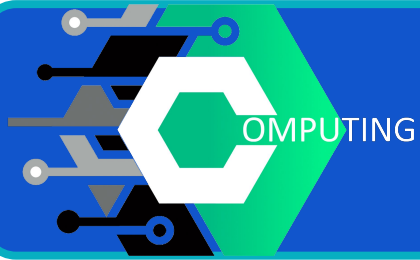
Focus:
The ability to create and manipulate digital objects using CAD software, applying real-world design principles and measurements to construct virtual structures.

Unit Title:
Problem Solving with Flowcharts

Focus:
The ability to apply flowcharting techniques to solve programming problems, effectively using decisions, variables, and combinations of these to create effective solutions.

Unit Title:
Cinematic Storytelling: Mastering Film Techniques

Focus:
The ability to use various filmmaking techniques such as establishing shots, camera movement, depth of field, transitions, and a variety of other cinematic elements.



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Term 2

Term 3

Term 4

Term 5

Term 6

YEAR 6

Unit Title:
Digital Ethics: Navigating a Technological World

Focus:
Exploring the ethical implications of digital technologies, including energy consumption, e-waste, artificial intelligence, and human-robot interaction.

Unit Title:
Ohbot Robotics: Advanced Programming

Focus:
Expanding programming skills with Ohbot, including conditional statements, motor control, variable manipulation, and nested structures.

Unit Title:
Digital Safety: Protecting Yourself Online

Focus:
Understanding online safety practices, including self-presentation, bullying prevention, digital footprint management, copyright awareness, and the impact of screen time.

Unit Title:
CAD Mastery: From Design to Production

Focus:
The ability to use Computer-Aided Manufacturing (CAM) to evaluate, design, and produce physical artifacts, considering constraints like time, resources, and cost.

Unit Title:
Python Programming: A Beginner's Guide

Focus:
Introducing the Python programming language, covering its origins, basic syntax, error handling, and the use of escape sequences.

Unit Title:
Film Editing Foundations: Crafting Your Story

Focus:
The fundamentals of video editing, including software layout, tool usage, selection processes, timeline construction, and the role of music in storytelling.



Langney Primary Academy