

Lingdale Primary School



Computing Curriculum



Overarching Principles

Computing

Subject Intent

- ❖ To teach the three strands of computing – computer science, digital literacy and information technology – to enable children to be successful in this subject.
- ❖ To build on children’s knowledge and understanding so they are equipped to use information technology to create programs, systems and a range of content.
- ❖ To ensure children are digitally literate at a level suitable for working in a digital world.
- ❖ To ensure pupils are responsible, competent, confident and creative users of technology both information and communication.
- ❖ To develop children’s knowledge of the fundamental principles of computer science.
- ❖ To enable children to analyse problems using computational thinking.

Essential Knowledge

- ❖ Understand that electrical appliances require programs to complete a task.
- ❖ Understand the role of technology in everyday life.
- ❖ Understand how to use technology in a variety of ways.
- ❖ Understand how to stay safe online.

Disciplinary Skills

- ❖ Use block programming to create and debug programs.
- ❖ Use a range of applications and software to create work specific for purpose.
- ❖ Know how to report inappropriate behaviour online

Connecting Themes

- ❖ Computer programs can be used across the whole curriculum. Some software will be used in lessons and not just discrete computing sessions.

Key Subject Teaching Approaches

- ❖ The PRIMM (Predict-Run-Investigate-Modify-Make) approach will be used to develop understanding of programming.
- ❖ The Purple Mash and Teach Computing schemes of work will be used to support children’s growing knowledge.
- ❖ Online safety will be covered at least once a term using Project Evolve.
- ❖ Children’s understanding will be progressive and will consistently build on prior knowledge which will be revisited regularly.
- ❖ Appropriate curriculum links will enforce discrete learning opportunities.

	Autumn	Spring	Summer
EYFS	How things work Investigating mechanical equipment Electronic devices within role play Taking photographs Use of Smartboard - watching videos and interactive games		
Years 1 & 2 Cycle A	Technology around us (Digital Literacy/Information Technology) Online safety and & Exploring Purple Mash (Digital Literacy)	Programming a robot (Computer Science) Creating pictures (Information technology)	Lego Builders (Computer Science) Presenting Ideas (Information Technology)
	The first unit in each cycle will need to be taught discretely to each year group		
Years 1 & 2 Cycle B	IT around us (Digital Literacy/Information Technology) Online safety and & Exploring Purple Mash (Digital Literacy)	Robot Algorithms (Computer Science) Animated story books (Information Technology)	Effective searching (Digital Literacy) Programming – Scratch Junior (Computer Science)

**Years 3 & 4
Cycle A**

**Online Safety
(Digital Literacy)**

**Effective searching
(Digital literacy)**

**Simulations
(Information Technology)**

**Branching Databases
(Information Technology)**

**Computer Networks – Connecting
computers
(Computer Science)**

**Programming - Scratch
(Computer Science)**

**Creating Media - Photos
(Information Technology)**

**Logo
(Computer Science)**

**Years 3 & 4
Cycle B**

**Online Safety
(Digital Literacy)**

**Creating Media – Stop Motion
(Information Technology)**

**Desktop Publishing
(Information Technology)**

**Programming – Scratch
(Computer Science)**

**Computer Networks - Internet
(Computer Science)**

**Email
(Digital Literacy)**

**Programming – Scratch
(Computer Science)**

**Years 5 & 6
Cycle A**

**Online Safety
(Digital Literacy)**

**Spreadsheets
(Information Technology)**

**Programming – Scratch
(Computer Science)**

**Email
(Digital Literacy)**

**Databases
(Information Technology)**

**Computer Networks – Systems
(Computer Science)**

**Programming – Crumble
(Computer Science)**

Years 5 & 6
Cycle B

Online Safety
(Digital Literacy)

Email
(Digital Literacy)

Blogging
(Computer Science)

Game Creator
(Computer Science)

Spreadsheets
(Information Technology)

Quizzes
(Information Technology)

Quizzes
(Information Technology)

Programming – Micro:bits
(Computer Science)

3D modelling
(Information Technology)