



# ***Aspiration and Achievement for All***

## **Computing Policy 2025**

Adopted by the Senior Leadership Teams of  
New Road and Park Lane Primary and Nursery Schools

Aspire Learning Trust

on 16<sup>th</sup> June 2025

## **Computing Policy**

The subject leaders for computing are Mr Allen (New Road Primary and Nursery School); Mrs Gregory (Park Lane Primary and Nursery School).

### **Introduction**

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. We understand that a high-quality computing education is essential for pupils to understand modern information and communication technologies (ICT), and for them to use these skills to become responsible, competent, confident and creative participants of an increasingly digital world. Computers, tablets, and a variety of devices can be used to acquire, organise, store, manipulate, interpret, communicate and present information. We aim to provide quality hardware and software for the use of everyone in school and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

The school's aims are to:

- Provide a relevant, challenging and enjoyable curriculum for all pupils, meeting the requirements of the National Curriculum programmes of study for computing.
- Enhance learning throughout the curriculum using computing skills.
- To equip pupils with the confidence and attitude to continually develop their computing skill in response to future developments
- Provide staff with the means and training to optimise their use of ICT.
- To respond to new developments in technology.
- To develop everyone's understanding of how to use ICT and computing safely and responsibly in line with the school's E Safeguarding strategy.

### **The national curriculum for computing aims to ensure that all pupils:**

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.
- Can analyse problems in computational terms and have repeated practical experience of writing computer programs to solve such problems.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident, and creative users of information and communication technology.

## **Computing Curriculum Planning**

(Please also refer to the School's Curriculum Policy)

Our curriculum planning is in three phases (long-term, medium-term, and short-term). Revising and consolidating skills helps children to build upon prior knowledge before introducing new vocabulary and challenge. Provision for computing activities is part of the overall topic planning completed for each class termly.

The subject leader for computing oversees the curriculum coverage and ensures that requirements are met. We plan the topics in computing so that they build upon prior learning. Children of all abilities have the opportunity to develop their skills and knowledge in each unit and, through planned progression built into the scheme of work, we offer them an increasing challenge as they move through the school.

Each unit of learning contains clearly defined knowledge that children will learn. In addition to what we would like the children to know we also provide opportunities for children to apply knowledge skilfully. This is detailed in our progression of skills document for computing.

## **Curriculum Overview**

The Kapow Computing scheme of work is designed through three strands. These are:

- Information Technology (using and creating content with computer functions)
- Computer Science (programming and coding computer instructions)
- E-Safety (evaluating content and using technology safely).

These three strands are organised into five key areas, creating a cyclical route through which pupils can develop their Computing knowledge and skills by revisiting and building on previous learning:

1. Computer systems and networks
2. Programming
3. Creating media
4. Data handling
5. Online safety

The knowledge and skills from these units are then applied throughout the other units in the scheme. Key skills are revisited again and again with increasing complexity in a spiral curriculum model. This allows pupils to revise and build on their previous learning. Together, these aim to build overall digital literacy for all children.

### **Kapow strand 1: Information Technology**

Our children will acquire and develop skills associated with information technology to:

- Use search technologies effectively.
- Select, use and combine a variety of software 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.
- Acquire and refine the techniques needed to use ICT (e.g. saving, copying, and checking the accuracy of input and output).
- Practise mathematical skills (e.g., ordering numbers including negative numbers, measuring and calculating to an appropriate number of decimal places, drawing and interpreting graphs and bar charts in real contexts).
- Learn why numerical and mathematical skills are useful and helpful to understanding. - Develop the skills of collecting first-hand data, analysing and evaluating it, making inferences or predictions and testing them, drawing and presenting conclusions, and use all these in their work with ICT.

### **Kapow strand 2: Computer Science Our children will acquire and develop the skills associated with computer science in order to:**

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, as well as solving 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 algorithms work, using that reasoning to detect and correct errors in algorithms and programs.
- Understand computer networks, including the internet, and how they can provide multiple services such as the World Wide Web.

**Kapow strand 3: E-safety / Digital Literacy Our children will acquire and develop their skills in digital literacy in order to:**

- Understand the opportunities that networks offer for communication and collaboration.
- Be discerning in evaluating and presenting data and information.
- Be able to use technology safely, respectfully and responsibly, such as recognising acceptable and unacceptable behaviour and identifying a range of ways to report concerns about content and contact.

**Teaching of E-Safety is embedded throughout all learning in Computing.**

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	<b>Digital Literacy</b>		<b>Computers and Hardware</b>		<b>Computational Thinking</b>	
EYFS	Using a computer		Sorting and Categorising		Programming Bee Bots	
Year 1		Getting Started: Digital imagery		Introduction to Data		Programming Bee Bots
Year 2		Stop Motion		What is a computer?		Programming Scratch Junior
Year 3	Inside a computer		Top Trumps Data Base		Further Programming with Scratch	
Year 4	Computer systems and networks collaborative learning		Searching the Internet		Further Coding with Scratch	
Year 5	Micro-bit programming		Search Engines		Mars Rover 1	
Year 6		Bletchley Park		Big Data 1		Introduction to Python or Kodu

**Teaching**

We use the three components of an explicit teaching approach to ensure that all children learn in a clear and supported manner (see Teaching and Learning Policy).

Explicit teaching often follows the "I do, we do, you do" framework. This structured approach ensures that teaching progresses systematically:

1. **I do:** The teacher demonstrates a skill or concept, making their thinking process visible to the class.
2. **We do:** The teacher and students practise together, guided by the teacher.
3. **You do:** Students practise independently, applying what they've learnt.

**Assessment for Learning**

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess the progress of individual children. Assessment is built into computing throughout the lesson. There is planned opportunity for day-to-day assessment against clear intended learning outcomes.

Individual attainment in computing is assessed by class teachers using our school marking and feedback policy, to maintain lesson by lesson feedback and understand next steps to be built on and where individual needs sit. Teachers will also use a combination of assessment sheets/quizzes and spoken/written tasks at the end of each unit to give a basic assessment of what has been learnt.

## **Safeguarding**

Use of ICT and the internet is also linked into our child protection and anti-bullying policies. All staff and adults working in our schools **know who to go to** if they have a concern that a child or young person might be at risk or suffering harm as a result of the use of these technologies.

If you are concerned that a child's safety is at risk because you suspect someone is using communication technologies (such as social networking sites) to make inappropriate contact with the child

Report to and discuss with the named Designated Safeguarding Leads in the school who will coordinate the school's response and liaise with other agencies and the child's parents.

## **Monitoring for Harmful Content**

Maintaining a safe and secure learning environment always has never been more important. The schools use Classroom Cloud to enable selected staff to monitor online activity, identify students at risk, and spot concerning trends. Staff are alerted to the following:

- Keyword and phrase monitoring for over 20,000 terms – including slang terms
- Includes 18 language packs, perfect for supporting ESL/EAL students
- Word cloud of triggered and trending topics across your school
- Image Analysis to detect images displayed in websites, apps, and media, alerting staff when harmful content may have been viewed by a student

## **Monitoring and Review**

The computing subject leader is responsible for monitoring the standards of the children's work and the quality of the teaching in computing lessons. S/he is also responsible for supporting colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for computing in the school.

After monitoring the evidence of learning or the medium-term planning, the subject leader presents the Headteacher with a report which evaluates strengths and weaknesses as well as indicating areas for further improvement. The subject leader also undertakes lesson observations, giving personalised feedback and pointers for improvements when required. This policy will be reviewed at least every two years

## **Review of the Policy**

The policy will be reviewed within the cycle of the School Development Plan. Alterations and amendments will be incorporated into a revised policy based on the review.