

# Bonneygrove and Millbrook Primary Federation

## Computing Subject Guidance

### INTENT

At Bonneygrove and Millbrook Primary Federation, we believe that Computing is an essential part of preparing pupils for life in an increasingly digital world. Our Computing curriculum is designed to equip pupils with the knowledge, skills and understanding they need to use technology safely, creatively and responsibly.

Our intent is firmly rooted in the **National Curriculum for Computing (2014)** and is delivered through the **Kapow Primary Computing scheme**, ensuring full coverage of computer science, information technology and digital literacy from EYFS to Year Six.

Through Computing, pupils develop:

- Computational thinking and problem-solving skills
- Knowledge of how digital systems work
- Skills in programming, data handling and digital creation
- Understanding of online safety and digital citizenship
- Confidence to use technology purposefully and responsibly

In line with the **Ofsted Inspection Framework (November 2025)**, our Computing curriculum is ambitious, inclusive and carefully sequenced so that pupils **build knowledge cumulatively, revisit key concepts and apply learning meaningfully across the curriculum.**

### WHY WE TEACH COMPUTING THE WAY WE DO

We teach Computing through a structured, progressive and practical approach because children learn best when they actively apply skills and solve real problems.

Our approach ensures that pupils:

- Understand how technology works, not just how to use it
- Develop resilience and perseverance through debugging and problem-solving
- Learn how digital systems affect everyday life

- Become responsible and informed digital citizens, understanding how to stay in the online world

Using **Kapow Primary**, pupils revisit key strands—**computing systems and networks, programming, creating media, data handling and online safety**—allowing knowledge to deepen through a spiralling curriculum over time rather than being taught in isolation.

Computing also supports pupils experiencing digital poverty by ensuring that all pupils have equitable access to devices, software and high-quality teaching within school. Devices include Chromebooks, iPad, VR headsets and use of Google Classroom platform.

Online safety is developed across units and support is provided to parents through newsletters and relevant online safety updates. Each year pupils participate in Safer Internet Day, which further consolidates knowledge gained within the units across the year.

### **ROLE OF THE COMPUTING SUBJECT LEADER**

The Computing Subject Leader at Bonneygrove and Millbrook Primary Federation plays a key role in ensuring that the Computing curriculum is ambitious, coherently sequenced and effectively implemented, in line with the **National Curriculum for Computing (2014)** and the **Ofsted Inspection Framework (November 2025)**.

The Subject Leader:

- Provides strategic direction for Computing across the Federation
- Oversees the implementation of the **Kapow Primary Computing scheme**
- Ensures progression in knowledge, skills and vocabulary from EYFS to Year Six
- Monitors teaching and learning through lesson visits, book looks and pupil voice
- Supports staff confidence and subject knowledge in Computing
- Ensures SEND and EAL provision is embedded within Computing lessons
- Oversees online safety provision and safeguarding links
- Manages resources, devices and software
- Contributes to whole-school self-evaluation and inspection readiness

Through effective leadership, the Computing Subject Leader ensures pupils leave the Federation as confident, capable and responsible users of technology.

## **SEND INCLUSION**

SEND inclusion is integral to the design and delivery of the Computing curriculum. Guided by the **nasen Teacher SEND Handbook (January 2024)**, we follow the graduated approach of:

**Assess → Plan → Do → Review**

All pupils receive **Quality First Teaching**, with reasonable adjustments made so that pupils with SEND are not disadvantaged and can access the same ambitious Computing curriculum as their peers.

## **SUPPORTING PUPILS WITH SEND IN COMPUTING**

Pupils with SEND are supported through:

- Visual instructions and step-by-step guides
- Modelling and repetition
- Pre-teaching of key vocabulary
- Paired and collaborative working
- Alternative ways to record outcomes
- Use of unplugged activities to support understanding

These strategies reduce cognitive load and ensure all pupils can participate successfully.

## **EAL SUPPORT**

Pupils with English as an Additional Language are supported through:

- Visual prompts and symbols
- Demonstration rather than reliance on written instructions
- Repetition of key language and vocabulary
- Opportunities for collaborative talk

Computing supports language development through purposeful discussion and shared problem-solving.

## **IMPLEMENTATION**

The Computing curriculum is carefully planned, coherently sequenced and knowledge rich. Learning is organised so that pupils build understanding progressively, revisiting and applying skills across year groups.

Across the Federation, pupils revisit:

- Programming and algorithms
- Data handling and representation
- Digital media creation
- Computing systems and networks
- Online safety and digital responsibility

Teaching is underpinned by:

- Clear learning intentions
- Practical, hands-on activities
- Opportunities to debug and refine work
- Explicit vocabulary instruction
- Regular retrieval of prior learning

The **Kapow Primary Computing scheme** ensures full National Curriculum coverage and progression from EYFS to Year Six

## **EXAMPLES OF WHAT WE TEACH IN COMPUTING**

### **EYFS**

- Using computers and hardware
- Giving simple instructions
- Programming Bee-Bots
- Introduction to data

### **Key Stage One**

- Algorithms and debugging
- Block coding
- Digital imagery and stop motion
- Online safety

## **Key Stage Two**

- Scratch and Python programming
- Computer networks and the internet
- Data handling and analysis
- Creating digital content such as websites, videos and animations
- Understanding AI and the history of computing

This progression ensures breadth, balance and depth across all year groups

## **IMPACT**

The impact of the Computing curriculum is seen in pupils who:

- Understand how technology works
- Apply logical thinking to solve problems
- Use technology confidently and responsibly
- Demonstrate resilience when debugging and improving work

By the end of Key Stage Two, pupils can:

- Design, write and debug programs
- Use technology to create and present information
- Understand networks and digital systems
- Stay safe online and make responsible choices

Pupils leave the Federation digitally literate and well prepared for secondary education and modern life.

## **OUTCOMES – NATIONAL CURRICULUM 2014**

By the end of the Federation, pupils meet the expectations of the **National Curriculum for Computing (2014)**, demonstrating secure knowledge and skills across computer science, information technology and digital literacy.

## **DESIRED OUTCOMES – BONNEYGROVE AND MILLBROOK PRIMARY FEDERATION**

By the time pupils leave Bonneygrove and Millbrook Primary Federation, we want them to be confident, responsible digital citizens who:

- Are curious and inquisitive about technology
- Think logically and solve problems independently
- Use technology safely and respectfully
- Understand the impact of technology on society
- Are resilient, honest, ambitious, creative, kind and inclusive learners

The computing curriculum supports cross-curricular learning by making clear connections between subjects, helping pupils develop a broader understanding of key concepts and skills. Cross-curricular links are explicitly highlighted: each unit includes identified cross-curricular connections, detailed in the unit hub and long-term plans. This allows learning to be integrated across different subjects. Computing enhances topic-based learning by providing pupils with tools to research, present, analyse and create. These skills can then be applied and consolidated across history, geography and science, through purposeful ways, whilst online safety is reinforced through real life scenarios. Pupils enjoy computing because it empowers them to take ownership of learning and express ideas in innovative ways. Ultimately pupils become safe and confident users of technology in a rapidly developing digital age.

“ My computing lessons help me to learn even more about typing on a laptop. ”  
Year 2 pupil

“ I like using the laptops in our computing lessons. ”  
Year 3 pupil

“ I enjoyed making our own website about our favourite books. We learnt to add images and subtitles.”  
Year 4 pupil

**Why Intent is strong**

The intent is strong because it is clearly rooted in the National Curriculum for Computing (2014) and aligned with the Ofsted Inspection Framework (2025), ensuring ambition and relevance. It sets out a clear vision for developing digitally literate, responsible and confident learners, with a balanced focus on computer science, information technology and digital literacy. The curriculum is inclusive, well-sequenced and designed to build knowledge cumulatively, ensuring all pupils, including those with SEND and EAL, can succeed in an increasingly digital world.

**Why Implementation is strong**

Implementation is strong because the curriculum is delivered through a structured, progressive scheme (Kapow Primary) that ensures full coverage and clear progression from EYFS to Year Six. Teaching is practical, knowledge-rich and carefully sequenced, with regular opportunities for retrieval, application and problem-solving. Adaptations for SEND and EAL learners are embedded, and pupils benefit from hands-on access to a range of technologies. Online safety and cross-curricular links are consistently reinforced, ensuring meaningful and engaging learning experiences.

**Why Impact is strong?**

The impact is strong because pupils leave the Federation as confident, capable and responsible users of technology. They demonstrate secure knowledge of digital systems, programming and online safety, and can apply computational thinking to solve problems. Pupils show resilience, creativity and independence in their learning, and are well prepared for the next stage of education. Outcomes align with National Curriculum expectations, with pupils achieving digital literacy that supports both academic success and everyday life.