



Computing Policy

1. INTRODUCTION

This document is one of a series that make up the whole **CRACKING** curriculum statement for the school. It states the school philosophy about the contribution which Computing makes to our pupils' education and the way in which the National Curriculum and computing are delivered in practice. In effect it is an expanded policy statement and together with the long, medium- and short-term thematic planning constitutes the school scheme of work.

This policy should be read alongside other relevant school policies, including Safeguarding, Behaviour, Anti-bullying, Data Protection and Acceptable Use Policies.

2. INTENT

Why is Computing important?

Computing is an essential part of modern life and underpins learning, work and leisure in an increasingly digital world. At Kings Meadow Primary School, we recognise that our pupils are growing up in a society shaped by technology and digital communication.

At Kings Meadow we believe that:

- Computing enables pupils to participate confidently and safely in a rapidly changing technological world;
- Computing develops pupils' ability to think logically, solve problems and work creatively;
- Digital literacy and online safety are vital life skills that empower pupils to make informed and responsible choices;
- Computing supports pupils in expressing ideas, creating content and communicating effectively;
- Understanding technology helps pupils become active, ethical and responsible digital citizens.

Through our **CRACKING curriculum it is our intention for our children to:**

- Develop secure knowledge and understanding of the three strands of the Computing National Curriculum:
 - Computer Science
 - Information Technology
 - Digital Literacy

- Learn how algorithms, programs and digital systems work;
- Develop computational thinking skills such as decomposition, sequencing, abstraction and debugging;
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content;
- Understand the role of technology in the wider world, including its impact on communication, culture and work;
- Learn how to keep themselves and others safe online and know where to seek help or support;
- Develop respectful, responsible and ethical online behaviour;
- Apply critical thinking when evaluating digital content and online information.

3. IMPLEMENTATION

When is Computing taught?

Computing is taught through a combination of **discrete Computing lessons** and **meaningful links to our CRACKING curriculum thematic units** where appropriate. This ensures pupils develop both subject-specific knowledge and the ability to apply Computing skills across the wider curriculum.

The coverage and progression plans published on the Computing page of our school website show clear and systematic progression in line with the National Curriculum Computing objectives. <https://www.kingsmeadowprimary.co.uk/computing/>

How is Computing taught?

Computing is taught through a balance of **explicit instruction, practical exploration and problem-solving activities**. Lessons are designed to build knowledge progressively and revisit key concepts to ensure retention.

We use **Purple Mash** as our core Computing platform, which supports:

- Clear progression of skills from Early Years to Year 6;
- Age-appropriate software and resources;
- Opportunities for creativity, programming, digital literacy and online safety;
- Assessment and evidence collection to demonstrate progress.

Learning takes place mainly in the classroom, with opportunities for collaborative work, independent exploration and practical application. Children are encouraged to talk about their learning, explain their thinking and evaluate their own work.

Progression in Computing

Through our **CRACKING curriculum** it is our intention for our children to develop their learning within each cognitive phase by **building secure knowledge and skills across the Purple Mash Computing strands**, so that:

- **Natterjack Toads (EYFS)** - Explore technology through play, develop early problem-solving and sequencing skills, and use digital tools safely with adult support
- **Sand Lizards (Year 1 & 2)** - Explore technology and follow simple algorithms to create digital content safely
- **Red Squirrels (Year 3 & 4)** - Create, test and debug programs and understand how digital systems store, share and present information
- **Seagulls (Year 5 & 6)** - Design, refine and evaluate digital solutions while understanding the responsibilities and impact of technology use

As pupils progress through the school, key concepts from the Purple Mash curriculum are revisited and built upon, ensuring **clear progression in knowledge, vocabulary and skills**. Children become increasingly confident in applying computational thinking, using technology creatively and acting responsibly online.

Natterjack Toads (EYFS)

In the Early Years Foundation Stage, pupils begin their Computing journey through **play-based, exploratory and real-life experiences**, aligned with the Purple Mash EYFS resources and the *Early Learning Goals*.

Pupils are supported to:

- Develop early computational thinking through **problem-solving, sequencing and logical reasoning** during structured play and adult-led activities;
- Follow and give simple instructions, laying the foundations for understanding algorithms;
- Use technology purposefully to support learning and creativity, including drawing, recording sounds and taking photographs (e.g. 2Paint a Picture, Simple recording tools);
- Explore cause and effect through age-appropriate digital devices and programmable toys;
- Begin to understand how technology is used in everyday life at home and in school;
- Learn how to stay safe when using technology, including knowing to ask an adult for help and understanding that not everything online is suitable for children.

Technology is integrated across the learning environment, both indoors and outdoors, and is used to enhance communication, language development and engagement. These early experiences provide a strong foundation for future learning in Computing by developing confidence, curiosity and positive attitudes towards technology.

Sand Lizards (KS1 – Year 1 & 2)

In this phase, pupils are introduced to Computing through **practical, visual and play-based experiences**, closely aligned with Purple Mash KS1 units.

Pupils learn to:

- Understand that algorithms are a set of instructions and that computers follow precise commands (Coding – Levels 1-2);
- Create and debug simple programs using directional language and sequencing;
- Use technology purposefully to create pictures, text and simple multimedia (e.g. 2Paint, 2Create a Story);
- Organise and retrieve work using folders and simple file management tools;
- Recognise common uses of technology in everyday life and school;
- Learn how to stay safe online, including keeping personal information private and knowing who to talk to if something worries them (Online Safety – KS1 units).

Learning is rooted in familiar contexts, enabling pupils to build confidence and curiosity while developing early digital literacy and online safety awareness.

Red Squirrels (LKS2 – Year 3 & 4)

Pupils build on their KS1 knowledge by **developing greater control, independence and understanding**, following the Purple Mash Lower Key Stage 2 progression.

Pupils learn to:

- Design, write and debug programs using sequence, selection and repetition (Coding – Levels 3-4);
- Use logical reasoning to predict and explain program behaviour;
- Create and edit digital content such as presentations, animations and simple databases (e.g. 2Create a Story, 2Animate, 2Question);
- Collect, organise and present data using charts and graphs;
- Understand how information is shared through networks and the internet;
- Develop responsible online behaviour, including respectful communication, privacy awareness and evaluating online content (Online Safety – LKS2 units).

Pupils begin to make informed choices about the tools they use and reflect on how technology supports learning across the wider curriculum.

Seagulls (UKS2 – Year 5 & 6)

In Upper Key Stage 2, pupils apply their knowledge and skills to **more complex and independent Computing tasks**, in line with Purple Mash UKS2 units.

Pupils learn to:

- Design, write and refine programs using variables, input and output (Coding – Levels 5-6);
- Decompose problems into smaller parts and test programs systematically;
- Create high-quality digital outcomes such as videos, blogs, spreadsheets and collaborative documents;
- Analyse data and present findings effectively using appropriate digital tools;
- Understand how search engines work and evaluate the reliability and bias of online information;
- Explore the ethical use of technology, digital footprints, copyright and online identity (Online Safety – UKS2 units).

By the end of Year 6, pupils are confident, capable and responsible digital citizens, well prepared for the next stage of their education.

Resources:

The school is well-resourced to deliver the Computing curriculum, including:

- A computer in every classroom;
- Laptop & Chromebook trolleys (x80 devices);
- iPad trolleys (x100 devices) ;
- Interactive whiteboards;
- Programmable devices (e.g. Beebots);
- Purple Mash and other approved software packages.

Resources are centrally managed and timetabled to ensure equitable access for all pupils.

Adaptive Teaching:

Adaptive teaching in Computing ensures that all pupils, including those with Special Educational Needs and Disabilities (SEND) and those who are more able, can access the curriculum and achieve well. Teaching is responsive and flexible, with lessons adapted to remove barriers to learning while maintaining high expectations for all pupils. Teachers use clear modelling, structured scaffolding and visual supports to secure understanding and build confidence. Learning is broken down into manageable steps where appropriate, and pupils are

given opportunities to demonstrate their understanding in different ways, such as through spoken explanations, diagrams, audio or video recordings. Appropriate use of assistive technology supports pupils to access learning and work independently. Where pupils grasp concepts quickly, learning is extended through deeper thinking, problem-solving and open-ended tasks, ensuring all pupils are supported and challenged to make strong progress in Computing.

Oracy in Science:

Oracy plays a key role in Computing lessons at Kings Meadow Primary School, supporting pupils in developing a secure understanding of technical concepts. Pupils are encouraged to explain algorithms and processes verbally, discuss problem-solving strategies and collaborate with others to evaluate digital outcomes. Through structured discussion, paired talk and group work, pupils learn to use subject-specific vocabulary accurately and confidently. These opportunities for purposeful talk help pupils to clarify their thinking, deepen understanding and articulate technical ideas effectively, supporting both their Computing learning and wider communication skills.

Online Safety and Digital Citizenship:

Online safety is embedded throughout the Computing curriculum and reinforced through PSHE. Pupils are taught to:

- Keep personal information private;
- Recognise inappropriate content and behaviour;
- Understand how to report concerns using the school's 'Zip It, Block It, Flag It' approach;
- Respect others online;
- Understand age restrictions and digital footprints.

4. IMPACT

The impact of our Computing curriculum is measured through a range of formative and summative assessment strategies. Ongoing formative assessment takes place during lessons and is used by teachers to inform future planning and ensure pupils make secure progress. Evidence of learning is collected through Purple Mash, alongside work scrutiny, planning audits and Pupil Voice discussions carried out by the Computing Leader to assess understanding, engagement and progression. Teachers are required to save examples of work

from pupils working at different levels, which are used to build a bank of evidence demonstrating progression from one year group to the next. Pupil progress is tracked termly against National Curriculum objectives, and parents are informed of their child's attainment and progress through annual Summer term reports. The Computing Leader provides strategic direction for the subject, supports staff development and monitors standards to ensure continued improvement in the teaching and learning of Computing across the school.

Reviewed	December 2025
Approved by Governing Body	
Next Review	December 2028 or sooner if required.