COMPUTING POLICY

Introduction

The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. At Meadow Farm Community Primary School we recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world. The purpose of this policy is to state how the school intends to put this provision in place.

Curriculum Intent

The school's aims to:

- Provide a broad, balanced, challenging and enjoyable computing curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for computing at Key Stage 1 and 2
- To respond to new developments in technology
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing. To develop the understanding of how to use computers and digital tools safely and responsibly.

The National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order 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.
- The school believes that IT, computer science and digital literacy are essential life skills necessary to fully participate in the modern digital world, allowing children to become creators of digital content rather than simply consumers of it.
- Provides access to a rich and varied source of information and content.
- Communicates and presents information in new ways, which helps pupils understand, access and use it more readily.

- Can motivate and enthuse pupils.
- Offers opportunities for communication and collaboration through group working both inside and outside of school.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Early years

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play.

Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys.

Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

By the end of key stage 1 pupils will be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and computing the behaviour of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils will be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs
- Understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

	Progression of Computing							
Computer Science	• Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. • Create and debug a simple programs. • Use logical reasoning to predict the behaviour of simple programs.							
	Nursery	**Reception**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	• Show an interest in toys with buttons, flaps and simple mechanisms and begin to learn to operate them. • Can operate mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. • Explores how things work e.g. cameras, torches, iPads, walkie-talkies, hand whisks.	• Can complete a simple program on an electronic device. • Can create content such as a video recording, stories and/or raw a picture on a screen. • Uses everyday technology within play. • Can understand the uses of everyday technology and has a basic understanding of how they work, e.g.	• **1.3 Moving a robot.** Write short algorithms and programs for floor robots and predicting program outcomes. • **1.6 Programming animations.** Designing and programming the movement of a character on screen to tell stories.	• **2.3 Robot algorithms.** Creating and debugging programs and using logical reasoning to make predictions. • **2.6 Programming quizzes.** Designing algorithms and programs that use events to trigger sequence of code to make an interactive quiz.	• **3.1 Connecting computers.** Identifying that digital devices have inputs, processes and outputs and how devices can be connected to make networks. • **3.3 Sequencing Sounds.** Creating sequences in a block based programming language to make music. • **3.5 Desktop Publishing.**	• **4.1 The Internet.** Recognising that the internet is a network of networks including the WWW, and why we should evaluate digital content. • **4.2 Audio production.** Capturing ad editing audio to produce a podcast, ensuring that copyright is considered. • **4.3 Repetition in shapes.** Using a text-based	5.1 Systems and searching. Recognising IT systems in the world and who some can enable searching on the internet. 5.2 Video Production. Planning, capturing, and editing video to produce a short film. • **5.3 Selection in physical computing.** Exploring	• **6.1 Communication and collaboration.** Exploring how data is transferred by working collaboratively online. • **6.2 Webpage creation.** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.
	• Can operate simple equipment e.g. turns on a CD player, uses remote control. • Shows an interest in technological toys with knobs or pulleys, real objects such as cameras and touch screen devices. • Knows that information can be retrieved from digital devices and the internet.	printers, calculators, photocopiers. • Is competent to explore with different technologies through play.			Creating documents and modifying text, images and page layouts for a specific purpose. • **3.6 Events and actions in programs.** Writing algorithms and programs that use a range of events to trigger sequences of actions.	programming language to explore count-controlled loops when drawing shapes. • **4.4 Data logging.** Recognising how and why data is collected over time, before using data loggers to carry out investigation. • **4.5 Photo editing.** Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled. • **4.6 Repetition in games.** Using block-based programming language to explore count-controlled and infinite loos when creating a game.	conditions and selection using a programmable microcontroller. • **5.4 Flat file databases.** Using a database to order date and create charts to answer questions. • **5.6 Selection in quizzes.** Exploring selection in programming to design and code an interactive quiz.	• **6.3 Variables in games.** Exploring variables when designing and coding a game. • **6.6. Sensing movement.** Designing and coding a project that captures inputs from physical devices.

Information Technology

- Use Technology purposefully to create, organise, store, manipulate and retrieve digital content.

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• Enjoys mark making through touch screen technology. • Can handle touch screen technology carefully and the right way up.		• **1.1 Technology around us.** Recognising technology in school and using it responsibly. • **1.2 Digital painting.** Choosing appropriate tools in a program to create art and making comparisons with working non-digitally. • **1.4 Grouping data.** Exploring object labels, then using them to sort and group objects by properties. • **1.5 Digital writing.** Using a computer to create and format text, before comparing to writing non-digitally.	• **12.1 Information technology around us.** Identifying IT and how its responsible use improves our world in school and beyond. • **2.2 Digital photography.** Capturing and changing digital photographs for different purposes. • **2.4 Pictograms.** Collecting data in tally charts and using attributes to organise and present data on a computer. • **2.5 Digital music.** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	• **3.1 Connecting computers.** Identifying that digital devices have inputs, processes and outputs and how devices can be connected to make networks. • **3.2 Stop-frame animation.** Capturing and editing digital still images to produce a stop frame animation that tells a story. • **3.3 Sequencing Sounds.** Creating sequences in a block based programming language to make music. • **3.4 Branching databases.** Building and using branching databases to group objects	• **4.1 The Internet.** Recognising that the internet is a network of networks including the WWW, and why we should evaluate digital content. • **4.2 Audio production.** Capturing ad editing audio to produce a podcast, ensuring that copyright is considered. • **4.3 Repetition in shapes.** Using a text-based programming language to explore count-controlled loops when drawing shapes. • **4.4 Data logging.** Recognising how and why data is collected over time, before using data	• **5.1 Systems and searching.** Recognising IT systems in the world and who some can enable searching on the internet. • **5.2 Video Production.** Planning, capturing, and editing video to produce a short film. • **5.3 Selection in physical computing.** Exploring conditions and selection using a programmable microcontroller. • **5.4 Flat file databases.** Using a database to order date and create charts to answer questions. • **5.5 Introduction to vector**	• **6.1 Communication and collaboration.** Exploring how data is transferred by working collaboratively online. • **6.2 Webpage creation.** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation. • **6.3 Variables in games.** Exploring variables when designing and coding a game. • **6.4 Introduction to spreadsheets.** Answering questions by using spreadsheets to
				using yes/no questions. • **3.5 Desktop Publishing.** Creating documents and modifying text, images and page layouts for a specific purpose. • **3.6 Events and actions in programs.** Writing algorithms and programs that use a range of events to trigger sequences of actions.	loggers to carry out investigation. • **4.5 Photo editing.** Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled. • **4.6 Repetition in games.** Using block-based programming language to explore count-controlled and infinite loos when creating a game.	**graphics.** Creating images in a drawing programme by using layers and groups of objects. • **5.6 Selection in quizzes.** Exploring selection in programming to design and code an interactive quiz.	organise and calculate data. • **6.5 3D Modelling.** Planning, developing and evaluation 3D computer models of physical objects. • **6.6. Sensing movement.** Designing and coding a project that captures inputs from physical devices.

Digital Literacy

- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping persona information private: identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• Knows that the internet can be used to retrieve information.	• Can use the internet with adult supervision and support to find and retrieve information of interest to them.	• **1.1 Technology around us.** Recognising technology in school and using it responsibly. • **1.3 Moving a robot.** Writing short algorithms for floor robots, and predicting program outcomes.	• **2.1 Information technology around us.** Identify IT and how its responsible use improves our world in school and beyond. • **2.2 Digital photography.** Capturing and changing digital photographs for different purposes.	• **3.2 Stop-frame animation.** Capturing and editing digital still images to produce a stop frame animation that tells a story. • **3.4 Branching databases.** Building and using branching databases to group objects using yes/no questions.	• **4.1 The Internet.** Recognising that the internet is a network of networks including the WWW, and why we should evaluate digital content. • **4.2 Audio production.** Capturing ad editing audio to produce a podcast, ensuring that copyright is considered. • **4.5 Photo editing.** Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled.	• **5.1 Systems and searching.** Recognising IT systems in the world and how some can enable searching on the internet. • **5.2 Video Production.** Planning, capturing and editing video to produce a short film.	**6.2. Webpage Creation.** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation. **6.3 Variables in games.** Exploring variables when designing and coding a game. **6.5 3D Modelling.** Planning, developing and evaluation of 3D computer models of physical objects.

Implementation of the policy

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school. Teachers are required to inform the computing subject leader of any faults as soon as they are noticed. Resources, if not classroom based, are located in the computing suite and IT storeroom. A service level agreement with LEAD IT Services is currently in place to help support the subject leader to fulfill this role both in hardware and software.

Computing network infrastructure and equipment has been sited so that:

- Every classroom from nursery to Y6 is connected to the school network and has an interactive whiteboard with sound and video facilities.
- There is a computing suite, two trolleys containing laptops and the use of a class set of ipads.
- Internet access is available in all classrooms.
- Each class from Y1 – Y6 has an allocated slot per week for teaching computing.
- The computing suite, laptops and ipads are available for use throughout the school day as part of computing lessons and for cross-curricular use.
- Pupils may use IT and computing independently, in pairs or as part of a group.
- The school has a computing technician who is on site every Thursday from 1pm.

Planning

The school uses the Teach Computing curriculum, a whole school scheme of work for Y1 to Y6 which fully meets the objectives of the national curriculum for Computing and allows for clear progression in computing.

We assess the children's work in computing by making informal judgments as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit.

Pupils with special educational needs (see also SEN policy)

We believe that all children have the right to access IT and computing. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the computing curriculum for some pupils.

We teach IT and computing to all children, whatever their ability. Computing forms part of the national curriculum to provide a broad and balanced education for all children. Through the teaching of computing we provide opportunities that enable all pupils to make progress. We do this by setting suitable challenges and responding to each child's individual needs. Where appropriate IT can be used to support SEN children on a one to one basis where children receive additional support. To support our children with dyslexia we will provide structured lessons plans that follow a predictable pattern. We use visual supports, for example flowcharts to represent code. Our lessons will have a flexible seating plan to allow peer to peer support and we will use assistive technologies, such as text to speak with them are available. Our coding focusses on a block language allowing children to focus on the logic of the task rather than being concerned about the syntax.

Equal opportunities (see also equal opportunities policy)
We will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to computing and all staff members follow the equality policy. Resources for SEN children and all pupil groups will be made available to support and challenge appropriately.

Cross curricular links
As a staff we are all aware that IT and computing skills should be developed through core and foundation subjects. Where appropriate, IT and computing should be incorporated into schemes of work for all subjects. IT and computing should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross-curricular approaches and uses Purple Mash across the curriculum, which embeds computing in Art, Music, English, Mathematics, Science, Geography and History from Year 1 to Year 6.

Parental involvement
Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home for pleasure, through home-learning tasks and use of the school website. Parents will be made aware of issues surrounding e-safety and encouraged to promote this at home.

Monitoring and review

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, pupil discussion and evaluating pupil work.

We allocate time for the vital task of reviewing samples of children's work and for visiting classes to observe teaching in the subject.

The role of the Subject Leader
There is a computing subject leader who is responsible for the implementation of computing policy across the school. Their role is to:

- Offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- Provide colleagues opportunities to observe good practice in the teaching of computing.
- Maintain resources and advise staff on the use of digital tools, technologies and resources.
- Monitor classroom teaching or planning following the schools monitoring programme.
- Monitor the children's progression in computing, looking at examples of work of different abilities.
- Keep up-to-date with new technological developments and communicate information and developments with colleagues
- Lead staff training on new initiatives.
- Attend appropriate in-service training
- Have enthusiasm for computing and encourage staff to share this enthusiasm
- Keep parents and governors informed on the implementation of computing in the school.
- Liaise with all members of staff on how to reach and improve on agreed targets

- Help staff to use assessment to inform future planning.

The role of the class teacher
Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning computing and using their knowledge, skills and understanding of computing across the curriculum.

Teachers will plan and deliver the requirements of the National Curriculum for Computing to the best of their ability. We set high expectations for our pupils and provide opportunities for all to achieve, including girls and boys, pupils with educational special needs, pupils with disabilities pupils from all social and cultural backgrounds, and those from diverse linguistic backgrounds.

The class teacher's role is a vital role in the development of computing throughout the school and will ensure continued progression in learning and understanding, and create effective learning environments.

The class teacher will also:
- Secure pupil motivation and engagement
- Provide equality of opportunity using a range of teaching approaches and techniques
- Use appropriate assessment techniques and approaches
- Set suitable targets for learning as outlined in the inclusion policy.
- Maintain up to date assessment records.

Staff training
The computing subject leader will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.

Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs and notify the subject leader.

Teachers will be encouraged to use IT and computing to produce plans, reports, communications and teaching resources.

Health and safety (see also Health and Safety policy)
The school is aware of the health and safety issues involved in children's use of IT and computing.

All fixed electrical appliances in school are tested by a Local Authority contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months.

Staff should not bring their own electrical equipment in to school but, if this is necessary, equipment must be PAT tested before being used in school. This also applies to any equipment brought in to school by, for example, visitors running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people.

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to a computer technician, bursar or head teacher who will arrange for repair or disposal.
In addition:

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- E-safety guidelines will be set out in the e-safety policy & Acceptable Use Policy

Security

We take security very seriously. As such:

- The computing technician will be responsible for regularly updating anti-virus software.
- Use of IT and computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of IT and computing and the internet and will understand the consequence of any misuse.
- The agreed rules for safe and responsible use of IT and computing and the internet will be displayed in all computing areas.

Impact

After the implementation of this robust computing curriculum, children at Meadow Farm Community Primary School will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.

Policy prepared by:

Mrs Doriver Lilley, Computing Lead.

Date prepared: November 2025

Date ratified by the Strategic Committee: 12.11.25

(Chair of the Strategic Committee)

Signed:

Mrs M. Gaiderman

S Eyre

Signed: (Head Teacher)

Mrs S. Eyre

Review date: January 2028