GREATFIELDS PRIMARY

Excellence for all

Computing Policy

Last Reviewed: September 2024

Next Review: September 2026

Contents:

1. Subject Statements

Intent

At Greatfields Primary School we teach Computing using Purple Mash scheme of learning. The aim of Computing is to teach children how to use technology in a range of ways and to understand how to use technology in a safe way. Computing has deep links with mathematics, science, and design and technology and can support learning across these subjects. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils.

Our aims:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to become responsible, respectful and competent users of data, information and communication technology.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Provide technology solutions for forging better home and school links.

Implementation

At Greatfields Primary School, every child has an hour of Computing each week and this is delivered in a specific built Computing suite within the school. Pupils are also able to access Computing through iPad and laptops in their classrooms.

At Greatfields we use Purple Mash and through the extensive long, medium, step-by-step short-term planning, we are able to meet the requirements of the national curriculum for computing. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.

To make the best use of Purple Mash, pupils need to be logged on with their individual usernames and passwords, using 2dos to complete work so their work will be saved in their own folders automatically and can be easily reviewed and assessed by the class teacher.

As pupils progress through the school, pupils can build on prior learning within the three strands of computing, covering new or deeper knowledge and developing their technical skills.

With Computing and technology becoming an increasing part in the worlds future we intend to develop pupils' understanding of the concepts, practices and perspectives that underpin programming and other aspects of computer science, while providing ample opportunity for creative, collaborative project work in which pupils can acquire the information technology skills they will need. *Purple Mash* also helps pupils to understand the implications of technology for individuals and society as they become digitally literate.

Our children in Early Years provision are also exposed to the understanding of internet safety as they explore the world around them and how technology is an everyday part of their learning and understanding of the world.

Impact

By the end of each key stage, pupils are expected to know, apply and understand the different areas of the national curriculum. At Greatfields Primary School we aim for the children to 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. We use a mixture of interim and summative assessment (based on the objectives in the 2014 National Curriculum) to determine children's understanding and progression in computing. This information is used to feed into teachers' future planning, teachers are able to revisit misconceptions and knowledge gaps in computing when teaching other curriculum areas. This supports varied paces of learning and ensures all pupils make good progress.

2. Teaching and Learning

At Greatfields Primary school, we have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

Our curriculum is based around quality first teaching with the main aim of our teaching being 'Excellence for all'. This is then underpinned by the eight key components which are:

- Pedagogy
- Classroom Climate
- Lesson Design
- Student Self-awareness
- Successful Learning
- Collaborative Learning
- Effective Questioning
- Quality Feedback

The Computing curriculum reflects this, as it is mapped out to show a clear progression of skills from year to year in the pupil's time at the school. These skills are then used to plan and deliver high quality lessons, the planning also ensures time is effectively managed to guarantee that lessons and activities are

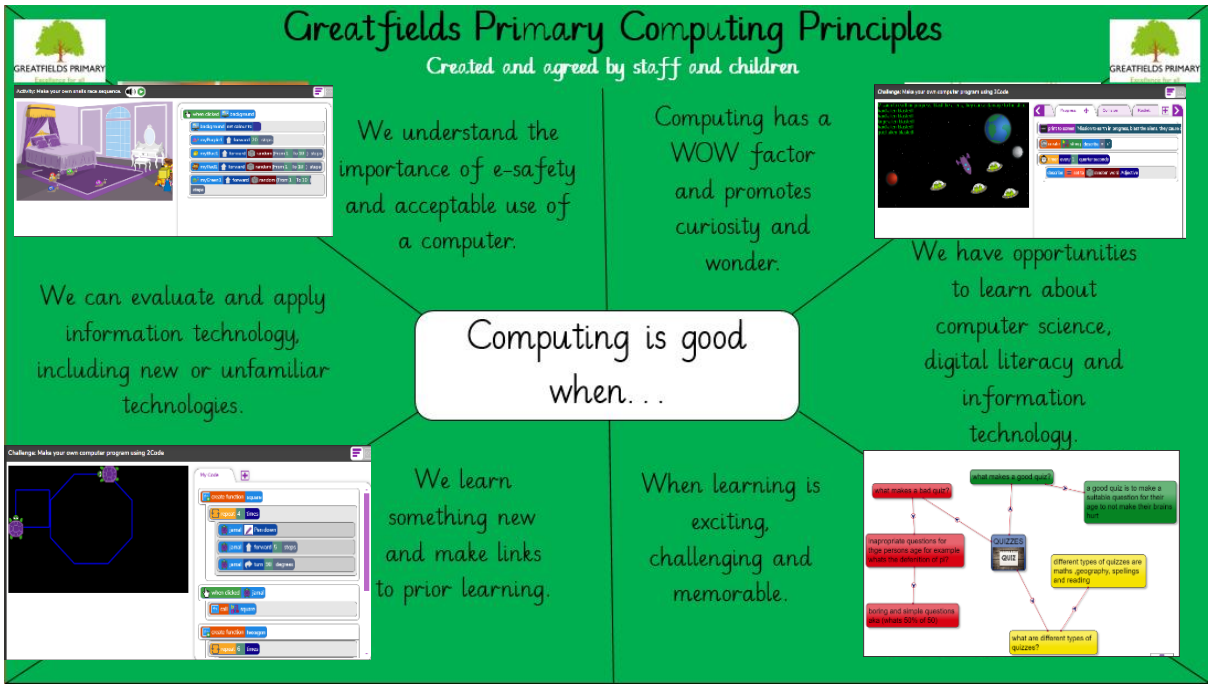
well organised and resourced. Pupils experience a range of opportunities to work individually, in pairs or in groups over time.

To ensure a common ethos in the teaching and learning of Computing, staff and children were involved in the creation of the Greatfields Primary 'Computing Principles'.

Computing is good when:

- We understand the importance of e-safety and acceptable use of a computer.
- Computing has a WOW factor and promotes curiosity and wonder.
- We have opportunities to learn about computer science, digital literacy and information technology.
- We can evaluate and apply information technology, including new or unfamiliar technologies.
- We learn something new and make links to proper learning.
- When learning is exciting, challenging and memorable.

Figure 1: Greatfields Primary 'Computing Principles' Poster



3. Safeguarding: Online Safety

Online safety has a high profile at Greatfields Primary School for all stakeholders. We ensure this profile is maintained and that pupil needs are met by the following:

- A relevant up-to-date online safety curriculum which is progressive from Early Years to the end of Year 6 through Purple Mash.
- A curriculum that is threaded throughout other curriculums and embedded in the day-to-day lives of our pupils.
- Training for staff and governors which is relevant to their needs and ultimately positively impacts on the pupils.
- Scheduled pupil voice sessions and learning walks steer changes and inform training needs.
- Through our home/school links and communication channels, parents are kept up to date with relevant online safety matters, policies and agreements. They know who to contact at school if they have concerns.
- Pupils, staff and parents have Acceptable Use Policies which are signed and copies freely available.
- Our online safety policy (part of our safeguarding policy) clearly states how monitoring of online safety is undertaken and any incidents/infringements to it are dealt with.
- Data policies which stipulate how we keep confidential information secure.

4. Filtering and Monitoring

Through the Partnership Learning IT team we have a site wide filtering and monitoring system in place. This is monitored by them with any unusual or suspicious activity being flagged to the DSL immediately.

Reports are created on a termly basis to update the SLT and DSL on any changes or concerns, this is when SLT will feedback any concerns around websites which need to be blocked or they are concerned about.

On an annual basis SLT, DSL and IT team will meet to review the filtering and monitoring systems in place with any changes be agreed on where it reasonably does not affect the teaching and learning.

A review of filtering and monitoring should be carried out to identify your current provision, any gaps, and the specific needs of your pupils and staff.

You need to understand:

- the risk profile of your pupils, including their age range, pupils with special educational needs and disability (SEND), pupils with English as an additional language (EAL)
- what your filtering system currently blocks or allows and why
- any outside safeguarding influences, such as county lines
- any relevant safeguarding reports
- the digital resilience of your pupils
- teaching requirements, for example, your RHSE and PSHE curriculum
- the specific use of your chosen technologies, including Bring Your Own Device (BYOD)
- what related safeguarding or technology policies you have in place
- what checks are currently taking place and how resulting actions are handled

To make your filtering and monitoring provision effective, your review should inform:

- related safeguarding or technology policies and procedures
- roles and responsibilities
- training of staff
- curriculum and learning opportunities
- procurement decisions
- how often and what is checked
- monitoring strategies

5. <u>Assessment</u>

- Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention.
- Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool.

- Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning
- Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash.
- Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment.
- Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about the samples into the 2Simple Computing Assessment Tool.
- Work from a range of classes and abilities is shared using the Noticeboard feature in Purple Mash. Additionally, exemplar pieces of work from individual pupils is shared with parents using Parent Portal (a feature in Purple Mash).

6. Planning and Resources

Planning

The school uses Purple Mash for Primary schools - the whole-school scheme of work for Year 1 to Year 6 pupils. Purple Mash fully meets the objectives of the National Curriculum for Computing and allows for clear progression in computing. Pupil progress towards these objectives will be recorded by teachers as part of the school recording system. Staff will follow Purple Mash' planning guidance and pupil progress trackers.

A minority of children will have teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in accordance with

the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure that appropriate provisions and/or interventions are affected.

7. Organisation

Children study computing in blocks, and the content of each block is outlined in the school's Computing Knowledge and Skills Progression Map. This approach enables pupils to build upon prior learning and supports a greater depth of understanding throughout the focussed teaching block.

8. Resources

Laptops

We have 30 Laptops to support independent learning, each having access to a range of programmes that can meet the needs of the new programme of study.

iPads

Each teacher has an iPad for assessment purposes. We have 18 iPads for use within the classroom to support the programme of study.

Classroom Computers

There is at least one desktop computer in each classroom. These machines are networked and have access to the shared drive for planning and preparation.

Printers and Photocopiers

There is one colour photocopier which is networked to each computer based in the PPA room on the ground floor.

Interactive Whiteboards

Each classroom has an interactive board linked to the desktop computer.

Other Resources to support the curriculum.

- Headphones
- MS Teams

Children study computing in blocks, and the content of each block is outlined in the school's Computing Knowledge and Skills Progression Map.

9. EYFS

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

10. KS1 and KS2

KS1

- 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.
- 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.

KS2

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- 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.

- 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.
- 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.
- 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 worldwide web; and the opportunities they offer for communication and collaboration.

11. Equal Opportunities

Greatfields Primary School 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 equal opportunities policy. Resources for SEN children and children who are working at greater depth are made available to support and challenge appropriately.

12. Inclusion

We believe that all children have the right to access IT and computing. 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.

13. Role of the Subject Leader

The Computing lead will monitor the teaching and learning of computing across the school to support and guide the practice of teachers, ensuring a high quality, broad and stimulating computing curriculum.

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 the children's progression, looking at examples of work of different abilities.
- Manage the Computing budget.
- Keep parents and governors informed on the implementation of Computing in the school.
- Help staff to use assessment to inform future planning.
- Offer CPD training to all staff.
- Monitor and evaluate the effectiveness of Computing teaching and learning.

- Liaise and consult with external agencies where appropriate for educational visits.
- Keep up to date with new technological developments and communicate information and developments with colleagues.
- Acceptable use policy – ensuring that all new starters receive and sign a copy. A copy is sent out at the beginning of each academic to remind parents and children about the acceptable use policy.

14. Parents

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.

Appendix 1

Pupil Computing Acceptable Use Agreement

These rules will keep me safe and help me to be fair to others.

- I will only use the school's computers for schoolwork.
- I will only edit or delete my own files and not look at, or change other people's files without their permission.
- I will keep my logins and passwords secret.
- I will not bring files into school without permission or upload inappropriate materials to my work space.
- I am aware that some websites and social networks have age restrictions and I should respect these.
- I will not attempt to visit internet sites that I know to be banned by the school.
- I will only email people I know or a responsible adult has approved.
- The messages I send or information I upload, will always be polite and sensible.
- I will not open an attachment or download a file, unless I know and trust the person who has sent it.
- I will not give out my home address, phone number, send a photograph or a video, or give out any other personal information that could be used to identify me, my family or my friends, unless a trusted adult has given me permission.
- I will never arrange to meet someone I have only ever previously met on the internet, unless my parent/carer has given me permission and I take a responsible adult with me.
- If I see anything I am unhappy with or I receive a message I do not like, I will not respond to it but I will show my teacher / responsible adult.

I have read and understand these rules and agree to them.

Name: _____ (Printed) Class: _____

Signed: _____ Date: _____

Parental Signature: _____ Date: _____