Bitterne C of E Primary School

Policy for Computing and E-Safety

At Bitterne CE Primary School, we believe that computing is an integral part of preparing children to live in a world where technology is rapidly changing and evolving, where children are going to be expected to interact with technology that hasn't even been invented yet. Due to this, we will inspire every child to develop curiosity and fascination in technology and computing which will remain with them for the rest of their lives. Through high quality lessons, we will encourage children to ask questions about computing and relevant technology in an enquiry-based approach, leading to a high-level of achievement in Computing and preparing them well to contribute to the wider society in which they live.

Headteacher

Andy Peterson

Reviewed by	Leadership Team and Full Governing Board	**Authorised by**	Leadership Team
Last Review	January 2023	**Date**	20th April 2020
Next Review	January 2025	**Review Cycle**	

Signed for Governors: Amanda Humby, Chair of Governors

The Nature of Computing at Primary School.

'A high-quality computing education equips pupils to understand and change the world through logical thinking and creativity, including making links with mathematics, science and design and technology.
The core of computing is computer science, in which pupils are taught the principles of information and computation, and how digital systems work. Computing equips pupils to use information technology to create programs, systems and a range of media. It also ensures that pupils become digitally literate- able to use, and express themselves and develop their ideas through, information and communication technology- at a level suitable for the future workplace and as active participants in a digital world.' NC 2014 page 188

The Nature of Computing at Bitterne CE Primary

At Bitterne CE Primary School, we facilitate the children's enquiry of Computing through the school's Christian values of Love, Trust and Forgiveness. We believe that Computing has the potential to teach the children how to be citizens of an ever-changing world. Through love, the children will develop an awe and wonder of technology present all around them and a fascination about the interaction between humans and the technology they create. In trust, the children will learn about how we all have an obligation in using technology responsibly with a high regard for E-safety and how this applies to their everyday lives. Through forgiveness, the children learn about how communicate with others and use technology alongside one-another and the impact their actions can have on those around them, and how through their own choices can learn from the mistakes of the past to contribute to a safer community.

Throughout their time at Bitterne CE Primary, all children will have the opportunity to foster their love and enjoyment of Computing. Trips, visits and special visitors have been carefully selected to develop experiences that the children will remember for the rest of their lives, which in turn will underpin their love of Computing.

The Computing Curriculum

The National Curriculum sets out the programmes of study for each year group. However, within each key stage, there is flexibility to introduce content earlier or later as appropriate. The school can also introduce key stage content earlier than the current key stage. It is also expected that children will use a variety of information and communication technologies across the curriculum and will develop basic skills for word processing, programming, spread sheets, data bases, presentation software etc. in order that they can apply these skills in a confident and creative way.

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 in order to solve such problems
- Can evaluate and apply information technology, including new and unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.

By the end of the Computing Learning Journey all pupils should be fluent in the use of different technologies and programmes and be able to creatively apply the skills they have learnt to solve problems and use unfamiliar technologies.

Planning for computing

The **planning for computing** should follow the National Curriculum programmes of study and NCCE (National Centre for Computing Education) overviews/units of work. The scheme of work for computing from KS1 and KS2 should be followed.
The planning for computing should follow the agreed format across the school. It should outline the 'Learning Journey' over a unit with a clear expected outcome. The learning will be progressive and ensure the children are taught the skills, knowledge and understanding needed over the unit so that by the end of the unit good progress is evident.

The planning should not be over detailed or bureaucratic. The teacher must keep in mind that the planning is a working document that will change as the unit progresses as a result of assessment for learning. By the end of a unit, the planning will have annotations on it where barriers for individuals, groups or the whole class have been identified and addressed.
The Computing Leader will monitor that the planning follows the agreed format but will not expect the audience for the planning to be anyone other than the teacher themselves. SLT and the Computing Leader will however be looking at the **impact of planning on the learning** in a lesson or over time in the books. It may be that in lesson observations, the planning is not studied in detail as it is the learning in the class at the time as a result of the planning that will be judged. This evidence may also be gathered through looking at work/evidence on the school severs as well as pupil conferencing.

All planning should dedicate appropriate time to children **working on computing for a sustained period of time** for both teacher structured work and independent work. The productivity of the children over time is a key element of work scrutiny. It generally follows that good teaching with high expectations results in at least good productivity and therefore greater evidence of progress. Over a unit of work there should be a good variety of learning activities to interest and engage students. A clear focus on using and applying learning tasks should be evident in the planning and children should talk enthusiastically about their learning.

Children should have planned opportunities to say and/or write explanations or share their reasoning. The work books should show some examples of where children have written explanations, described planning or reflected on their learning. The quality of the writing should be at least equal to that in other subjects.

Learning Intentions are an important tool, when used effectively, to ensure the thread of learning is clear to the children. It also helps them to know what their next step in the lesson is. In computing it is sometimes useful to have process success criteria (Steps to success) as well as outcome success criteria. It is motivating for children to create their own process success criteria after the process has been modelled to them. On occasions, it may be that the teacher will deliberately not

reveal the learning intentions at the start of a lesson and the pupils will be challenged to articulate what they have learnt later in the lesson.

Problem solving should be integrated into all unit planning to accomplish specific goals. The children should have opportunities to think hard and draw on previous knowledge.

Guided groups- Within the computing lesson, there should be opportunities for the teacher or TA to work with a small group in order to support the learning or provide challenge. These groups can be planned based on the assessment information from the previous day, or they can be groups formed during a lesson where the teacher judges that a focus group would move the children's learning on. At all times, the groups for computing will be flexible depending on what the children need. Teaching Assistants should work with a variety of ability groupings over time.

Practical and visual activities and resources

Carefully chosen practical resources and activities aid conceptual understanding and make learning more interesting. Regardless of ability or age, all children should have access to practical and visual resources appropriate to their understanding. Many resources for computing will be web based. Such resources should be used with caution as some websites are task rather than learning based. Indeed, some online resources are the equivalent of a worksheet but digitally. Resources that promote creativity and independence in solving a problem are preferred. However, in all units there are also opportunities for 'unplugged' activities which many involve children reflecting on work they have completed

Progression for computing

Please refer to the overview for Computing in Appendix 1.

Coaching and computing

Every teacher and teaching assistant has access to high quality coaching for Computing. This can be planned or informal. In the NCCE units of work there are signposts to support which staff can access independently. The basic skills for IT such a word processing, data bases, spread sheets etc. should be used across the curriculum and staff training will be given to ensure all staff can use these applications to an appropriate standard.

Inclusion in Computing

Disadvantaged / SEND – It should be clear in planning that these groups of children have been catered for during each lesson and if /when/where they made need extra support with tasks. Within the lessons there should be opportunities for everyone to access the same activities, they may however be scaffolded or differentiated where it is needed. Every child must have equal opportunity to access and succeed. This may require individualised support or resources in order for progress in computing to be of a consistently good standard for all children. In provisions such as Woodlands, Squirrels or Shooting Stars children will be able to access elements of the computing curriculum relevant to their attainment.

Research has proven that children are stimulated by the outdoors, and typically in this environment, memories are created that build on the children's self-esteem and enthusiasm for learning. For children in the Woodlands group, the curriculum has been specially designed to

teach the children about Computing in a different environment. Targeting statements at a Lower Key Stage 2 level, children will receive lessons that are carefully designed to build understanding in Computing and develop their emotional wellbeing.

For children in the Squirrels and Shooting Stars group, the curriculum overview provides opportunities for children to develop their knowledge of Computing at a level appropriate to their development. Teachers liaise with the Shooting Stars Lead to ensure learning can be reinforced back in the classroom.

Greater Depth

It should be clear in planning that this group of children has been catered for during each lesson and if /when/where they made need extra support to help them to achieve the higher standard. Planning should show how teachers are trying to challenge this group of children where possible. Within the lessons there should be opportunities for everyone to access the same activities, they may however be differentiated where it is needed. This may be more opportunities for these children to reflect on the work they have done and evaluate it with a chance to edit and improve their work.

Computing in Early Year Foundation Stage

Despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, which focuses on the learning and development of children from birth to age five, there are many opportunities for young children to use technology to solve problems and produce creative outcomes. In particular, many areas of the framework provide opportunities for pupils to develop their ability to use computational thinking effectively.

The September 2020 release of Development Matters (pg. 9) outlines how effective teaching and learning gives children the opportunity to play and explore, participate in active learning and create and think critically, therefore there are many opportunities which exist to use technology with younger children; particularly when linked to a topic studied within class.

Children typically learn through a mix of free-choice play and more focused activities with adults both inside and outside. The provision will be IT rich and tailored to the needs of different groups of children, including challenge for those higher attaining children and support for the lower attaining children. Adults will use language related to Computing and question effectively to develop the children's vocabulary and thinking.

Computing across the curriculum

Expectation- Children will be able to demonstrate the independent application of taught computing skills across the entire curriculum.

Children will have opportunities for Computing activities linked to other subjects in the curriculum but particularly so in mathematics, science, English and design and technology

Links to Personal Development

Spiritual development: Through helping children to recognise modern and technologically advanced world around them, this awareness helps children understand their place within it. Computing provides opportunities for children to learn about aspects of the world they otherwise may not have been able to access.

Moral development: Through helping children to reflect on how the world around them can be affected by choices made online, they can make informed choices in the future. Through discussion, the children learn to appreciate the moral dilemmas that can be posed through their use of different technologies and in particular social media. Introducing these dilemmas to them helps them to understand the effects their choices can have.
Social development: Through helping children to understand the need to consider the views of others when discussing their use of technology and the different experiences and exposure people have had to it, it allows children to consider other people's opinions and experiences.
Cultural development: Through the use of technology children can research and learn about the different cultures around them giving them a more rounded and balanced view of the world they live in.

Links to reading

Please refer to the Policy for Reading. Children should experience a wide range of reading and this includes as part of their computing lessons. This may be reading and understanding problems or reading and interpreting data.

Links to writing

Children should be introduced to key computing vocabulary in a progressive way across the school. The vocabulary should be modelled precisely by all staff and children should be expected to accurately use the vocabulary when speaking and in their written work.
There should be examples of written work printed in computing where the children are explaining their thinking, reasoning or justifying their results. The writing should follow the non-negotiables for writing and should be of the same standard as the writing in English books.

Links to maths

Children in KS2 should begin to be able to use computing lessons as a way to access statistics or create their own charts/graphs. This should be modelled by staff to demonstrate how to use this software accurately. The graphs created can be used in maths lessons / topic lessons to show understanding.

Links to speaking and Listening and spoken language.

All adults model and develop children's speaking and listening by talking to children, asking questions, modelling new vocabulary and helping children to express their ideas orally.
There should be planned opportunities to develop skills in speaking and listening and this should be linked in computing lessons. All adults in school should be good role models for the correct use of the correct use of computing vocabulary showing that they understand the meaning of the word (See Appendix 2)

Links to the wider curriculum

Children across KS1 and KS2 will be able to participate in engaging and relevant activities to their stage of development in the Computing Curriculum as well as any relevant curriculum topics. This may include participating in school trips, role play, having visitors in school or other activities relating to the topic they are studying. This will not only enhance their learning of computing but also support their personal and social development in becoming an effective citizen.

Assessment of Computing

Marking and feedback

The computing work should always be marked in accordance with the 'Marking and Feedback Policy'. There should be time given for talkback activities to respond to the marking where needed. The tip should be the next step to improve the work. During sustained periods of working, the adults should be pen marking the work already done and giving advice on how to improve further in the lesson (where the work is paper based). During the lesson, teachers should be questioning to check or probe the child's understanding, identifying and tackling misconceptions and adapting planning for individuals, groups or the class accordingly. The teacher may also want to comment capture during these conversations and record this where needed.

Assessment in Computing

In EYFS, KS1 and KS2 the teacher should be assessing throughout the lesson. This would involve listening to any discussion, responses to questions or problems orally or in writing. Computing will be included in the annual report to parents where strengths and next steps will be identified.
Each teacher should keep assessment overview for each computing unit to record how well each child is doing. This would be a class list with the unit success criteria and a not made as to whether each child's achievement is working towards, expected or exceeding in their year group.

Pupil views on Computing

The pupils will be asked regularly - what makes their learning in computing so successful. This can be done orally or through a written survey. The Computing Leader will analyse and report to staff and governors on the children's perception of their learning in computing lessons. This information will support the termly RAP.

Leadership of Computing

[Please see the Curriculum Leadership Overview for full details of the Subject Leader's role and how this relates to the wider Leadership structure].
The Computing subject leader should:

- Clearly communicate an ambitious vision for Computing, providing inclusive education to all pupils
- Complete a current subject Raising Attainment Plan (RAP) securely based on accurate evaluation of the school's strengths and areas to develop.
- Ensure full curriculum coverage in every year group. Within this, the subject lead should ensure skills progress from year group to year group and topic to topic.
- Be relentless in ensuring that the Computing in the school follows this policy, which will result in greater consistency in the teaching and learning for geography.
- Monitor the Behaviour and Attitudes of children within Computing and review where provision could be adapted to encourage enjoyment and engagement within the subject.
- Undertake regular monitoring activities for Computing (undertake learning walks, pupil conference, data analysis, work sample, planning scrutiny etc).
- Proactively seek opportunities to develop the Computing curriculum within the local community of the school, including involving parents, carers and local services where relevant.

This policy will be reviewed every 2 years or sooner as appropriate.

E-Safety in Computing

ICT is used daily as a tool to improve teaching, learning, communication and working practices to the benefit of our children and young people and those that work to support them. The use of ICT is recognised as being of significant benefit, in personal, social and educational contexts. However, alongside these benefits are potential risks that we have a statutory duty of care to manage, to ensure they do not become actual dangers to children and young people in our care.

The DfE Keeping Children Safe in Education statutory guidance requires Local Authorities, Multi Academy Trusts, and schools in England to ensure learners are safe from harm:

> *"It is essential that children are safeguarded from potentially harmful and inappropriate online material. An effective whole school and college approach to* ***online safety*** *empowers a school or college to protect and educate pupils, students, and staff in their use of technology and establishes mechanisms to identify, intervene in, and escalate any concerns where appropriate"*

The DfE Keeping Children Safe in Education guidance also recommends:

> ***Reviewing online safety*** *… Technology, and risks and harms related to it, evolve, and change rapidly. Schools and colleges should consider carrying out an annual review of their approach to online safety, supported by an annual risk assessment that considers and reflects the risks their children face. A free online safety self-review tool for schools can be found via the* 360 safe self-review tool.

Online Safety Education Programme

While regulation and technical solutions are particularly important, their use must be balanced by educating learners to take a responsible approach. The education of learners in online safety is therefore an essential part of the school's online safety provision. Learners need the help and support of the school to recognise and avoid online safety risks and develop their resilience.

The 2021 Ofsted "Review of Sexual Abuse in Schools and Colleges" highlighted the need for:

> *"a carefully sequenced RSHE curriculum, based on the Department for Education's (DfE's) statutory guidance, that specifically includes sexual harassment and sexual violence, including online. This should include time for open discussion of topics that children and young people tell us they find particularly difficult, such as consent and the sending of 'nudes'.."*

Online safety should be a focus in all areas of the curriculum and staff should reinforce online safety messages across the curriculum. The online safety curriculum should be broad, relevant and provide progression, with opportunities for creative activities and will be provided in the following ways (statements may need to be adapted, depending on school structure and the age of the learners).

- A planned online safety curriculum for all year groups matched against a nationally agreed framework.
- Lessons are matched to need; are age-related and build on prior learning
- Lessons are context-relevant with agreed objectives leading to clear and evidenced outcomes
- Learner need and progress are addressed through effective planning and assessment

- Digital competency is planned and effectively threaded through the appropriate digital pillars in other curriculum areas e.g. PHSE; SRE; Literacy etc
- It incorporates/makes use of relevant national initiatives and opportunities e.g. Safer Internet Day and Anti-bullying week
- The programme will be accessible to learners at different ages and abilities such as those with additional learning needs or those with English as an additional language.
- Learners should be helped to understand the need for the learner acceptable use agreement and encouraged to adopt safe and responsible use both within and outside school
- staff should act as good role models in their use of digital technologies the internet and mobile devices
- In lessons where internet use is pre-planned, it is best practice that learners should be guided to sites checked as suitable for their use and that processes are in place for dealing with any unsuitable material that is found in internet searches
- Where learners are allowed to freely search the internet, staff should be vigilant in supervising the learners and monitoring the content of the websites the young people visit
- It is accepted that from time to time, for good educational reasons, students may need to research topics, (e.g. racism, drugs, discrimination) that would normally result in internet searches being blocked. In such a situation, staff should be able to request the temporary removal of those sites from the filtered list for the period of study. Any request to do so, should be auditable, with clear reasons for the need
- The online safety education programme should be relevant and up to date to ensure the quality of learning and outcomes.

Contribution of Learners

The school acknowledges, learns from, and uses the skills and knowledge of learners in the use of digital technologies. We recognise the potential for this to shape the online safety strategy for the school community and how this contributes positively to the personal development of young people. Their contribution is recognised through:

- mechanisms to canvass learner feedback and opinion – Computing Leader will conference pupils regularly through the year.
- contributing to online safety events with the wider school community e.g. parents' evenings, family learning programmes etc.

E-Safety Risks & Issues

E-Safety risks and issues can be roughly classified into three areas: content, contact and commerce. The following are basic examples of the types of e-safety risks and issues that could fall under each category.

Content:

- Exposure to age-inappropriate material
- Exposure to inaccurate or misleading information
- Exposure to socially unacceptable material such as that inciting violence, hate or intolerance
- Exposure to illegal material

- Plagiarism

Contact:

- Grooming using ICT, leading to sexual assault and/or child prostitution
- Bullies using ICT (email, mobile phones, chat rooms etc) as a way to torment their victims
- Children and young people self-publishing information - sometimes inappropriate - about themselves and therefore putting themselves at risk

Commerce:

- Exposure to inappropriate commercial advertising
- Exposure to online gambling services
- Commercial and financial scams

Infrastructure & Technology

At Bitterne CE Primary School we use an accredited service supplier to deliver filtered internet access, configured to our own local circumstances and requirements.

Under the accreditation scheme, a product for filtering internet content must meet or exceed the following requirements:

- There must be telephone and web-based support for all aspects of the service.
- The product must block 100 per cent of illegal material identified by the Internet Watch Foundation (IWF) Child Abuse Images and Content (CAIC) URL List.
- The product must be capable of blocking 90% of inappropriate content in each of the following categories:
- Pornographic, adult, tasteless or offensive material
- Violence (including weapons and bombs)
- Racist, extremist and hate material
- Illegal drug taking and promotion
- Criminal skills and software piracy
- It must be possible to request (or make) amendments to the blocked content.

Firewall and virus protection is provided by Hampshire County Council (through HPSN2.1) for computers connected to the schools network. It is the schools' responsibility to ensure that the virus definition files are updated regularly on all school machines to maintain protection. Monitoring Systems – to keep track of who downloaded what, when and on which computer. There are a variety of solutions available on the market; for technical consultancy.

Filtering and content control is provided by Hampshire County Council through HPSN2.1. This uses a nationally approved database of keywords and URLs which it filters. Additional keywords and URLs can be added to the filter by contacting the IT Service desk, telephone: 023 8083 2333. An online form available through the ITS Intranet site can be completed to request a specific URL to be blocked or unblocked by the filter. For more information visit:

http://intranet.southampton.gov.uk/yoursupport/it-solutions/for-customers/.

Managing Filtering

All Bitterne CE Primary School, staff will work with Southampton County Council and Hampshire County Council to ensure systems to protect pupils are reviewed and improved. If staff or pupils

come across unsuitable on-line materials, the site must be reported to the e-Safety Coordinator. Senior staff will ensure that regular checks are made to ensure that the filtering methods selected are appropriate, effective and reasonable.

Teaching and Learning

Why the Internet and digital communications are important

The Internet is an essential element in 21st century life for education, business and social interaction. The school has a duty to provide pupils with quality Internet access as part of their learning experience. Internet use is a part of the statutory curriculum and a necessary tool for staff and pupils.

Internet use will enhance learning

The school Internet access will be designed expressly for pupil use and will include filtering appropriate to the age of pupils. Pupils will be taught what Internet use is acceptable and what is not and given clear objectives for Internet use. Pupils will be educated in the effective use of the Internet in research, including the skills of knowledge location, retrieval and evaluation. Pupils will be shown how to publish and present information to a wider audience.

Pupils will be taught how to evaluate Internet content

The school will ensure that the use of Internet derived materials by staff and pupils complies with copyright law. Pupils will be taught the importance of cross-checking information before accepting its accuracy. Pupils will be taught how to report unpleasant Internet content.

Pupils:

- are responsible for using the school digital technology systems in accordance with the learner acceptable use agreement and Online Safety Policy.
- should understand the importance of reporting abuse, misuse or access to inappropriate materials and know how to do so
- should know what to do if they or someone they know feels vulnerable when using online technology
- should understand the importance of adopting good online safety practice when using digital technologies out of school and realise that the school's Online Safety Policy covers their actions out of school, if related to their membership of the school.

Internet Code of Conduct

- Pupils should be supervised at all times when using the Internet.
- Independent pupil use of telecommunications and electronic information resources is not permitted in school.
- Access to school systems must be with a unique user name and password, which must not be made available to any other staff member or pupil.
- All Internet activity should be appropriate to the student's education.
- Internet activity that threatens the integrity or security of the school's ICT systems, or activity that attacks, corrupts, or threatens the security of other organisations' systems, is prohibited.
- Copyrights, software licensing rules, laws of the land, property rights, privacy and the rights of others must be respected and adhered to at all times.
- The Internet must not be used to access, display, store, transmit, distribute, edit or record inappropriate sites such as those containing pornographic, violent, racist, discriminatory, criminal

skills related, illegal drugs related or offensive material. Users will recognise materials that are inappropriate and, if deliberately accessing them, should expect to have their access removed.
- The Internet must not be used to download entertainment software or games.
- The Internet must not be used to conduct or host any on-going non-education related activities, including discussion groups, chat lines, newsgroups or any other form of on-line club.
- The use of a computer system without permission or for a purpose not agreed by the school could constitute a criminal offence under the Computer Misuse Act 1990.

Parents and carers

Parents and carers play a crucial role in ensuring that their children understand the need to use the online services and devices in an appropriate way.

The school will take every opportunity to help parents and carers understand these issues through:

- publishing the school Online Safety Policy on the school website
- providing them with a copy of the learners' acceptable use agreement (the school will need to decide if they wish parents/carers to acknowledge these by signature)
- publish information about appropriate use of social media relating to posts concerning the school
- seeking their permissions concerning digital images, cloud services etc (see parent/carer AUA in the appendix)
- parents'/carers' evenings, newsletters, website, social media and information about national/local online safety campaigns and literature.

Parents and carers will be encouraged to support the school in:

- reinforcing the online safety messages provided to learners in school
- the use of their children's personal devices in the school (where this is allowed

Monitoring

The DfE guidance "Keeping Children Safe in Education" states:

> "It is essential that governing bodies and proprietors ensure that appropriate filters and monitoring systems are in place ...governing bodies and proprietors should be doing all that they reasonably can to limit children's exposure to the … risks from the school's or college's IT system. As part of this process, governing bodies and proprietors should ensure their school or college has appropriate filters and monitoring systems in place and regularly review their effectiveness. They should ensure that the leadership team and relevant staff have an awareness and understanding of the provisions in place and manage them effectively and know how to escalate concerns when identified. "

The school has monitoring systems in place to protect the school, systems and users:

- The school monitors all network use across all its devices and services.
- An appropriate monitoring strategy for all users has been agreed and users are aware that the network is monitored. There is a staff lead responsible for managing the monitoring strategy and processes.
- There are effective protocols in place to report abuse/misuse. There is a clear process for prioritising response to alerts that require rapid safeguarding intervention. Management of serious safeguarding alerts is consistent with safeguarding policy and practice
- Technical monitoring systems are up to date and managed and logs/alerts are regularly reviewed and acted upon.

Bitterne CE Primary School
Curriculum Map: Computing

The Computing Curriculum consists of 4 units Year 1 to Year 6, along side the Continuous Provision during the EYFS.

Computing Units Overview

Year Group	Unit Title (Skills and Knowledge)		Context of Learning	Recommended Session Length
1	Aut 1	Technology Around Us	Knowledge of Computers, Mouse , Keyboard	5-6 sessions
	Aut 2	Digital Painting	Microsoft Paint or paintz.app - Christmas Cards	5-6 sessions
	Spr 1	Moving a Robot	Beebots	5-6 sessions
	Spr 2	Grouping Data		5-6 sessions
	Sum 1	Digital Writing	Word Processing / Keyboard	5-6 sessions
	Sum 2	Programming Animations	Scratch Jr.	5-6 sessions
2	Aut 1	IT Around Us	Knowledge of IT in school and other settings	5-6 sessions
	Aut 2	Digital Photography	Ipads	5-6 sessions
	Spr 1	Robot Algorithms	Beebots	5-6 sessions
	Spr 2	Pictograms	Data Handling using j2e pictogram	5-6 sessions
	Sum 1	Digital Music	musiclab.chromeexperiments.com/Song-Maker	5-6 sessions
	Sum 2	Creating Quizzes	Scratch Jr.	5-6 sessions
3	Aut 1	Computing Networks and Systems		5-6 sessions
	Aut 2	Word Processing	Microsoft Word	5-6 sessions

	Spr 1	Sequencing Sounds	Scratch	5-6 sessions
	Spr 2	Branching Databases	https://www.j2e.com/jit5#branch	5-6 sessions
	Sum 1	Desktop Publishing	Microsoft Publisher	5-6 sessions
	Sum 2	Events and Actions in Programming	Scratch	5-6 sessions
4	Aut 1	Computing Systems and Networks		5-6 sessions
	Aut 2	Audio Production	Audacity https://audacityteam.org/download	5-6 sessions
	Spr 1	Programming Repetition in Shapes	Scratch	5-6 sessions
	Spr 2	Data Logging		5-6 sessions
	Sum 1	PowerPoint	Microsoft Powerpoint	5-6 sessions
	Sum 2	Programming Repetition in Games	Scratch	5-6 sessions
5	Aut 1	Computing Systems and Networks		5-6 sessions
	Aut 2	Word Processing	Microsoft Word	5-6 sessions
	Spr 1	Flatfile Databases	A1 Resource: Minibeasts database from J2E	5-6 sessions
	Spr 2	Vector Drawings	Vectr	5-6 sessions
	Sum 1	Selection in Quizzes	Scratch	5-6 sessions
	Sum 2	Creating Playable Games in Kodu	Kodu	5-6 sessions
6	Aut 1	PowerPoint	Microsoft Powerpoint	5-6 sessions
	Aut 2	Computing Networks and Systems		5-6 sessions
	Spr 1	Variables in Games	Scratch	5-6 sessions
	Spr 2	Intro to Spreadsheets	Microsoft Spreadsheet	5-6 sessions
	Sum 1	3D Modelling	TinkerCAD	5-6 sessions
	Sum 2	Scratch	Scratch	5-6 sessions

Appendix 2: Vocabulary Word Bank

Term	Key Stage	Definition
Algorithm	1&2	A precise set of ordered steps that can be followed by a human or a computer to achieve a task
Attribute (property)	1&2	A word or a phrase that can be used to describe an **object** such as its colour, size, or price
Browser	2	SEE: Web browser
Code	1&2	The **commands** that a **computer** can **run**
Code snippet	1&2	A section of a **program** viewed in isolation
Command	1&2	A single instruction that can be used in a **program** to control a **computer**
Computer	1&2	A **programmable** machine that accepts and **processes inputs** and produces **outputs** (input, process, output; IPO)
Computer network	2	A group of interconnected computing devices
Computer system	2	A combination of **hardware** and **software** that can have **data input** to it, which it then **processes** and **outputs**. It can be **programmed** to perform a variety of tasks.
Condition	2	A statement that can be either True or False
Condition-controlled loop	2	SEE: Loop (condition-controlled)
Count-controlled loop	2	SEE: Loop (count-controlled)
Data	1&2	A letter, word, number etc. that has been collected for a purpose, but **stored** without context
Data set	2	A collection of related **data**
Debugging	1&2	The process of finding and correcting errors in a **program**
Decompose	2	To break down a task into smaller, more achievable steps
Digital device	2	A computer or a device with a computer inside that has been programmed for a specific task
Domain name	2	The part of a **website**'s **URL** that is user friendly and identifies that it is under the control of a particular person or organisation e.g. raspberrypi.org
Execute (run)	2	SEE: Run
Hardware	2	The physical parts of a **computer system**
HTML (HyperText Markup Language)	2	A standardised language used to define the structure of **web pages**
Hyperlink	2	(Also: link, weblink) Text or media that when clicked, takes the user to another specified location (**URL**)
Infinite loop	2	SEE: Loop (infinite)
Information	1&2	**Data** put into a context that provides meaning
Information technology	1	The study, use, and development of **computer systems** for storing, processing, retrieving, and sending information

Input	2	**Data** that is sent to a **program** to be **processed**
Input device	2	A piece of **hardware** used to control, or send **data** to, a **computer**
Internet	2	The global system of interconnected **computer networks**
Loop	2	(**Count-controlled**, **condition-controlled**, or **infinite**) **Commands** that repeatedly **run** a defined section of **code**
Loop (condition-controlled)	2	A **command** that repeatedly **runs** a defined section of **code** until a **condition** is met
Loop (count-controlled)	2	A **command** that repeatedly **runs** a defined section of **code** a predefined number of times
Loop (infinite)	2	A **command** that repeatedly **runs** a defined section of **code** indefinitely
Network	2	SEE: Computer network
Object	1	Something that can be named and has other **attributes** (**properties**), which can be labelled
Object	2	Something that is uniquely identifiable and has **attributes**
Output	2	The result of **data processed** by a **computer**
Output device	2	A piece of **hardware that** is controlled by **outputs** from a **computer**
Procedure	2	A named set of **commands** that can be called multiple times throughout a **program**. This type of **subroutine** does not return a value.
Process	2	A **program**, or part of a **program**, that is running on a **computer**
Program	1&2	A set of ordered **commands** that can be **run** by a **computer** to complete a task
Property (attribute)	1	A word or a phrase that can be used to describe an **object** such as its colour, size, or price
Repetition	2	Part of a **program** where one or more **commands** are **run** multiple times in a **loop**
Router	2	A device that manages the flow of data between **computer networks**
Run (execute)	1&2	To action the **commands** in a **program**
Selection	2	Part of a **program** where if a **condition** is met, then a set of **commands** is **run**
Server	2	A networked **computer** that manages, **stores,** and provides **data** such as files to other computers
Software	2	The **programs** used to control **computers** and perform specific tasks
Stored (data)	2	**Data** kept digitally so that it can be accessed by a computer
Subroutine	2	A named sequence of **commands** designed to perform a specific task
Switch (network switch)	2	A device that manages the flow of **data packets** within a **computer network**
Technology	1	The use of scientific knowledge for practical purposes
URL (Uniform Resource Locator)	2	The address of a file on the **internet**
Variable	2	A named piece of **data** (often a number or text) **stored** in a computer's memory, which can be accessed and changed by a **computer program**

Web	2	SEE: WWW (World Wide Web)
Web address	2	SEE: URL (Uniform Resource Locator)
Web browser	2	A **program** used to view, navigate, and interact with **web pages**
Web page	2	A **HTML** document viewed using a **web browser**
Website	2	A collection of interlinked **web pages**, stored under a single **domain**
WiFi	2	A technology that allows devices to wirelessly access a **network** and transfer **data**
WAP (Wireless Access Point)	2	A network device that allows wireless computing devices to connect to a wired **network**
WWW (World Wide Web)	2	A service provided via **the internet** that allows access to **web pages** and other shared files

Learner Acceptable Use Agreement Template – for KS2

Sections that include advice or guidance are written in BLUE. It is anticipated that schools will remove these sections from their final acceptable use document. Schools should review and amend the contents of this agreement to ensure that it is consistent with their school policies. Schools will need to decide on the suitability of the statements/language used and may wish to amend these in light of the age/abilities of the learners.

Introduction

Digital technologies have become integral to the lives of children and young people, both within and outside schools. These technologies are powerful tools, which open-up new opportunities for everyone. They can stimulate discussion, encourage creativity and stimulate awareness of context to promote effective learning. Learners should have an entitlement to safe access to these digital technologies.

This acceptable use agreement is intended:

- to ensure that learners will have good access to devices and online content, be responsible users and stay safe while using digital technologies for educational, personal and recreational use
- to help learners understand good online behaviours that they can use in school, but also outside school
- to protect school devices and networks from accidental or deliberate misuse that could put the security of the systems and users at risk.

Acceptable Use Agreement

When I use devices I must behave responsibly to help keep me and other users safe online and to look after the devices.

For my own personal safety:

- I understand that what I do online will be supervised and monitored and that I may not be allowed to use devices in school unless I follow these rules and use them responsibly
- I will only visit internet sites that adults have told me are safe to visit
- I will keep my username and password safe and secure and not share it with anyone else
- I will be aware of “stranger danger” when I am online
- I will not share personal information about myself or others when online
- If I arrange to meet people off-line that I have communicated with online, I will do so in a public place and take a trusted adult with me
- I will immediately tell an adult if I see anything that makes me feel uncomfortable when I see it online.

I will look after the devices I use, so that the school and everyone there can be safe:

- I will handle all the devices carefully and only use them if I have permission.
- I will not try to alter the settings on any devices or try to install any software or programmes.
- I will tell an adult if a device is damaged or if anything else goes wrong.
- I will only use the devices to do things that I am allowed to do. (schools may wish to add anything that would not be allowed e.g. online games, file sharing etc.)

I will think about how my behaviour online might affect other people:

- When online, I will act as I expect others to act toward me.
- I will not copy anyone else’s work or files without their permission.

- I will be polite and responsible when I communicate with others and I appreciate that others may have different opinions to me.
- I will not take or share images of anyone without their permission.

I know that there are other rules that I need to follow:

- I will only use my own personal devices (mobile phones/USB devices etc.) in the school if I have permission (schools should amend this section in the light of their mobile devices policies). If I am allowed, I still have to follow all the other school rules if I use them.
- I will only use social media sites with permission and at the times that are allowed (schools should amend this section to take account of their policy on access to social media).
- Where work is protected by copyright, I will not try to download copies (including music and videos).
- When I am using the internet to find information, I should take care to check that the information is accurate, as I understand that the work of others may not be truthful and may be a deliberate attempt to mislead me.
- I should have permission if I use the original work of others in my own work.

I understand that I am responsible for my actions, both in and out of school:

- I know that I am expected to follow these rules in school and that I should behave in the same way when out of school as well.
- I understand that if I do not follow these rules, I may be subject to disciplinary action. This could include (schools should amend this section to provide relevant sanctions as per their behaviour policies) *loss of access to the school network/internet, detentions, suspensions, parents/carers contacted and in the event of illegal activities involvement of the police.*

The school will need to decide if they will ask learners (and/or) their parents/carers to sign the AUA or whether it is sufficient to just make it clear that these rules should be followed and to re-enforce them through the year. The form below is provided for those schools that wish to have them signed.

Learner Acceptable Use Agreement Form

Please complete the sections below to show that you have read, understood and agree to the rules included in the acceptable use agreement. If you do not sign and return this agreement, access will not be granted to school systems. (Schools will need to decide if they require learners to sign, or whether they wish to simply make them aware through education programmes/awareness raising).

I have read and understand the above and agree to follow these guidelines when:

- I use the school systems and devices (both in and out of school)
- I use my own devices in the school (when allowed) e.g. mobile phones, gaming devices USB devices, cameras etc.
- I am out of school and involved in any online behaviour that might affect the school or other members of the school.

Name of Learner: ..... Group/Class: .....

Signed: ..... Date: .....

Parent/Carer Countersignature (optional)

It is for schools to decide whether or not they require parents/carers to sign the parent/carer acceptable use agreement (see template later in this document in the Parent/Carer AUA). This includes a number of other permission forms (including digital and video images/biometric permission/cloud computing permission).

Some schools may, instead, wish to add a countersignature box for parents/carers to this learner acceptable use agreement.

Learner Acceptable Use Agreement Template – for younger learners (Foundation/KS1)

This is how we stay safe when we use computers:

- I will ask a teacher or suitable adult if I want to use the computers/tablets
- I will only use activities that a teacher or suitable adult has told or allowed me to use
- I will take care of computers/tablets and other equipment
- I will ask for help from a teacher or suitable adult if I am not sure what to do or if I think I have done something wrong
- I will tell a teacher or suitable adult if I see something that upsets me on the screen
- I know that if I break the rules I might not be allowed to use a computer/tablet

Signed (child): .....

(The school will need to decide whether or not they wish the children to sign the agreement – and at which age - for younger children the signature of a parent/carer should be sufficient)

Signed (parent): .....

Primary schools using this acceptable use agreement for younger children may also wish to use (or adapt for use) the parent/carer acceptable use agreement (the template can be found later in these templates) as this provides additional permission forms (including the digital and video images permission form).