Broomwood Primary School Computing and E-Safety Policy Draft

Introduction

This policy outlines the practices followed in the teaching of Computing and E Safety at Broomwood Primary School.

Rationale

Computing changes the lives of everyone. Through teaching the skills of computing we equip children with the skills required to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. We enable them to find, explore, analyse, exchange and present information as well as using computing skills to programme or use equipment for a range of activities. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way, validating it before accepting its accuracy. Children also learn how to stay safe whilst using the internet and how the use of computing can help them become creative, independent learners, by taking the laborious routine out of some text and information tasks.

E-safety is the 'Safe and responsible use of technology'. Children will learn about the benefits and risks of using technology. They will be taught what internet use is acceptable and what is not. They will learn how to use the internet safely and what to do if they see something that upsets them. This is important as the internet is an essential element in 21st century life for education, business and social.

Vision / Mission Statement

Our school Vision is 'Achieve, Believe and Succeed for a brighter future'.
Our school mission statement is: 'To create a positive, enjoyable atmosphere to inspire all to learn and grow'.

The Aims of the Subject

National Curriculum Aims:

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 or unfamiliar technologies, analytically to solve problems

- Are responsible, competent, confident and creative users of information and communication technology

At Key stage 1 Pupils are taught to:

- 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 simple programs

- Use logical reasoning to predict the behaviour of simple programs

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

- Recognise common uses of information technology beyond school

- Use technology safely and respectfully, keeping personal 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.

At Key stage 2 Pupils are taught to:

- Design, write and debug 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

- Use logical reasoning to explain how some simple algorithms work 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

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Our School aims to do this by:

As part of a broad and balanced curriculum we aim to give all our pupils the opportunity to undertake a balanced programme of computing activities which show progression and continuity. Through these activities the children will develop the following skills:

- Creativity and original thinking
- Problem solving

- Perseverance
- Ability to listen carefully
- Evaluation of their own and other's work (such as programmes or film editing)
- Ability to use a range of computing skills with confidence and sense of achievement
- Ability to find, select and use information
- Ability to use computing for effective and appropriate communication
- Ability to programme, monitor and control events and applications
- Understanding of how to stay safe online
- Understanding of the uses of computing and its place in society
- Understanding of the capabilities and limitations of computing
- Understanding of the implications and consequences of the use of computing.

We aim to offer the above skills by integrating them into our thematic curriculum throughout each topic. The skills should not only show the progression through a series of lessons, but also across the year groups. We aim to provide this within a positive and enjoyable atmosphere, which will inspire all children to learn and grow and allow them to achieve, believe and succeed for a brighter future.

Implementation of Computing at Broomwood Primary School

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

In our school computing is taught through the 3 core areas: computer science, information technology and digital literacy, ensuring a broad and balanced curriculum.

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.
Programming is taught in a progressive way, moving from programmable toys in EYFS to Scratch Jr, Hopscotch and Daisy in KS1 and Scratch, Python and app development in KS2. This learning is done within our topics and once the skills have been developed the enquiry-based challenges, which require children to apply the skills have a clear brief and intended user, giving purpose to their learning.

Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. A knowledge led approach ensures that children have the opportunities to develop topic specific vocabulary and encourages the children to become articulate learners.

Computing 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. One example of this is word processing skills, which are taught explicitly in KS1, whereas in KS2 they are used within lessons from other subject areas (e.g.
Literacy) to embed these skills in the curriculum and show the children how they can be used in real situations.

Computing clubs at our school offer children further opportunities to develop their computing skills and build on their own interests. IPAD club have enjoyed basic coding and creating stop-motion animation films. Code club have deepened their understanding of algorithms and have even sent some of their coded messages to the ISS

(International Space Station).

Children are prepared to be safe when using technology through E-safety teaching. This is covered at the start of each session and we also celebrate an E-safety day where this becomes a whole school focus and children develop and deepen their understanding through memorable experiences.

How it fits into the overall curriculum

Computing is taught across the school by being linked to the thematic curriculum on a two-year rolling programme, where possible. Where this is not possible, the lessons are taught discretely alongside the thematic curriculum and through themed days.

Computing in the Thematic Curriculum

We meet the requirements of the New Primary Curriculum through our thematic curriculum. All children throughout Key stage 1 and 2 are be given access to computing teaching throughout each topic.

A long-term plan has been created to show how the blocks of computing have been matched with our thematic curriculum (Appendix A). Planning is taken from the Kapow schemes of work, however the activities in the scheme are used as a guideline and the objectives may be covered with activities more fitted to our topics.

How is the subject taught at each Key Stage, including Foundation Stage?

It is anticipated that the majority of activities will be undertaken with whole class groups. Teachers will use their own judgement as to when and how children should be grouped at these times. Some opportunities for individual work and experimentation should also be provided. A range of resources will be used across the school, including Computers, iPads, Lego WeDo, Bee Bots, sound buttons, talking books, remote control cars, cameras and laptops. We aim to vary the teaching methods within each lesson in order to provide constant reinforcement for the computing skills being learned. Kagan structures are used to ensure all children are involved and to encourage partner and group work and evaluation.

E-safety will be mentioned at the start of each session to remind children and ensure they stay safe. We remind children, 'If you see something which upsets you, tell an adult you trust'. E-safety rules are on display in all networked rooms and are discussed with the children. All pupils are given lessons on E-Safety appropriate to their age group scheduled throughout the year taken from Kapow (this can also be done using Childnet and thinkyouknow online resources).

We recognise that all classes have children with widely differing computing abilities. this is especially true when some children have access to computing equipment at home, while others do not. In school we provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways by:

- Setting common tasks which are open ended and have a variety of responses
- Setting tasks of increasing difficulty
- Grouping children by ability in the room and differentiating tasks
- Providing resources of different complexity that are matched to the ability of the child
- Using classroom assistants where available to support the work of individual children or groups.

In the Early years children have access to computing through focus tasks and inside and outside continuous

provision. The children will be encouraged to experiment with a range of resources including cameras, bee bots, remote control cars and sound buttons. They learn basic computing vocabulary.

Computing is used in our other lessons too. As the aims of computing are to equip children with the skills necessary to use technology to become independent learners, the teaching style we adopt is as active and practical as possible. While at times we do give children direct instructions to use hardware and software, the main emphasis of our teaching is in individuals or groups of children using technology to help them in whatever they are studying. So, for example the children might research a topic using the internet. We encourage children to explore ways in which computing can be used to improve their results, for example, how a piece of writing can be edited or how the presentation of a piece of work could be improved using publishing software.

Impact

Our knowledge based curriculum, which is broad and balanced, enables children to develop skills in computing which will prepare them for their futures. it provides a solid base for them to further develop their knowledge of coding and digital design and provides them with word processing and data analysis skills which will be useful in high school and their futures.

Planning

Objectives are taken and used from the Kapow scheme of work which has been tailored for our rolling 2-year long term plan. To ensure that the children are able to access all objectives, whenever a new topic is planned, care is taken to give children new experiences to ensure progression of skills.

Planning is written as a 2-year rolling programme, so can be integrated or used alongside the thematic planning (dependent on the topic). It is written to be taught using the resources easily accessible to all teachers.

Assessment

Children are assessed at the end of each topic through a quiz and knowledge capture. (See appendix B)

At the end of the year children will receive an effort grade and a level for Computing (Emerging, expected or exceeding) in their report and on Target Tracker for subject monitoring.

Equal Opportunities

The School welcomes and values disabled people to be an active part of school life.

Broomwood Primary School is keen to make sure that we do not make it difficult for disabled children, young people and adults to be involved in every part of school life. We have a legal duty not to discriminate against disabled people and to monitor how many of our pupils. Staff, parents/carers and governors are disabled under the Disability Discrimination Act 2005.

Broomwood Primary School recognises that disabled people are very diverse and include people with a physical impairment, visual impairment, hearing impairment, learning difficulty, specific learning difficulty (e.g. dyslexia), mental health issues, people who are deaf, British sign language users and people with long term health conditions.

Pupils with Special Educational / Gifted and Talented Needs in Computing

Teachers strive to identify and address any special educational requirements so that all pupils are enabled to participate in Computing as fully as possible. For instance, all pupils are given their turn in class work, without exception. Pupils' involvement may be harnessed by asking them to lead or share in group or pair work, to give them the confidence to be an active member of the group. Support for the more demanding tasks is provided by the support teacher, the class teacher or by peers. Appropriate provision is made, where necessary, for children with special needs.

Children who are perceived as particularly talented within Computing must be allowed to progress further by having their learning requirements met through differentiation. Appropriate provision is made to accommodate for such children. One example of this is a Computing club in which children work on more complex coding and will be sharing their programmes.

An extra-curricular club is provided to children, after school (45 min session). This is an opportunity for them to take part in more fun activities and to develop their computing knowledge further.

Parental involvement

Parents are informed of the topics children are learning about through the school website. Parents are invited to some activities which take place within school.

A brochure is distributed to parents, including information about how to be safe online and support their child in Computing (Appendix C).

As a school we have signed up to the National Online Safety portal (https://nationalonlinesafety.com/) This allows parents and staff to access resources to keep children safe online. (See appendix H)

Health and Safety

Health and safety assessments are carried out for trips. Risk assessments have been carried out for craft related activities, such as the use of scissors. Risk assessments are also available for the use of the playground / hall which may be used for some activities. All teachers are aware of these risk assessments and use them in their teaching. They are available at the school office.

Resources

There are a number of Computing resources available in school – these include iPads, Bee Bots, computers, laptops, remote control cars, sound buttons and talking books. Most classes have a class computer which can be used by the children. All classes have a visualiser to show work.

Managing Internet Access

Information system security:

- School ICT system capacity and security will be reviewed regularly
- Virus protection will be updated regularly
- Security strategies will be discussed with Trafford LA

Email

- Pupils may only use approved email addresses on the school system (these are set up as bps_@gmail.com –

numbers 1 – 34)

- Pupils must immediately tell a teacher if they receive an offensive email
- Pupils must not reveal personal details of themselves of others in email communication, or arrange to meet anyone
- Email sent to an external organisation should be written carefully and authorised before sending, in the same way as a letter written on school headed paper
- The forwarding of chain emails is not permitted.
- Staff all have work emails – these link to their Google drive (they are set up as staff1st name.staff2nd name@broomwoodprimary.co.uk)

Managing filtering

- The school will work with the LEA/ DfES and the internet service provider to ensure systems to protect pupils are reviewed and improved.
- The school has monitoring and filtering provided by Smoothwall (See appendix G)
- Regular checks will be made to ensure that the filtering methods selected are appropriate, effective and reasonable.

The School Website

Broomwood Primary School values the contribution that the school website can make to the life and role of the school in a modern society. Broomwood Primary website has 5 important roles:

- To promote the school
- To provide information to prospective parents and teachers, the wider community and the world
- To act as a communication channel between teachers, parents, pupils and school management
- To improve pupil learning
- To raise standards in teaching and learning

Safeguards:

- The safety of children or other users who appear or are referred to on the site is of paramount importance.

Publishing names, images and work:

- Adult's names will be published as their title and last name (e.g. Mr Walker).
- Children's names will be published as their first name only.
- Any images of children will not be labelled with their names
- Children will only be shown in photos where they are suitably dressed
- Personal details of children, staff and governors, such as home addresses, telephone numbers, email addresses, etc. will not be released via the school website or email.

Privacy:

- Adults have the right to refuse permission to publish their image on the site
- Parents have the right to refuse permission of their child's work and / or image to be published on the site. (A text message is sent out to parents when work will be used).

Monitoring:

- Teachers all have usernames to log into the school site. They will check material before it is uploaded to ensure that it is suitable and complied with the record of objections held by the Headteacher and with copyright laws (as far as possible).
- Teachers will update their class pages each half term. This will be monitored..
- Subject leaders will be required to keep their curriculum area of the page up to date. This will be monitored.

- The web pages will be regularly reviewed for accuracy and will be updated as required. This will be the responsibility of the Site Administrator and school management.

Maintenance and editing:

- At least two people should have the knowledge to maintain and edit the site and they must pass on this knowledge to a successor at the end of a term of office.

Social Networking and Personal Publishing

- The use of social networking sites for personal use is not allowed on school equipment, or during working hours.
- Social networking sites can be used to build class pages, but this must be monitored by the teacher who sets it up, and is at the discretion of the Headteacher.
- Blogs can be used as a class activity, but this must be monitored by the teacher who sets it up, and is at the discretion of the Headteacher.
- Newsgroups will be blocked unless a specific use is approved.
- Pupils will be advised never to give out personal details of any kind which may identify them or their location.
- Pupils and parents will be advised that the use of social network spaces outside school is inappropriate for primary aged pupils.

Emerging Technologies

- Emerging technologies will be examined for educational benefit and a risk assessment will be carried out before use in the school is allowed.
- Mobile phones will not be used in lessons or formal school time. The sending of abusive or inappropriate text messages is forbidden. (With the agreement of the head, mobile phones may be used by outside agencies for music).
- Smart technology (such as smart watches), may be worn by staff, but they must not have a camera.
- Staff will be issued with the school phone when contact with pupils around is required (e.g school trips).

Protecting Personal Data

Personal data will be recorded, processed, transferred and made available according to the Data protection Act 1998 and GDPR regulations.

From time to time pupil data and photographs may be required to be taken off site, if this happens the following procedures will apply:

- Only necessary personal data / photos will be taken off site
- All laptops must have a password to protect the data on them.
- All laptops which are used off site must have a further username and password to get through an encryption barrier. This is applied to all teacher laptops and is paid for annually.
- Any personal photographs of pupils which are required to be taken off site by staff will be transported on school laptops (they will not be on a pen drive or memory card), unless in the event of a trip (class trip, teams playing, choir in the community, etc) in which case they will be taken on a memory card and transferred as soon as possible.
- USB sticks may not be used.
- All data/ photographs will be stored in a password protected file.
- Staff personal cameras / mobile phones will never be used to hold data or take photographs of pupils.

Policy Decisions

Authorising internet access

- All staff will read and sign the 'Acceptable ICT Use Agreement' before using any school computing resource (Appendix F).
- The school will keep a record of all staff and pupils who are granted internet access. The record will be kept up to date.
- At KS1, access to the internet will be by adult demonstration with directly supervised access to specific, approved on line materials.
- Parents will be asked to sign and return a consent form (a letter is sent out when a child starts the school to gain permission).

Assessing risks

- The school will take all reasonable precautions to ensure that users access only appropriate material. However, due to the international scale and linked nature of Internet content, it is not possible to guarantee that unsuitable material will never appear on a school computer. The school cannot accept liability for the material accessed, or any consequences of Internet access.
- The school will audit computing provision to establish if the E-Safety policy is adequate and that its implementation is effective.

Handling E-Safety complaints

- Complaints of Internet misuse will be dealt with by a senior member of staff
- Any complaint about staff misuse will be referred to the head teacher.
- Complaints of a child protection nature must be dealt with in accordance with the school child protection procedures.
- Pupils and parents will be informed of the complaints procedure.

Infringements

Whenever a student or staff member infringes the E-Safety Policy, the final decision on the level of sanction will be at the discretion of the school management. The behaviour policy will be followed to deal with any e-safety and use of technology infringements.

The following are provided as **exemplification** only:

Students

Category A infringements

- Use of non-educational sites during lessons
- Unauthorised use of email
- Unauthorised use of mobile phone (or other new technologies) in lessons e.g. to send texts to friends
- Use of unauthorised instant messaging / social networking sites

[Possible Sanctions: ***referred to class teacher*** */ senior manager / e-Safety Coordinator]*

Category B infringements

- Continued use of non-educational sites during lessons after being warned

- Continued unauthorised use of email after being warned
- Continued unauthorised use of mobile phone (or other new technologies) after being warned
- Continued use of unauthorised instant messaging / chatrooms, social networking sites, NewsGroups
- Use of Filesharing software e.g. Napster, Vanbasco, BitTorrent, LiveWire, etc
- Accidentally corrupting or destroying others' data without notifying a member of staff of it.
- Accidentally accessing offensive material and not logging off or notifying a member of staff of it

*[Possible Sanctions: **referred to Class teacher/ e-safety Coordinator** / removal of Internet access rights for a period / removal of phone until end of day / contact with parent]*

Category C infringements

- Deliberately corrupting or destroying someone's data, violating privacy of others
- Sending an email, MSN message, snapchat, etc that is regarded as harassment or of a bullying nature (one-off)
- Deliberately trying to access offensive or pornographic material
- Any purchasing or ordering of items over the Internet
- Transmission of commercial or advertising material

*[Possible Sanctions: **referred to Class teacher / e-safety Coordinator / Headteacher / behaviour lead / removal of Internet access rights for a period /** contact with parents / removal of equipment]*

Other safeguarding actions

If inappropriate web material is accessed:

1. Ensure appropriate technical support filters the site
2. Inform LEA as appropriate

Category D infringements

- Continued sending of emails or MSN messages regarded as harassment or of a bullying nature after being warned
- Deliberately accessing, downloading and disseminating any material deemed offensive, obscene, defamatory, racist, homophobic or violent
- Receipt or transmission of material that infringes the copyright of another person or infringes the conditions of the Data Protection Act, revised 1988
- Bringing the school name into disrepute

*[Possible Sanctions –**Referred to Head Teacher / Contact with parents** / possible exclusion / removal of equipment / refer to Community Police Officer / LA e-safety officer]*

Other safeguarding actions:

1. Secure and preserve any evidence
2. Inform the sender's e-mail service provider

Staff

Category A infringements (Misconduct)

- Excessive use of Internet for personal activities not related to professional development e.g. online shopping, personal email, instant messaging etc.
- Use of personal data storage media (e.g. USB memory sticks) without considering access and appropriateness of any files stored.
- Not implementing appropriate safeguarding procedures.
- Any behaviour on the world wide web that compromises the staff members professional standing in the school and community.

- Misuse of first level data security, e.g. wrongful use of passwords.
- Breaching copyright or license e.g. installing unlicensed software on network.

*[Sanction - **referred to line manager / Headteacher**. Warning given.]*

Category B infringements (Gross Misconduct)

- Serious misuse of, or deliberate damage to, any school / Council computer hardware or software;
- Any deliberate attempt to breach data protection or computer security rules;
- Deliberately accessing, downloading and disseminating any material deemed offensive, obscene, defamatory, racist, homophobic or violent;
- Receipt or transmission of material that infringes the copyright of another person or infringes the conditions of the Data Protection Act, revised 1988;
- Bringing the school name into disrepute.

*[Sanction –**Referred to Headteacher / Governors and follow school disciplinary procedures;** report to LA Personnel/ Human resources, report to Police]*

Other safeguarding actions:

- Remove the PC to a secure place to ensure that there is no further access to the PC or laptop.
- Instigate an audit of all ICT equipment by an outside agency, such as the schools ICT managed service providers - to ensure there is no risk of pupils accessing inappropriate materials in the school.
- Identify the precise details of the material.

If a member of staff commits an exceptionally serious act of gross misconduct they should be instantly suspended. Normally though, there will be an investigation before disciplinary action is taken for any alleged offence. As part of that the member of staff will be asked to explain their actions and these will be considered before any disciplinary action is taken.

Schools are likely to involve external support agencies as part of these investigations e.g. an ICT technical support service to investigate equipment and data evidence, the Local Authority Human Resources team.

Child Pornography

In the case of Child Pornography being found, the member of staff should be **immediately suspended** and the Police should be called: see the free phone number **0808 100 00 40** at:
http://www.met.police.uk/childpornography/index.htm

Anyone may report any inappropriate or potentially illegal activity or abuse with or towards a child online to the Child Exploitation and Online Protection (CEOP):

http://www.ceop.gov.uk/reporting_abuse.html

http://www.iwf.org.uk

Role of the subject coordinator

- To support, advise and work with colleagues in developing the Computing curriculum, policy and schemes of

work that reflects the requirements of the National Curriculum.

- To monitor the implementation of the new computing curriculum and ensure that there are appropriate links with topics covered
- To support and monitor that staff are using the computing assessment through topic book scrutiny.
- To produce and revise the Computing and E-Safety policy in accordance with the school's agreed format
- To ensure there in an E-Safety display up in every classroom and one within ICT areas in school
- To create an action plan and share it with the link governor
- To complete the SEF ICT
- To attend courses and read up to date articles to keep up with current issues in ICT and cascade this information to staff through staff meetings
- To liaise with the ICT technician within the school
- To manage the purchase and maintenance of ICT resources
- To prepare a business plan to bid for the ordering of new ICT resources within the allocated budget
- To monitor Computing teaching and learning throughout the school through observation of lessons; learning walks and work scrutiny (complete at least two across the year). Ensure that staff are appropriately using cameras, visualisers, IPADs etc. to enhance teaching and learning.
- To report to the head teacher and governors as and when required
- To encourage links with high schools and other primary schools to enhance computing within the school
- To ensure there in an extra-curricular ICT provision throughout the year and that G&T pupils are catered for.

Role of the Headteacher

To monitor the planning and teaching of Computing throughout the school.

Policy review

This policy will be reviewed and revised in line with the developments in the Primary Curriculum and the school development plan.

Reviewed March 2023 S Walker

Approved by Governing Body_____

Date_____

Appendix A – Long term plan

Year A

ICT Long term plan - Year A

In KS2 (annually):

- One 'Presentation' lessons in a 3-week plan needs to be word processed.
- One Science investigation needs to have data presented using a spreadsheet & graph
- One topic session needs to involve creating a PowerPoint of their knowledge.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
UKS2		Ancient Greeks	Circuit Builders	Raging Rivers and Monstrous Mountains		How do we see?	Ancient Egypt
	Unit	Mars Rover- 1	Mars Rover- 2	Introduction to Python	Big Data 2	Search Engines	Programming- Music
	Curriculum links						Plan a soundtrack for a book linked to topic or literacy
	Key Area	Data Handling	Skills Showcase	Programming	Data Handling	Computing systems and networks	Programming
	Hardware	Laptops and iPads	Laptops and iPads	Laptops and iPads	Laptops and iPads	Laptops and iPads	Laptops
	Software		Google sheets or Excel Tinkercad website or App for iPads	Turtle academy website MSW logo downloaded on laptops Trinket website	Micropolis and MakeCode websites	Canva for Education and Sketchpad websites Socrative App	SonicPi downloaded on laptops

				Powerpoint or Google slides			
	E-Safety	Smart Rules	Life Online	Sharing Online	Creating a Positive Online Reputation	Capturing Evidence / Password Protection	Think before you click
LKS2	Topic	Stone Age to Celts	Our Brilliant Bodies	The Rotten Romans	Lights, Camera, Action!	The British Empire	The Rainforest
	Unit	Comparison Cards	Collaborative Learning	HTML	Website Design	Computational Thinking	Emailing
	Curriculum links		Literacy- Composition and peer assessment Writing or presentations linked to topic	Create their own newspaper report linked to topic	Creating a website linked to a book or film.		Could send an email in support of an ethical company or to complain.
	Key Area	Data Handling	Computing systems and networks	Skills Showcase	Creating Media	Programming	Computing systems and networks
	Hardware	Laptops	Laptops and iPads	Laptops and iPads	Laptops and iPads	Laptops and iPads	Laptops
	Software	Spreadsheet software such as Google Sheets or Microsoft Excel Online email provider such as Gmail (Google) or Kidsemail which has a free 1 month trial.	G Suite (Gmail, Google Docs Google Slides, Google Sheets, Google Forms) can be accessed either via an internet browser or by installing the app.	Glitch and Creative Commons websites	Google Sites	Scratch	Online email provider such as Gmail (Google) or Kidsemail which has a free 1 month trial. Google Forms accessed with a Google account or Microsoft Forms accessed through a Microsoft account.
	E-Safety	Smart Rules	What happens when I search online?	How do companies encourage us to buy online?	Fact, opinion or belief?	What is a bot?	What is my #TechTimetable like?
KS1		Childhood Then and Now	Fire	Circle of Life		What makes this place special?	
	Unit	Improving Mouse Skills	Algorithms Unplugged	Word Processing	What is a computer?	Algorithms and Debugging	Rocket to the Moon
	Curriculum links	Links to literacy- Drawing scenes from a story. Art- Self Portraits		Literacy- Writing, presenting a piece of work			
	Key Area	Computing systems and	Programming	Computing systems and	Computing systems and	Programming	Skills Showcase

		networks		networks	networks		
	Hardware	Laptops or iPads		Laptops	Laptops and iPads	Laptops	Laptops
	Software	Sketchpad website		Word Typing Club website	Sketchpad website	Scratch Lightbot App Google Earth App or website	Word Sketchpad website Spreadsheet software such as Google Sheets or Microsoft Excel
	E-Safety	Smart Rules	What happens when I post online?	How do I keep my things safe online?	Who should I ask?	It's my choice	Is it true?
EYFS Reception		What do I celebrate?		How can we help Cinderella have a ball?	Twinkle, twinkle little star, how I wonder what you are?	Was it once a mixed-up time?	How do we make sense of the world?
		Links to computing - iPads to take photographs, voice recorders Pictures of Play Picture Walk Class Photo Album Main topic focus - Understanding the world/physical development		Links to computing – Using CD players, recording music composition, Spheros Main topic focus - Personal, social and emotional development	Links to computing – Using google Earth on the computer Main topic focus - Understanding the world	Links to computing – Story creating apps Main topic focus - Literacy	Links to computing – Sound buttons/recorders, camera, visual and audio equipment linked to senses Main topic focus - Understanding the world

		ICT taught through continuous provision – use of talking books, sound buttons, interactive whiteboard, bee bots, class computer, electric toys (e.g. cars). E safety – Understand what to do if they see something they don't like online.					
EYFS Nursery & Pre School		How do I get about?	What do I celebrate?	What makes a sound?	Who are the famous animals in my book?	How do things move?	How many nursery rhymes do I know?
		Links to computing - Using google maps, remote controlled cars Main topic focus - Understanding the world	Links to computing - iPads to take photographs, voice recorders	Links to computing – Composing music on the interactive whiteboard/iPads, recording videos of music/singing on iPads. Main topic focus - Expressive arts and design/ Understanding the world	Links to computing – Online books/book apps. Wind up animals and toys with levers and buttons. Main topic focus - Literacy	Links to computing - Bee bots Bee Bots Main topic focus - Understanding the world	Links to computing – Using the interactive whiteboard to listen to nursery rhymes, composing music on the iPad, recording performances. Main topic focus - Literacy

		ICT taught through continuous provision – use of talking books, sound buttons, interactive whiteboard, bee bots, class computer, electric toys (e.g. cars). E safety – Understand what to do if they see something they don't like online.					

Year B

ICT Long term plan - Year B

In KS2 (annually):

- One 'Presentation' lessons in a 3-week plan needs to be word processed.
- One Science investigation needs to have data presented using a spreadsheet & graph
- One topic session needs to involve creating a PowerPoint of their knowledge.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
UKS2		Amazing Africa	Adventures in Space	Is it right to fight?	Is it right to fight?	Biodiversity/ Dinosaurs	The Americas
	Unit	Stop Motion Animation	Big Data 1	Bletchley Park	History of Computers	Microbit	Inventing a Product
	Curriculum links	Animation could be linked to a book from guided reading or class read		Once the top-secret home of the World War Two Codebreakers	Children write, record and edit radio plays set during WWII, look back in time at how computers have evolved and design a computer of the future.		
	Key Area	Creating Media	Data Handling	Computing systems and networks	Creating Media	Programming	Skills Showcase

	Hardware	iPads	Laptops and iPads	Laptops and iPads	Laptops	Laptops	Laptops, iPads and micro:bits
	Software	Stop Motion Studio App	Microsoft Excel or Google Sheets	Scratch (Website) Microsoft Word and PowerPoint Google Forms	Audacity Google Docs	https://makecode.microbit.org/	https://makecode.microbit.org/ TinkerCAD Google Sites iMovie App
	E-Safety	Smart Rules	Online Protection	Online Communication	Online Reputation	Online Bullying	Online Health
LKS2	Topic	Anglo Saxons	Vikings	Volcanoes and Earthquakes	Where does our food come from? Including Plants	Sounds Amazing	The Caribbean
	Unit	Programming: Scratch	Video Trailers	Networks and the Internet	Journey inside a computer	Further coding with Scratch	Investigating Weather
	Curriculum links	When creating a game link to the Anglo Saxons E.g. Beowulf	Creating a trailer for a book from guided reading or class read				Could link to comparing the weather in the Caribbean to the UK.

	Key Area	Programming	Creating Media	Computing systems and networks	Computing systems and networks	Programming	Data Handling
	Hardware	Laptops, desktops and/or tablets	iPads	Laptops and iPads	iPads	Laptops	Laptops, iPads, Green screen
	Software	Scratch	iMovie	Scratch Microsoft PowerPoint	Sketchpad	Scratch	Google Sheets or Microsoft Excel Sketchpad iMovie
	E-Safety	Smart Rules	Lesson 1- Beliefs, opinions and facts on the internet	When being online makes me upset	Sharing of Information	Rules for social media platforms	
KS1		Who did it?	Investigating India	Superheroes	Superheroes	Seaside	Seaside
	Unit	Programming- Bee-Bot	Introduction to data	Scratch Jr	Stop Motion	Data Handling: International Space Station	Digital Imagery
	Curriculum links	Link to focus text or class text	Branching database with Indian animals	Code and animate a superhero	Create a superhero stop motion animation		Take photos when on a trip or to tell a story
	Key Area	Programming	Data	Programmin	Creating Media	Data Handling	Creating Media

			Handling	g			
	Hardware	Bee-Bots	Laptops and iPads	iPads	iPads	Laptops and iPads	Laptops and iPads
	Software		Websites; Sketchpad and Just2easy	Scratch Jr App	Stop Motion Studio App		Google Photos App vGoogle Slides
	E-Safety	Smart Rules	Using the internet safely	Online Emotions	Always be kind and considerate	Posting and sharing online	
EYFS Reception		What do I know about me?		Who are the famous characters inside my books?	Should Goldilocks say sorry?	Are all mini-beasts scary?	Who can I ask for help?
		Links to computing - Ipads to take photographs, voice recorders Pictures of Play Picture Walk Class Photo Album Main topic focus - Understanding the world/physical development		Links to computing - Story making apps Main topic focus -Literacy	Links to computing - CD players to listen to the story Main topic focus - Personal, social and emotional development	Links to computing -Bee bots, Using the computers to make bug pictures Bee Bots Main topic focus - Understanding the world	Links to computing - Using google to research with an adult Main topic focus - Understanding the world

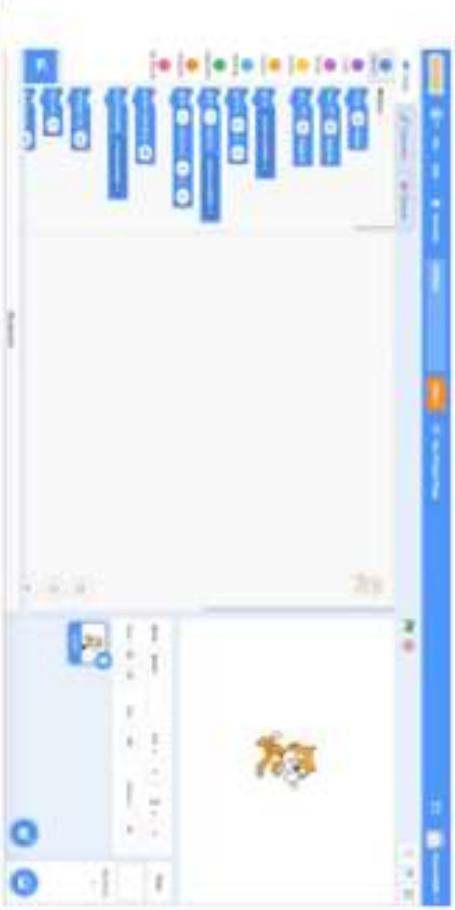
		ICT taught through continuous provision – use of talking books, sound buttons, interactive whiteboard, bee bots, class computer, electric toys (e.g. cars). E safety - Understand what to do if they see something they don't like online.				
EYFS Nursery & Pre School		Who lives in my house?	Which colours make you feel happy or sad?	What would you find at the farm?	Who goes to the ugly bug ball?	What can I do with water?
		Links to computing - Using google maps, using apps to design houses Main topic focus - Understanding the world	Links to computing - Drawing apps Main topic focus - Expressive arts and design/personal social and emotional	Links to computing - Interactive whiteboard to play farm games/watch videos Main topic focus - Understanding the world	Links to computing - Bee bots Bee Bots Main topic focus - Understanding the world	Links to computing - Interactive whiteboard/spheros in water Main topic focus - Understanding the world

			development			
		ICT taught through continuous provision – use of talking books, sound buttons, interactive whiteboard, bee bots, class computer, electric toys (e.g. cars). E safety – Understand what to do if they see something they don't like online.				

Appendix B – Assessment sheet (example)

Year 3 - Programming: Scratch

Use this image to answer the following questions:



1 What does the image show?

2 What does one of the different sections/windows allow you to do?

3 What can you create with this program? Give some examples.

Quiz

Kapow Primary

Unit title: _____

Name: _____ Date: _____

Question 1:	A	B	C	D
Question 2:	A	B	C	D
Question 3:	A	B	C	D
Question 4:	A	B	C	D
Question 5:	A	B	C	D
Question 6:	A	B	C	D
Question 7:	A	B	C	D
Question 8:	A	B	C	D
Question 9:	A	B	C	D

Question 10:

Score:

Some useful websites

When using the internet we recommend that you use one of the child-friendly search engines:

Ask Jeeves for kids
www.askforkids.com

Yahooligans
www.yahooligans.com

CBBC Search
www.bbc.co.uk/cbbc/search

Kidsclick
www.kidsclick.org

Our Code of Conduct

At Broomwood Primary School we enjoy our right to:

- Learn and teach well
- Respect
- Feel safe and be safe

To help the children stay safe when using technology in school, we have the following rules:

1. Only use the internet when an adult is present.
2. Only click on links or buttons when we know what they do.
3. Use the internet to search when an adult knows.
4. If we see something we don't like, turn off the screen and tell an adult.
5. Only send nice emails and they have to be sent within a lesson.

Our school policy for e-safety is available from our school office.

Broomwood Primary School

E-SAFETY

Information for parents & carers

At Broomwood Primary School we believe that using ICT is extremely beneficial to a child's learning. We do however, endeavour to keep your child safe when they are using new technologies.

This leaflet has been provided to help you understand how you can help to keep your child safe at home.

Appendix C – E Safety Brochure for Parents

How we know that using ICT at home can help

Many studies have looked at the benefits of having access to a computer and/or the internet at home. Here are some of the key findings:

Used effectively, ICT can improve children's achievement.

Using ICT at home and at school develops skills for life.

Children with supportive and involved parents and carers do better at school.

Children enjoy using ICT.

Using ICT provides access to a wider and more flexible range of learning materials.

How you can help your child at home

ICT is not just about using a computer. It also includes:

The use of controllable toys, digital cameras and everyday equipment such as tablets and media players.

Children can be helped to develop their ICT skills at home by:

- Typing a letter or email to a relative.
- Drawing a picture on a screen.
- Using the internet to research a class topic.
- Using interactive apps and games.

Simple rules for keeping your child safe.

To keep your child safe they should:

- Ask permission before using the internet.
- Only use websites you have chosen together or a child friendly search engine.
- Only email people they know.
- Ask permission before opening an email sent by someone they don't know.
- Not use internet chat rooms.
- Not use their real names when using games on the internet.
- Never give out a home address, phone or mobile numbers.
- Never tell someone they don't know where they go to school.
- Never arrange to meet someone they have 'met' on the internet.
- Only use a webcam with people they know.
- Tell you immediately if they see anything they are unhappy with.

Using these rules

Go through these rules with your child and pin them up near a computer. It is also a good idea to regularly check the internet sites your child is visiting e.g. by clicking on 'History" and "Favourites".

Please reassure your child that you want to keep them safe rather than take internet access away from them.

For further information go to:

CEOP: www.ceop.gov.uk
Think U Know: www.thinkuknow.co.uk
Childnet: www.child-int.org

Cyber bullying

Cyber bullying is the use of technology to harrass, threaten, embarrass, or target another person. By definition, it occurs among young people.

Many children and teens who are cyber bullied are reluctant to tell a teacher or parent, often because they feel ashamed of the social stigma, or because they fear their computer privileges will be taken away at home.

The signs that a child is being cyber bullied vary, but a few fthings to look for are:

- Signs of emotional distress during or after using the internet or phone..
- Being very protectiveor secretive of their digital life and devices.
- Withdrawal from friends and activities.
- Avoidance of school or group gatherings.
- Slipping grades and "acting out" in agner at home.
- Changes in mood, behaviour, sleep or appetite.

Appendix D – Student agreement forms

Foundation & KS1 Computing User Agreement

We only use the internet when an adult is with us

We can click on the buttons or links when we know what they do.

We always ask if we get lost on the Internet.

If we see something we don't like we turn off the screen and tell an adult.

We can send and open emails together.

We can write polite and friendly emails to people that we know.

We look after equipment and leave it how we found it.

- I understand the school E-safety rules.
- I will use the computer, network, Internet access and other technologies in a responsible way at all times.
- I know that network and Internet access may be monitored.

Signed_____ Date _____

KS2 Computing User Agreement

- We ask permission before using the Internet.
- We only use websites that an adult has chosen.
- We immediately turn off the screen and tell an adult if we see anything we are uncomfortable with.
- We only e-mail people an adult has approved.
- We send messages that are polite and friendly.
- We never give out personal information or passwords.
- We never arrange to meet anyone we don't know.
- We do not open e-mails sent by anyone we don't know.
- We do not use Internet chat rooms.
- We look after equipment and leave it how we found it.

- I understand the school E-safety rules.
- I will use the computer, network, Internet access and other technologies in a responsible way at all times.
- I know that network and Internet access may be monitored.

Signed_____ Date _____

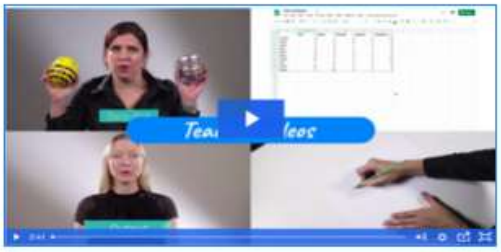
Appendix E – Kapow

Computing at Kapow Primary

Specialist-created Computing scheme of work
for EYFS to year 6

How Kapow Primary can help

- Short teacher videos with in-built CPD to explain each lesson and upskill teachers.
- Units of lessons created by computing specialists, suitable for both specialist and non-specialist teachers to follow.
- Intent, implementation and impact statement which outlines the intent and rationale behind Kapow Primary's Computing curriculum.
- Units of lessons that cater for schools with Microsoft devices/software.



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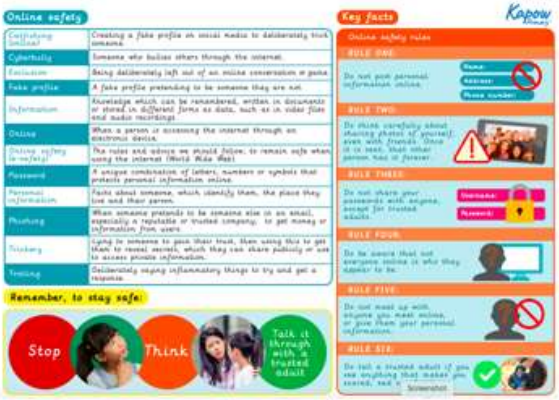
How Kapow Primary can help

- Knowledge organisers for each unit help to explain key computing terms in age-appropriate language.
- Engaging lessons, often with cross-curricular themes.
- All lessons are accessible on desktops, laptops, tablets and chromebooks.
- Mixed-age planning, designed for schools delivering the subject to mixed-age classes.



Lesson 1: Inputs and outputs (free lesson)

In this lesson, children learn about the different forms of inputs and outputs and their functions, pupils develop their understanding that computers follow instructions

The three strands of the computing curriculum

Computer Science (CS)

How computers and computer systems work and how they are designed and programmed.

Information Technology (IT)

The purposeful use of existing programs to develop products and solutions.

Digital Literacy (DL)

The skills knowledge and understanding needed in order to participate fully and safely in an increasingly digital world.

Appendix F – 'Acceptable Use Policy': Staff agreement form

Acceptable Use Policy

Acceptable Use Policy for Employees, Governors, Volunteers and Visitors In using technology for the use of communication for education and personal use, including but not limited to: IT software, internet, email, social media, via laptops, PCs, tablets, mobile phones and other mobile devices and lists the responsibilities they have in ensuring any form of communication using technology that they use in their role is used appropriately and in line with GDPR rules.

The school will try to ensure that everyone has good access to IT to enhance their role and to be able to provide the relevant learning opportunities for pupils.

Employees, governors, volunteers and visitors must ensure:

- That all technology devices have password/encryption facilities installed.
- They do not disclose or share any passwords provided for their use to others and will not attempt to gain access to anyone else's passwords. Passwords will not be written down and kept where anyone else can gain access to them.
- They do not install any hardware or software on any school-owned device without the headteacher's permission
- They are using a school email address for any correspondence they send in relation to their role in the school.
- Ensure all data is kept secure and used appropriately as authorised by the headteacher.
- They ensure that any emails with attachments that contain personal or sensitive data are encrypted or are saved onto a secure shared site giving the link to where it can be accessed.
- They know where any school owned device is at all times and be responsible for ensuring it is securely stored when not in use. Laptops/mobile devices that are taken off-site must be stored out of site securely. If left in a vehicle they must not be left in view but stored in the boot and the vehicle locked.
- They do not use school technology for personal use.
- They do not use personal technology/devices for school use at any time unless with the express permission of the headteacher. The only exception to this is if the only means of calling the emergency services to an incident is by using a personal mobile phone to do so.
- They do not use/duplicate/remove or amend anyone else's documents without their prior permission.
- They do not download, copy or distribute anything that is protected by copyright.
- They maintain professional boundaries when using the internet and social media for personal use. That when posting on personal forums/social media that there is the understanding that the use of any comments or photos regardless of whether they are positive or negative can be shared with others (parents, pupils, colleagues) and this could lead to losing control of who sees them or a misinterpretation of what was written, this could then bring your professional role and workplace into disrepute.
- They do not participate in communicating with pupils outside of their role at the school when using work or personal technology/devices for the use of social media, texting, calling. It is important to ensure that a professional relationship is adhered to at all times to prevent any misinterpretation of any actions made.
- That no personal details are exchanged with pupils that would allow contact directly via personal email, telephone, address.
- They do not use school equipment to upload, download any materials which are illegal (child sexual abuse images, criminally racist material, adult pornography covered by the Obscene Publications Act) or anything that is inappropriate or may cause harm or distress to others.
- That the use of school equipment to access personal sites (social media).
- That personal mobile phones must not be used in schools where children are present. Mobile phones should be put away during school hours but can be used when on a break away from pupils.
- All communications with pupils must be via the school's internal network

- They report any incidents of concern regarding social media misuse to the headteacher, computing lead and if necessary behaviour lead, this includes but is not limited to illegal, inappropriate or harmful material.
- That if any work device (laptop /ipad or similar) is stolen it must be reported immediately as this is considered a breach under GDPR and will need reporting within 72 hours.
- They agree to be responsible users at all times and understand that they are responsible for their actions and misuse or failure to comply with this policy could result in disciplinary action of a verbal, written warning, suspension, and the involvement of the police in the event of illegal activity.

Employees, governors, volunteers and visitors are asked to sign and date the form below to confirm they have received a copy of the Acceptable Use Policy for Employees, Governors and Visitors and have read and agree to adhere to it.

Agreement to adhere to the Acceptable Use Policy: I confirm that I have received a copy, read and understand that I must adhere with the above policy and understand that any breach could result in disciplinary action. I will immediately report the loss of any equipment covered by this policy. I will report any incidents of concern regarding misuse of technology/software/social media to the headteacher.

Name:
Signed:
Position:
Date:

Appendix G – Smoothwall

Smoothwall for Education

Product information sheet

Smoothwall Monitor Managed Service

Currently the only solution of its kind, Smoothwall Monitor - Managed Service is a real-time digital monitoring solution that offers a 24/7/365 human moderated service. A highly trained team monitor your alerts and will notify you of risks appropriate to their grade, meaning you can concentrate on providing support to the pupils in your care.

Advanced monitoring for schools and colleges

As digital learning becomes more commonplace in the classroom, the need to protect children online has risen to the top of schools' agendas.

Legislation such as Keeping Children Safe in Education and the Prevent Duty have solidified how high the Government expectations of school safeguarding responsibilities are. Not only must schools and colleges ensure they have appropriate filtering in place, but also appropriate monitoring, putting more of an emphasis on human interaction to ensure that vulnerable young people are safeguarded.

Smoothwall Monitor – Managed Service has been designed to provide the most advanced on-device monitoring. Moderated by vast AI technology and human specialists, you can concentrate on supporting and educating the young people in your care, with peace of mind that should an incident arise, you will be alerted by one of our expert moderators.

Smoothwall Monitor – Managed Service is the only solution of its kind to continuously build a profile of all users, allowing the system to accurately interpret between a one-off event or a consistent pattern of behaviour.

Now more than ever, schools and colleges need help to protect the young people in their care. Smoothwall Monitor - Managed Service provides round the clock support to keep your school one step ahead in the evolving world of digital safety.

Why is digital monitoring software needed?

Digital monitoring software helps pick up on thoughts that students can't say aloud, related to: suicidal thoughts, eating disorder, radicalisation, cyberbullying, sexual grooming, self-harm, racism and depression.

> I can't praise [it] enough! It's not only made my life a lot easier, but also has the ability to transform lives because receiving the alerts gives me time to act!

Designated Safeguarding Lead
King Harold Academy

smoothwall®

smoothwall.com/education

Smoothwall for Education

Product information sheet

Key features

Smart profiling

Builds an up to the minute profile of activity per individual, allowing the risk profile and context of a situation to be accurately analysed.

24/7/365 human moderation

Content is reviewed by a team of moderators around the clock to analyse instances and alert Safeguarding Officers of any high risk incidents.

Text analysis

Captures text input via the keyboard, whether online or offline, allowing you to monitor activity within encrypted sites and apps.

Image capture

Screen capture functionality sits within the solution, allowing any online and offline incidents that require investigation to be screen grabbed for later review or evidence.

Alerts & notifications

Alerts are based upon specific categories that are identified as serious incidents, and will be sent to your Designated Safeguarding Lead.

Portal

An online platform that allows you to review performance, view individual alerts and view system information.

Artificial intelligence

Uses machine learning to gather context before escalating for human moderation, improving performance and reducing false positives.

Auto updates

You never need to run updates for the client as it automatically updates in the background. This feature is optional.

Multi-device support

Available on PC and Mac, including terminal services and Chrome OS.

Get in touch

If you would like to find out more about Smoothwall Monitor – Managed Service or have any questions, please get in touch with our team of safeguarding experts. We'd be delighted to help.

Web: www.smoothwall.com/education
Tel: +44 (0)870 1999 500
Email: enquiries@smoothwall.com

Further reading

You may wish to download:

'A Complete Guide to Active Monitoring for Schools' at www.smoothwall.com/complete-guide-to-monitoring

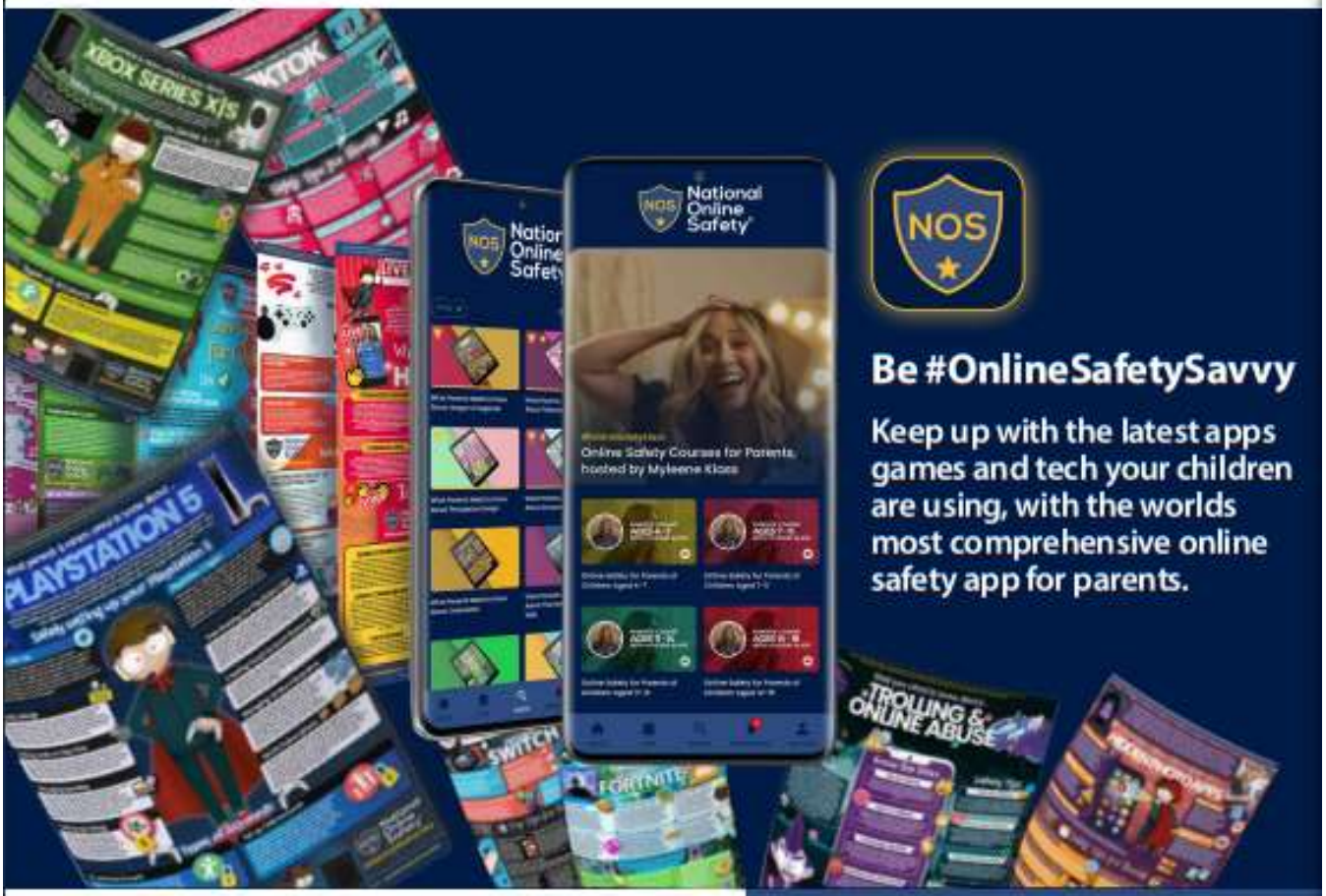
Smoothwall
Smoothwall
Smoothwall-Ltd
SmoothwallTV

smoothwall®

Appendix H – National Online safety

National Online Safety®

Download your Free Online Safety App for Parents & Carers



Be #OnlineSafetySavvy

Keep up with the latest apps games and tech your children are using, with the worlds most comprehensive online safety app for parents.

On the National Online Safety app you'll find:

- Hundreds of online safety guides on the topics you need to know about – from screen addiction, fake news and trolling to hacking, social media influencers and sexting;
- An online safety training course for parents – developed by our experts and delivered by online safety ambassador Myleene Klass;
- A user-friendly interface with increased functionality – find exactly what you need, when you need it;
- The option to get notifications to your phone as soon as new content becomes available – so you can stay up-to-date with the latest online crazes (and risks);
- An in-app voting system so you can help determine the subjects you'd like us to cover in future;
- The facility to personalise your content by favouriting key resources.

Download the free app today

Scan to download on Apple App Store

Scan to download on Google Play Store

or search for 'National Online Safety' in the store

Download on the App Store

GET IT ON Google Play

www.nationalonlinesafety.com Call: 0800 368 8061 Email: hello@nationalonlinesafety.com
Twitter: @natonlinesafety Facebook: /nationalonlinesafety Instagram: @nationalonlinesafety