FOUNDATION STAGE
Computing Toolkit

Sheffield City Council — Sheffield ILS eLearning Service
Improving outcomes . Embracing technology

This toolkit has been created to help teachers working in the Foundation Stage incorporate technology into lessons and provide a solid foundation for Computing at Key Stage 1.

The toolkit contains ten units organised into the following areas, to map to the Early Learning Goals. Note that although Technology is not included in the reformed ELGs, we recommend covering this area to prepare young people for their lives in an increasingly digital world. Click on the letter to jump to each unit:

A	Technology
A1 - What is a Computer? A2 - We Control Technology A3 - Tinkering: Bee-Bots	
B	Communication and Language
C	Personal, Social and Emotional Development
D	Physical Development
E	Literacy
F	Mathematics
G	Understanding the World
H	Expressive Arts and Design

Progression
At the bottom of each unit there are some progression statements. These may be used to assess how children are progressing with using technology, above and beyond the Early Learning Goals.

A	Technology

A1. What is a Computer?

Key Learning: A computer is a kind of machine that can help us do things. A computer doesn't have a brain – humans give them instructions. There are computers in lots of different things we use everyday e.g. laptops, smart speakers, mobile phones, shop tills, washing machines, games consoles, tablets etc. We control computers using a mouse, keyboard, touch screen.

Suggested Activities:

i. Discuss common technology in the home, school and wider world, e.g. washing machine; shop till; traffic lights. Encourage pupils to match pairs of images (e.g. clothes and washing machine), or image and sounds, and talk about what the technology is used for.

ii. Provide examples of everyday technology in continuous provision for pupils to explore and role play with. Can you take a computer apart and show children what is inside?

iii. Discuss what a computer is and how computers are used. You could use the BBC Bitesize resources: What is a Computer?; How can computers help you learn?; How do people use computers at work?

iv. There are lots of lovely unplugged activities at Hello Ruby to learn about computers e.g. Draw the Internet, Build your own computer.

v. Discuss how pupils use computers, mobile devices or smart speakers at home. What do they like doing? What don't they like about technology? Use images to help guide discussion. This can be used to inform future Online Safety discussions and input (see Unit C).

vi. Investigate the school computers and tablets – how do you turn it on, or start an application? How do you change the volume or take a photo? What activities can you do with it?

vii. Explore technology in school – tour the school taking photographs of technology, e.g. tills, automatic doors, computers, tablets, display screens, walkie talkies, cameras, CD player. Create a slideshow of the photos as a small group or class. Can pupils remember what the photos are of, and what the technology is used for?

viii. Provide a limited selection of technology (e.g. tablet, phone, laptop, smart speaker, camera, games console) and ask pupils to choose which one they would use for a specific purpose, e.g. taking a photo, listening to music, watching a video, playing a game, drawing a picture, finding out information.

ix.   Look at the basic parts of a desktop computer: mouse, keyboard, monitor/screen, and create labels in Communicate: in Print or similar. Ask pupils to match images and audio/text on the whiteboard. If using tablets in school, identify screen, home button, volume control and camera.

x.   Play the games, apps and activities in the Resources section, and talk about the different computers and technology shown in them, e.g. Nina and the Neurons.

xi.   Practise mouse skills using https://jacksonpollock.org/ - move the mouse to make marks, left-click to change the colour, double-click to clear the screen. There are also mouse-skills activities in the resources below.

xii.   Practise keyboard skills using the resources below or using https://patatap.com/ - each letter on the keyboard triggers a visual and a sound. You can also print out and laminate a lowercase *qwerty* keyboard, and practise recognising and finding letters or spelling out simple words (either by pointing at each letter, or use a felt-tip pen to mark each letter).

RESOURCES
Weblinks
http://www.bbc.co.uk/cbeebies/games/nina-go-digital-game - *Spot different technology with Nina and the Neurons* http://www.bbc.co.uk/cbeebies/watch/nina-and-the-neurons-computers-song BBC Bitesize: What is a Computer? – *simple introduction* BBC Bitesize: How can computers help you learn BBC Bitesize: How do people use computers at work? Keyboard practise BBC Bitesize: Dance mat typing Mouse + keyboard skills games http://primarygamesarena.com/Subjects/ICT - Mouse and keyboard activities Hello Ruby – unplugged activities to learn about computers

Software	iPad apps	
Out and About 3: Gadgets at Home IT Mouse Skills My 1st Mouse	Toca Town Toca Life: City Toca Life: School	*Explore the town/city and find examples of technology*
	Washing Machine by Wimbledon Sound Pop-It-Up-Shop Plum Cooking Elevator Up / Television Time / Mobile Cell Phone *by Inclusive Technology*	

Progression
- Explore technology. - Use different digital devices. - Recognise that you can access content on a digital device. - Use a mouse, touchscreen or appropriate access device to target and select options on screen. - Recognise a selection of digital devices. - Recognise the basic parts of a computer, e.g. mouse, screen, keyboard. - Select a digital device to fulfil a specific task, e.g. to take a photo.

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A2. We control technology

Key Learning: Computers don't have a brain, and can only follow instructions that we give them. Humans make computers and control what they do. We can **tinker** with (explore) computers to find out what they do – this is a key computational thinking approach.

Suggested Activities:

i.   Pupils can tinker with cause and effect apps and program, or more complex programs where they complete a number of steps to make something happen, e.g. the TES iBoard resources for ICT or the Busy Things activities. Discuss who is controlling the computer and how; and whether computers have brains.

ii. Record commands onto recordable buttons, and nominate one member of the class or an adult to be a human robot (a robot hat/mask can be used to help get into character). Pupils take it in turns to press a button and command the robot to do something (e.g. touch nose, shake head, wave hands). Discuss that you are controlling the robot by giving it instructions. The robot can't do anything unless it is told to.

iii. Ask the pupils to give instructions to the human robot (see above) to help them navigate a simple maze around the room or playground. Use recordable buttons to record commands for support if required. You could blindfold the robot to make it more difficult. Emphasise that the robot can't move unless given an instruction.

iv. Ask a volunteer to play a game where they control something or someone on screen, e.g. Wii Sports, Kinect Sports, CBeebies or a TES iBoard game with directional controls, or an iPad game. This can be done as a class or individually. Discuss how the game works – who is controlling the game? How do they control the game? What happens if the player does nothing?

v.   Provide opportunities for pupils to explore different technology in the classroom e.g. camera, tablet, fan, CD player, interactive whiteboard. Can they tell you what it is used for? Ask pupils to fulfil a specific task with the technology, e.g. take a photo/turn on the fan.

vi. Give pupils a remote-controlled car or toy and ask them to explore what it does. Ask questions about who is controlling the toy, and how they make it do things. Set tasks for the pupils: drive the car through the tunnel; drive the car to me. You could blindfold the pupil controlling the remote-controlled car and their partner has to give them instructions to help them navigate a simple maze.

vii.   Create a floor mat or laminate images on a topic to create a map of places to visit. Ask pupils to control remote-controlled cars/toys to visit each place, or a place they would like to go best. For example, use beach/mountain cards, or visit numbers in order. You could also add in places to avoid. Create larger images for pupils with poor control to aim for.

RESOURCES	
Weblinks	
[CBeebies games](#) – in particular Nina and the Neurons and Octonauts games [Sesame Street games](#) [eLT Scratch Games](#) – See the *Control & Explore* activities	
Software	**iPad apps**
Busy Things - *particularly the maths – shapes and space games*	*Busy Things Bundle; Toca Boca, Sago Mini apps [List of Making Things Happen apps](#)

Progression
- Explore technology. - Use different digital devices. - Repeat an action with technology to trigger a specific outcome. - Recognise the success or failure of an action. - Follow simple instructions to control a digital device. - Recognise that we control computers.

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A3. Tinkering with Bee-Bots (or other programmable robots)

Introduction:

- Give pupils time to tinker with the Bee-Bots or similar floor robot and explore what the buttons do. Ask questions about what they discover, e.g. What do you think the arrow buttons do? How far does it move? Which button do you need to press to make it start moving?

- Discussion: What is a robot? How do we control robots? Does a robot have a brain? Explain that the Bee-Bot is a robot and we can control it by giving it instructions. What sorts of instructions does it understand?

- Control pupils to move around the room using the Bee-Bot arrows on cards or screen – you could create a grid on the floor using masking tape. Emphasise that the right and left arrows mean a quarter turn on the spot. Example commands can be found in the **Bee-Bot Basics presentation**

- Allow children to make mistakes and support them to correct them. This is really important for building resilience.

Suggested activities:

i. Set small challenges on a grid (2 by 3 squares works well) to program the Bee-Bot, e.g. moving forward one square. Provide command cards to choose from before inputting into the Bee-Bot (see Resources). Pupils at this level can move just one square at a time, rather than planning out a full sequence of commands.

ii. Show a very short program (1 or 2 commands) and grid on the board and ask pupils where the Bee-Bot will end up – they can test out if they are correct on their own grids.

iii. In small group work suggest an incorrect command card to move the Bee-Bot in a certain direction. Can the pupil spot the error and correct it?

iv. Create grids for pupils to practise concepts from another subject. Practise counting with a number line; spell out high frequency words; practise road safety messages with pedestrian crossings and traffic lights. Can pupils estimate the number of moves to get to a certain square?

v. Pupils can draw or build their own Bee-Bot grid squares based on a cross-curricular theme, e.g. a treasure map, space, myths and legends to put together to create a class grid. They can also create costumes for the Bee-Bot out of cardboard, and work with pre-programmed Bee-Bots, or move one step at a time through the grid to reach a goal.

vi.   Create a grid based on a story you are reading in literacy. Program the Bee-Bot to move around the grid in the order of events in the story as you read. Encourage pupils to anticipate what comes next.

N.B. Bee-Bot grids are made up of squares 15cm by 15cm.

A	RESOURCES
Weblinks	

[Barefoot Bee-Bot Basics](#) – Comprehensive lesson plan for starting out with the Bee-Bot, with printable resources. Free login required.
[Bee-Bot Basics presentation](#) – Created for use at KS1, but contains the command icons you could reuse.
[Bee-Bot Command Cards - jigsaw](#) – more printable command cards

Progression
- Explore technology.
- Repeat an action with technology to trigger a specific outcome.
- Recognise the success or failure of an action.
- Follow simple instructions to control a digital device.
- Recognise that we control computers.
- Input a short sequence of instructions to control a device.

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B	Communication and Language

1. Listening, Attention and Understanding
2. Speaking

Suggested Activities:

i. Pupils listen to a story and then create their own sound effects using everyday objects and instruments to accompany a story – these can be recorded and added to a slideshow or eBook.

ii. Use talking tins, recordable buttons or sequencing strips to record parts of a story for pupils to sequence correctly. Pupils can record words or sentences onto recordable buttons to match an image or object.

iii. Create eBooks based on a class story – record the audio on each page. Provide the eBook for pupils to listen to and look through independently.

iv. Investigate some of the assistive technology tools that can read aloud a web page or piece of text, e.g. *Speak Screen* on the iPad, *Speak* selected text in Office tools, *Read Aloud* in the Edge browser or *Immersive Reader* (see here for more details). Give pupils a piece of text or web page to listen to, and ask questions about what they heard.

v. Create a Bee-Bot grid with characters or places from a story. Program the Bee-Bot to travel around the grid as you/the class retell the story. Ask pupils to anticipate what comes next (see also unit A3).

vi. In small groups take photos of pupils or staff in school, then record a short interview with them on a topic using mp3 recorder or tablet. Add photos and audio to a presentation (e.g. PowerPoint) as a class.

vii. Create an avatar or talking object using Chatterpix Kids (iPad) or Voki (http://www.voki.com/) to encourage pupils to talk about a topic or story.

viii. Pupils can perform a rhyme or song in a small group or as a class. This can be recorded and added to a presentation with suitable images.

ix. Talk to pupils about smart speakers/assistants, e.g. Siri, Alexa etc. Do they have these devices at home? What sort of questions do they ask? You could try asking questions in the lesson if you have a suitable device. What kind of questions can't they answer? Who is Siri/Alexa? Reinforce that this is a kind of computer, and not a real person.

x. Pupils can use apps such as Draw&Tell HD or Superhero Comic Book Maker to draw or animate something, and record a voiceover on an iPad.

xi. Create a simple stop-motion animation as a class and ask pupils to record the voices or retell a story.

xii.   Allow children to use collaborative apps, such as *Toca Tea Party* or *Toca Store* that encourage role play and conversation. If these aren't available, children can talk about their favourite apps and games on the computer, or use physical objects to role play use of technology.

xiii.   Act out scenes from a story and video them or add narration to a freeze frame photo in a presentation (e.g. in PowerPoint).

xiv.   Create a soundscape – arrange objects and drawings on a theme, then use recordable buttons or postcards to add audio to the scene. These could be memories, instructions, emotions or just labels.

B	RESOURCES
Weblinks	
http://www.voki.com/ - Create an avatar and make it speak	

Software	iPad apps
PowerPoint/Google Slides Immersive Reader (Office 365)	Chatterpix Kids Draw&Tell HD Superhero Comic Book Maker Princess Fairytale Maker Apple Clips Toca Store Toca Tea Party

Progression
- Explore technology. - Use technology to explore and access digital content. - Operate a digital device with support to fulfil a task. - Create simple digital content, e.g. record audio. - Follow simple instructions to control a digital device.

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3. Self-regulation
4. Managing Self
5. Building Relationships

This area lends itself well to reinforcing Online Safety messages and looking at healthy use of technology. See the Early Years-7 resources at https://projectevolve.co.uk/ for key statements.

Suggested Activities:

i. Encourage turn-taking and sharing technology. Use *Guided Access* on the iPad or a simple timer to set time limits for use of a device.

ii. Discuss rules for using technology – using pictures and key words, create a class set of rules for using computers, tablets and other devices.

iii. Discuss what pupils use technology for at home – you could send home a technology questionnaire to find out how the family uses computers, and ask pupils to draw themselves using technology.

iv. Model resilience when things go wrong with technology, and encourage resilience and perseverance when the children are using devices. Encourage tinkering – exploring computers and other technology, finding out what it does. Can a child explain to a peer how to do something that they have learnt?

C	**RESOURCES**

https://vclock.com/timer/ - Simple timer.

Progression
- Explore technology.
- Repeat an action with technology to trigger a specific outcome.
- Recognise the success or failure of an action.
- Follow simple instructions to control a digital device.
- Are aware that some online content is inappropriate.
- Are aware that information can be public or private.
- Know to tell an appropriate adult if they see something on the computer that upsets them.

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D	Physical Development

6. Gross motor skills
7. Fine motor skills

Suggested Activities:

i. Create a human robot (see unit A2) activity using dance or PE moves - give instructions to the whole class, or they can do it in pairs to 'control' each other.

ii. Create your own dance mat type activity using single or combinations of Bee-Bot commands on the whiteboard – so if you display a right turn arrow, the class turn to the right.

iii. Model the moves of a Bee-Bot on a life-size version of a grid, moving around obstacles safely.

iv. Digital scavenger hunt: give small groups of children a tablet or camera and a list of items from around school to find – fastest wins.

v. If you have tablets, source some cheap styluses for children to practise letter and number formation. Obviously, this can be done without technology, but there are a number of engaging apps to encourage reluctant writers (see units E and F for specific apps).

vi. Practise mouse and keyboard skills – excellent for fine motor control. See Resources for links or Unit A.

vii. Create a treasure hunt/orienteering course around school using QR codes for children to scan with a tablet.

D	RESOURCES

Keyboard practise
BBC Bitesize: Dance mat typing
 Mouse + keyboard skills games
http://primarygamesarena.com/Subjects/ICT - Mouse and keyboard activities
Bee-Bot Basics presentation - contains command symbols to print out or display

Progression
- Use a mouse, touchscreen or appropriate access device to target and select options on screen.

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8. Comprehension
9. Word Reading
10. Writing

Suggested Activities:

i. Pupils can listen to and follow a story in an eBook independently on the tablet or computer. They may choose from a selection, and use the controls to move on to the next page. Ask questions to see what pupils can remember about the story.

ii. Create an eBook to retell a story. Photograph artwork created by pupils, or images they have chosen from a selection. Record a narration. Pupils can help to add sound effects, a simple narration and add keyword text in small groups. (E.g. use [Book Creator](#) or PowerPoint using action buttons).

iii. Investigate some of the assistive technology tools that can read aloud a piece of text, e.g. *Speak Screen* on the iPad, *Speak* selected text in Office tools, *Read Aloud* in the Edge browser or *Immersive Reader* (see here for more details). Give pupils a simple piece of text to read whilst listening to the audio, and ask questions about what they have read.

iv. Create a Bee-Bot grid with characters or places from a story. Program the Bee-Bot to travel around the grid as you/the class retell the story. Ask pupils to anticipate what comes next (see also unit A3).

v. Using recordable tins or postcards with different letters and digraphs on each, ask pupils to record themselves saying each sound. You could also do this into a PowerPoint, or whiteboard software.

vi. Use the Draw&Tell HD app (free on the iPad) – pupils can write one or more letters (using a stylus where possible), then record the sound over it.

vii. Look at a variety of photos on a theme in a slideshow. Discuss what they show and which photos they like best. Pupils could suggest and type suitable captions.

viii. Use specific phonics apps and websites to practise reading and writing. There is a selection in the Resources.

E	RESOURCES

Weblinks

[Storynory](#) – free audio books (audio only)
[A Story Before Bed](#) – free stories read by the author or illustrator
[Example of a ASL signed eBook](#)
[Book Creator](#) – free to create eBooks

Software	iPad apps
PowerPoint/Google Slides Immersive Reader (Office 365)	Draw&Tell HD *Create your own eBooks:* Book Creator 30 Hands Kid in Storybook Maker *Read eBooks:* CBeebies StoryTime Collins Big Cat series of books Nosy Crow books: Little Red Riding Hood, Three Little Pigs, Goldilocks etc. *Phonics apps:* Hairy Letters Phonics Lite Twinkl Phonics Suite Little Writer

Progression

- Explore technology.
- Use technology to explore and access digital content.
- Operate a digital device with support to fulfil a task.
- Create simple digital content, e.g. record audio.
- Follow simple instructions to control a digital device.

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11. Number
12. Numerical Patterns

Suggested Activities:

i. In small groups or as a class: pupils can choose suitable images from a selection to add to a slideshow containing different numbers of objects. They can then record a voiceover for each slide.

ii. Use interactive whiteboard software or PowerPoint to create counting and more/less activities, e.g. drag a number to match a group of objects, or click a button to choose the correct label.

iii. Practise number formation in a drawing application on a touchscreen, or with a specific number formation app. Pupils can use a stylus with a tablet if you want them to practise their pencil grip.

iv. Use a painting application with stickers and ask pupils to add 1-5 stickers to a picture, or draw a number of objects on a theme. Ask pupils simple questions about the number of or more/less objects in a picture.

v. Use specific maths software and apps to practise counting (see Resources).

vi. In small groups take photos of counting objects in class or numbers of objects around school. They can add these to a poster and label with the number of objects, with support. This could also be done as a matching exercise, e.g. in Pic Collage – drag the correct number to match the picture.

vii. Video pupils singing counting songs (e.g. 5 Little Monkeys) as a class. Pupils can play back and sing along. You can also create your own class counting video, with each pupil filmed counting objects.

viii. Create a presentation about more and less/fewer in small groups, taking photos of objects and adding to slides, together with text and/or voiceover.

ix. Create a class pictogram. Ask the class a question and provide a set of images that could answer the question (for example: Do you prefer chocolate or crisps? Which is your favourite animal: cat, dog, fish or bird? How many brothers or sisters do you have?). Each pupil chooses an answer card and places it on the floor or table to build up a pictogram – create axes and a grid to guide where the images are placed. Ask questions about the results.

x. Create a class pictogram on the board – pupils drag and drop an image, or touch an option to add it to the pictogram (you can use the http://www.j2data.com/ pictogram examples on pets, fruit, transport or weather for this). Ask questions about the results.

xi. Using recordable buttons, pegs or postcards: record the numbers on a selection and ask pupils to order them, or ask pupils to record the number according to the image on the button.

xii. Create a number-line grid and program the Bee-Bot to move forwards as the children count. Explore patterns e.g. odd/even numbers – how many squares does the Bee-Bot move?

F	RESOURCES

Weblinks
http://www.topmarks.co.uk/maths-games/3-5-years/counting - Lots of games to practise counting 1-5 http://www.helpkidzlearn.com/ - Counting songs and activities http://www.crickweb.co.uk/Early-Years.html - Includes some counting activities Pictogram examples www.j2data.com – Create pictograms, requires login to save

Software	iPad apps
Busy Things – *Maths activities* PowerPoint - *create number presentations*	Five Little Aliens Little Digits Animals Counting Writing Game Toca Store - *count up to 5 coins* My Numbers Count to 5: Learning Numbers for Babies Let's Count by Roberta Pagnoni My 1 to 5 Draw&Tell by Duck Duck Moose – *add stickers or drawings, record audio to count* Pic Collage – *add photos and numbers to match* Doodle Buddy/ Drawing Desk – *add stickers, practise drawing numbers* Make a Scene Farmyard/Dinosaurs/ Animals/Outer Space/Under the Sea

Progression
- Explore technology. - Use technology to explore and access digital content. - Answer basic questions about information displayed in images e.g. more or less. - Operate a digital device with support to fulfil a task. - Create simple digital content, e.g. digital art. - Choose media to convey information, e.g. image for a poster.

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13. Past and Present
14. People, Culture and Communities
15. The Natural World

Suggested Activities:

i.   Create a class film on a topic, e.g. festivals, traditional tales. Pupils can act out scenes, choose music and sound effects to add to the film.

ii. Document a school trip or event, by putting together video and photos taken on the day. You could also recreate an event or trip by filming using a green screen, to reinforce learning.

iii. Small groups can interview staff or pupils in school from different backgrounds, countries, religions, or generations. They can record on a camera or tablet – what questions would they like to ask?

iv. Create a green screen film starring the children to re-create a scene from history, or set in another country.

v.   Create posters using a set of pre-selected images on a theme – this could be done on the computer, or using Pic Collage in small groups with support.

vi. Use Draw&Tell HD or a similar app to take a photograph of a piece of artwork around a topic and record feelings and thoughts about it.

vii. Look at Google Maps street view or Google Earth together and visit places around the world where different pupils come from, or characters in stories being read.

viii. Create a class eBook on a topic (use [Book Creator](#), or make a slideshow in PowerPoint). You could add audio and text in the home language of any EAL children.

ix. Ask families to fill in a questionnaire about use of technology – what did parents and grandparents have when they were at school? How has technology changed since?

x.   As a class, use photo editing software, or the Artistic Tools in PowerPoint to add filters to photographs to make them look old. You can remove the background in PowerPoint too, and superimpose photos of children onto historic backgrounds or places around the world. Discuss how not everything you see in photos is real.

xi. Investigate translation tools and learn how to say hello in different languages. E.g. [Google Translate](#) or [Microsoft Translate](#).

xii. Visit webcams in different countries, or at zoos to see the animals.

xiii. Use the Chatterpix Kids app to provide a voice to an animal, person from history or another country.

xiv. Create Bee-Bot mats on a theme, e.g. local area, festivals, animals. See unit A3 for more information on working with Bee-Bots.

G	RESOURCES
Weblinks	

NEN Gallery – copyright free images, audio and video
www.ribbet.com – Free photo-editing software
www.befunky.com – Free photo-editing software, collage maker and a range of templates to make cards, invitations, menus etc.
BeFunky Collage Creator – Add your own photos and text into a collage
iMovie helpsheet
Book Creator – free to create eBooks

Software	iPad apps
Windows Live Movie Maker / Photos Serif Movie Plus	iMovie Green Screen by DoInk ChatterPix Kids Photoshop Express BeFunky Pic Collage Book Creator Draw&Tell HD

Progression
- Explore technology. - Use technology to explore and access digital content. - Operate a digital device with support to fulfil a task. - Create simple digital content, e.g. digital art. - Choose media to convey information, e.g. image for a poster.

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16. Creating with Materials
17. Being Imaginative and Creative

Suggested Activities:

i. Pupils colour in a picture on a theme (e.g. Remembrance Day, animals, Olympics), using an online package or app. See Resources.

ii. Pupils explore effects and options in specific art software to create their own patterns and images, e.g. Busy Things > Expressive Art; Pretty Things; 2Paint; Tate gallery online tools.

iii. Pupils draw a picture to illustrate a story or topic using a paint application, e.g. seasons; religious festivals; space. Add it to an eBook or poster with support and add a caption or print out and label where appropriate.

iv. Pupils design a greetings card for an occasion or postcard, possibly using a template. This could be done in a painting package or app, or by hand and take a photo to add to a template in PowerPoint or Word.

v. Take photos of artwork created away from the computer and add to software (Pic Collage/PowerPoint/2Publish) to create a poster or collage. Pupils can add text labels or audio description if appropriate.

vi. Pupils can draw self-portraits in a painting application to print out and add to their pegs or drawers, e.g. https://paintz.app/ or Microsoft Paint.

vii. Role play narrative in animation apps such as Superhero Comic Book Maker or Princess Fairy Tale Maker.

viii. Record videos of invented narratives or retelling of stories.

ix. Record pupils performing songs, rhymes, poems and stories – add to a slideshow of photos.

x. Listen to different kinds of music – discuss how it makes you feel: scared/happy/sad. Choose music tracks or sound effects from a selection to accompany a film, animation, slideshow or image.

xi. Pupils can create music on a tablet or computer using apps or websites in the resources – explore different sounds and instruments. Chrome Music Lab has some lovely tools to make music, e.g. Kandinsky, and Blob Opera is a lot of fun!

xii. Pupils create their own sound effects using everyday objects and instruments to accompany a story – these can be recorded and added to a slideshow or eBook.

H	RESOURCES

Websites

http://jacksonpollock.org/ - A Jackson Pollack painting creator
https://bighugelabs.com/popart.php - Create Warhol inspired pop art
http://www.crickweb.co.uk/Early-Years.html - Colouring in and pattern matching activities
https://www.tate.org.uk/kids/games-quizzes - A number of art-based activities
http://haringkids.com/ - Explore Haring's art and create your own version
www.befunky.com – Free photo-editing software, collage maker and a range of templates to make cards, invitations, menus etc.
Kaleidescope painter – Drag the mouse to create kaleidoscope patterns.
Chrome Music Lab – Create music using these free apps.
Patatap – Create sounds & visuals
https://paintz.app/ - Simple painting application online.

Software	iPad apps
2Paint 2Paint a Picture (genres) 2Publish (Pattern/Card) TuxPaint Paint Pretty Things Busy Things – *Expressive Art*, *Music* 2Play / 2Explore / 2Beat / 2Sequence (Purple Mash) Musical Leaps and Bounds Noisy Things Splodge PowerPoint/Google Slides	*Art apps:* Brushes, Drawing Pad, Doodle Buddy, Art Rage, Drawing Desk, Glow Paint, Glow Draw *Music apps* e.g. Awesome Xylophone, Storybots Tap & Sing, Animal Piano, Percussive Free, Monkey Drum, Beatwave, Soundrop, iDaft, MuseicBox, Beamz *Animation apps:* Superhero Comic Book Maker, Princess Fairytale Maker, Puppet Pals,

Progression

- Explore technology.
- Use technology to explore and access digital content.
- Operate a digital device with support to fulfil a task.
- Create simple digital content, e.g. digital art.
- Choose media to convey information, e.g. image for a poster.

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Key Vocabulary

Here are some suggested key words to introduce to pupils in the Foundation Stage. Pupils may use some of this language, some of it may just be modelled to familiarise children with the terms. You may also add in language specific to your setting (e.g. if you use iPads).

Computer	*We are going to use the computer to make art.*
Laptop	*Can you turn on the laptop?*
Camera	*We can use the camera on the tablet to take a photo.*
Tablet	*What do you use the tablet for?*
Robot	*A Bee-Bot is a type of robot.*
Mouse	*We use the mouse to make things happen on the computer.*
Keyboard	*Type in your name using the keyboard.*
Screen	*What can you see on the screen?*
Login	*I am going to login to the computer.*
Password	*I need to remember my password.*
Internet	*We can go on the Internet to find out information.*
Search	*I'm going to search for some information.*
Website	*This website tells us all about penguins.*
Image	*I'm going to search for an image to add to my presentation.*
Audio	*Listen to the audio – the sound. What can you hear?*
Video	*Let's watch this video about …*
Text	*We can type the text into this box.*
Program	*We can program the Bee-Bot to move.*
Instructions	*A robot or computers follows our instructions.*
Control	*Humans control computers by giving them instructions.*