

FOUNDATION STAGE 2

Computing Toolkit

Sample Copy



Sheffield ILS eLearning Service
Improving outcomes. Embracing technology

This toolkit has been created to help teachers working in Foundation Stage 2 incorporate technology into lessons and provide a solid foundation for Computing at Key Stage 1. These are suggestions, not a statutory requirement.

The toolkit contains ten units organised into the following strands:

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| 1 | We Control Technology |
| 1a - What is a Computer? 1b - We Control Technology 1c - Tinkering: Bee-Bots | |

*This strand reflects the Early Learning Goal in **Understanding the world**: 'Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes'. In addition it prepares the children for learning Computational Thinking skills in KS1.*

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| 2 | Communication: Multimedia |
| 2a - Digital Art 2b - Sound & Music 2c - Photographs 2d - Films & Animation 2e - eBooks | |

This strand encourages the use of technology to support literacy and in other subject areas such as music and art.

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| 3 | Communication: Data |
| 3a - Counting 3b - Sorting | |

This strand demonstrates how technology can be used to support numeracy, and prepares pupils for working with data in Computing in KS1.

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.

1a. What is a Computer?

Objectives: *Recognise a range of technology and what it is used for; identify which device to choose from a selection to fulfil a specific task*

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. Discuss what a computer is and how computers are used. Use the BBC Bitesize resources: [What is a Computer?](#); [How can computers help you learn?](#); [How do people use computers at work?](#)
- iii. Discuss what pupils use computers or mobile devices for at home. What do they like/dislike doing? Use images to help guide discussion. This can be used to inform future Online Safety discussions and input.
- iv. Investigate the school computers and tablets – how do you log on/start an application? How do you change the volume or take a photo?
- v. Discuss rules for using technology in school. Pupils can choose from a bank of images or symbols to create a set of rules.
- vi. 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?
- vii. Provide a limited selection of technology and ask pupils to choose one for a purpose, e.g. taking a photo, listening to music, watching a video, drawing a picture.
- viii. Look at the basic parts of a desktop computer: mouse, keyboard, monitor/screen, and create labels in Communicate: in Print or similar. Match images and audio/text in PowerPoint or IWB software. If using tablets in school, identify screen, home button, volume control and camera.
- ix. 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.
- x. Practise mouse and keyboard skills using the resources below.

Online Safety & Digital Literacy (suggested points for discussion)

- ✓ Discuss using *Passwords* when you log on to a computer (if used in your setting), and the importance of keeping them private.

- ✓ Discuss *Responsible Use of Technology* – ask permission to use technology, create a set of rules for using computers for the class.
- ✓ Discuss use of technology at home and *Online Friends* we meet through games and apps – what makes a good friend?; being kind online; who are we talking to online?

RESOURCES

Weblinks

<http://www.bbc.co.uk/cbeebies/games/nina-go-digital-game> - *Spot different tech 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?](#)
[BBC Bitesize: What are the main parts of a computer?](#)
[Keyboard practise](#)
[BBC Bitesize: Dance mat typing](#)
[Mouse skills activity](#)
[Mouse + keyboard skills games](#)
<http://primarygamesarena.com/Subjects/ICT> - *Mouse and keyboard activities*

Software

Out and About 3: Gadgets at Home
 IT Mouse Skills
 My 1st Mouse

iPad apps

| | | |
|---|---|---|
| <p> Toca Town Toca Life: City Toca Life: School </p> | } | <p> <i>Explore the town/city and find examples of technology</i> </p> |
| <p> Washing Machine by Wimbledon Sound Pop-It-Up-Shop Plum Cooking Elevator Up / Television Time / Mobile Cell Phone by <i>Inclusive Technology</i> </p> | | |

Progression

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 - *Explore technology*
 - *Recognise different digital devices, e.g. computer, tablet, camera*
 - *Access digital content using an appropriate access device, e.g. mouse or touchscreen*
 - *Understand that different devices are used for different purposes, e.g. camera to take photo*
 - *Choose appropriate technology from a limited selection to fulfil a familiar task, e.g. take a photo*
 - *Identify a range of computer devices*
 - *Name the basic parts of a computer or tablet, e.g. mouse, screen, keyboard*
 - *Understand that you can access the same content on different devices*

2b. Sound and music

Objectives: Record music and sound effects; create digital music; combine audio and images

Suggested Activities:

- i. 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.
- ii. Play music on a tablet or computer – explore different sounds and instruments.
- iii. Record sounds on a topic (e.g. weather, animals, everyday objects) using an mp3 recorder or tablet. Play back and see if the children can remember/guess what made the sounds. Insert sounds into a slideshow of suitable images chosen by the class, e.g. using PowerPoint.
- iv. 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.
- v. Use talking tins, recordable buttons or sequencing strips to record parts of a story for pupils to sequence.
- 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. This could link with asking questions in literacy.
- vii. Create an avatar or talking object using YaKit Kids, Chatterpix, Tellagami (iPad) or Voki (<http://www.voki.com/>) to encourage pupils to talk about a topic or story.
- viii. Pupils can perform their own poem, song or piece of music on an instrument in a small group or as a class. This can be recorded and added to a presentation with suitable images.

Online Safety & Digital Literacy (see appendix)

- ✓ Discuss who owns a piece of music. How would you feel if someone used your music without asking?
- ✓ Discuss *Personal information* – what kind of information about ourselves would we keep private when talking to different people?

| RESOURCES | |
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| Weblinks | |
| http://www.incredibox.com/ - Create beatbox mixes by choosing icons http://www.voki.com/ - Create an avatar and make it speak | |
| Software | iPad apps |
| Audacity 2Play / 2Explore / 2Beat / 2Sequence (Purple Mash) Musical Leaps and Bounds Noisy Things Splodge PowerPoint/Google Slides | 30 Hands - <i>slideshow with audio</i> Toc and Roll - <i>layer up different instruments</i> Bossjock junior - <i>record sound effects</i> Loopimal - <i>create different compositions by creating loops</i> YaKit Kids Chatterpix Tellagami Draw&Tell by Duck Duck Moose - <i>add sounds or narration to a drawing</i> <i>Music apps e.g. Awesome Xylophone, Storybots Tap & Sing, Animal Piano, Percussive Free, Monkey Drum, Beatwave, Soundrop, iDaft, MuseicBox, Beamz</i> |

| Progression | |
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|  | <ul style="list-style-type: none"> - <i>Play music using software or app</i> - <i>Identify recorded sounds</i> - <i>Choose music or sound effects from a selection for a purpose</i> - <i>Choose a suitable app or piece of software to make music</i> - <i>Copy rhythms and notes</i> - <i>Indicate how a piece of music makes them feel</i> |