

## How can children learn about Computing in Early Years?

The Early Years Foundation Stage Curriculum supports children to begin developing their understanding of technology and how it is used in the world around them. Children learn that technology can help us to communicate, find out information, and solve problems through first-hand experiences with age-appropriate devices such as interactive whiteboards, tablets, cameras and programmable toys. They explore concepts such as sequencing, cause and effect, and logical thinking through play-based activities, coding toys, games and stories. Children are encouraged to talk about technology they use at home and in their community, helping them to recognise its role in everyday life. Through guided activities, children learn how to use technology safely and responsibly, building strong foundations for becoming confident, creative and critical users of technology as they grow.

### Links to Development Matters: Birth to Three

#### Understanding the World

- Repeat actions that have an effect

### Key Vocabulary

On, off, play, pause, move, start, stop, take turns, safe, walk, two hands, press, button, gentle, hold, screen

### End Points

- Take turns
- Follow repeated instructions
- Understand that we can start and stop actions

### Links to Development Matters: Three- and Four-Year-Olds

#### Personal, Social and Emotional Development

Increasingly follow rules, understanding why they are important  
Remember rules without needing an adult to remind them

#### Physical Development

Match their developing physical skills to tasks and activities in the setting

<b>Understanding the World</b>	Explore how things work
<b>Key Vocabulary</b>	
On, off, interactive whiteboard, play, pause, rewind, move, drag, start, stop, tap, take turns, safe, walk, two hands, press, button, home, camera, app, gentle, hold, screen, camera, closer, further away, favourite, mouse, keyboard, rules	
<b>End Points</b>	
<ul style="list-style-type: none"> <li>• Turn an interactive whiteboard on or off</li> <li>• Start and pause a video</li> <li>• Take turns to play a game with a friend</li> <li>• Handle devices carefully and safely</li> <li>• Take a photo</li> <li>• Understand the impact position can have on taking a picture</li> </ul>	

<b>Links to Development Matters: Reception</b>	
<b>Personal, Social and Emotional Development</b>	<ul style="list-style-type: none"> <li>• Show resilience and perseverance in the face of challenge.</li> <li>• Know and talk about the different factors that support their overall health and wellbeing: sensible amounts of 'screen time'</li> </ul>
<b>Physical Development</b>	<ul style="list-style-type: none"> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently</li> </ul>
<b>Expressive Arts and Design</b>	<ul style="list-style-type: none"> <li>• Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>
<b>Early Learning Goals</b>	
<b>Communication and Language Listening, Attention and Understanding</b>	<ul style="list-style-type: none"> <li>• Make comments about what they have heard and ask questions to clarify their understanding</li> </ul>
<b>Personal, Social and Emotional Development</b>	<ul style="list-style-type: none"> <li>• Managing Self</li> <li>• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge</li> <li>• Explain the reasons for rules, know right from wrong and try to behave accordingly</li> </ul>
<b>Expressive Arts and Design</b>	<ul style="list-style-type: none"> <li>• Creating with Materials</li> <li>• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</li> </ul>

### Key Vocabulary

Mouse, right click, move, Beebot, forward, backward, space, obstacle, map, follow, count, space, landmark, right, left, turn, camera, app, record, start, stop, move background, storyboard plan, sequence, type, press, space, finger space, spell

### End Points

- Navigate the mouse around the screen
- Direct a Beebot forward
- Direct a Beebot backwards
- Program a Beebot to follow a path
- Record a video
- Record a video in front of a screen/background
- Type a CVC word
- Use the space bar
- Type your name

### Links to National Curriculum: Year 1

#### **Pupils should be taught about:**

- 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