Computing Curriculum Progression Skills

<table>
<tr><td></td><td colspan="2">EYFS</td></tr>
<tr><td></td><td colspan="2">End of EYFS Expectations</td></tr>
<tr><td>EYFS Computational Thinking Skills</td><td colspan="2">We live in a technological world and there is no escape from the reality that technology is integrated into the lives of young children. Just as we ensure the children in our care are ready for the adult world by teaching them maths and literacy, we should also make sure that they are exposed to computational thinking and all-important e-safety.
Computing in the EYFS ensure children develop listening skills, problem-solving abilities and thoughtful questioning — as well as improving subject skills across the seven areas of learning.

Although the technology strand has been removed from the EYFS curriculum, there are lots of other assessment opportunities that arise from Computing. Our Computing sessions are largely cross-curricular with strong links to communication and language, mathematics, physical development and the characteristics of effective learning in particular.

<table>
<tr><td>Tinkering</td><td>Playing and exploring</td></tr>
<tr><td>Making</td><td>Making things, checking and fixing things</td></tr>
<tr><td>Collaboration</td><td>Playing and working collaboratively</td></tr>
<tr><td>Persevering</td><td>Not giving up</td></tr>
<tr><td>Logic</td><td>Anticipating and explaining is logical reasoning</td></tr>
<tr><td>Pattern</td><td>Grouping things, comparing, spotting similarities and differences, working out rules</td></tr>
<tr><td>Abstraction</td><td>Naming and labelling, working out what is important, sticking to the main theme, ignoring what is not important, creating a summary</td></tr>
<tr><td>Algorithms and Decomposition</td><td>Responding to instructions, ordering things, sequencing things, introducing storylines, working out different ways to do things, breaking problems down into steps</td></tr>
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<tr><td>Aspect</td><td colspan="2">Key Stage 1</td></tr>
<tr><td></td><td>End of Year 1 Expectations</td><td>End of Year 2 Expectations</td></tr>
<tr><td>Programming/algorithms</td><td>- Can use key simple language of algorithm such as forward and backwards.
- Can follow a set of simple instructions to programme e.g. Bee Bots - using the forward, backward and go command arrows.
- Can order instruction cards placed in wrong order, children have to debug the programme (instructions) to make the bee-bot move, ensuring start at the beginning of instruction and stop is at the end.</td><td>- Can use key language of algorithm such as quarter of a turn and half a turn.
- Can follow a set of instructions to programme Bee Bots including rotation to change directions.
- Can order instruction cards placed in wrong order, children have to debug the programme (instructions) to make the bee-bot move however ensuring they get to given specific destination.</td></tr>
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	- Can explain the correlation between simple arrow symbols such as forward and backward to bee-bots movement.	- Can writing own algorithms, using the knowledge of symbols, to plan the bee-bots routes. - Can discuss how to edit and refine a sequence of commands - Can use the 'repeat' loop and 'when' (conditional statements) command within a series of instructions
Data and Multimedia	- Can develop simple classification skills based on practical sorting activities. - Can, with support, use simple data plotting / graphing programs to produce pictograms and other simple graphs. - Can place objects and pictures in a list or simple table. Multimedia - Can use ICT to generate ideas for their work. - Can record images and videos. - Can understand that sound can be recorded and played back. - Can record their own voice or others with support.	- Can independently plot data as a pictogram, graph or bar graph. - Can change graph types. - Can interpret the graph – discuss and answer simple questions. Multimedia - Can take appropriate pictures and video for a specific purpose - Can edit images e.g. crop, resize and filters - Can add simple titles and credits - Can discuss which images to keep and why.
Communication	- Can talk about how they are using ICT. - Can start to use appropriate ICT vocabulary. E-safety - Can identify different devices that can go on the internet and separate those that do not. - Can make decisions about whether or not statements or images found on the internet are likely to be true. - Can identify what counts as personal information - Can identify when inappropriate content is accessed and how to act appropriately. - Can talk about the School e-safety policy 'SAFE' and 'Think then Click'.	- Can explain their work and how they have used ICT - Can use appropriate ICT vocabulary. E-Safety - Can identify obviously false information in a variety of contexts. - Can recognise that a variety of devices (Xbox, PSP, Computers and phones) connect users with other people. - Can identify personal information that should be kept private. - Can consider other people's feelings on the internet. - Can explain the School's e-safety policy 'SAFE' and 'Think then Click'.
Digital Literacy and Research	General skills - Can load programs with support e.g. Word, PowerPoint and paint (single page).	General skills - Can load programs independently. - Can save work to correct folder independently.

	- Can save document to correct folder with support. - Can retrieve work with support. - Can use key features of the keyboard – Shift key to create capital letters, enter/return, space bar and delete / back space. - Can use both hands on the keyboard Word / PowerPoint - Can create text. - Can import pictures. Paint - Can select a range of tools e.g. brushes, pens and spray - Can change colours - Can change patterns - Can draw a simple picture Websites - Can complete a search using a child friendly search engine. - Can talk about websites they have been on. - Can explore a website by clicking on buttons, arrows, menus and hyperlinks. - Can navigate 'back' by clicking on the 'back' button.	- Can retrieve work independently. - Can practise using the keyboard skills using both hands, try to use more than two fingers, and try to use the thumb on the spacebar. - Can plan what they are going to do and edit their work. - Word / PowerPoint - Can create a new blank document - Can manipulating image size and orientations. - Can changing text size, colour and font. - Adding multiple pages to a document. - Print or present documents. Paint - Can independently use various tools including brushes, and pens. - Can independently use the spray can, fill tool and stamps. - Can select and use tools appropriately. Websites - Can complete a search using a child friendly search engine independently. - Can use the internet to find information for a topic with support e.g. Favourite files or hyperlinks set up by teacher.