

## Robot programming adult led activity progression document

| Birth to three- babies, toddlers and young children will be learning to:                                                                                                               | 3 and 4-year-olds will be learning to:                                                                                                                                                                                                                                           | Children in reception will be learning to:                                                                                                 | Early Learning Goal:                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Develop counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.</p> <p>Count in everyday contexts, sometimes skipping numbers – ‘1-2-3-5’.</p> | <p>Recite numbers past 5.</p> <p>Say one number for each item in order: 1,2,3,4,5.</p> <p>Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</p> <p>Experiment with their own symbols and marks as well as numerals.</p> | <p>Count objects, actions and sounds.</p> <p>Count beyond ten.</p> <p>Link the number symbol (numeral) with its cardinal number value.</p> | <p><b>Mathematics ELG: Number</b> – have a deep understanding of numbers to 10</p>                                                                                                                 |
| <p>Compare amounts, saying ‘lots’, ‘more’ or ‘same’.</p>                                                                                                                               | <p>Compare quantities using language: ‘more than’, ‘fewer than’.</p>                                                                                                                                                                                                             | <p>Understand the ‘one more than/one less than’ relationship between consecutive numbers.</p> <p>Compare numbers.</p>                      | <p><b>Mathematics ELG: Numerical Patterns</b> – Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;</p> |

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| Birth to three- babies, toddlers and young children will be learning to: | 3 and 4-year-olds will be learning to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Children in reception will be learning to:                                                                                                                                        | Early Learning Goal:                         |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Notice patterns and arrange things in patterns                           | <p>Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'</p> <p>Describe a familiar route.</p> <p>Discuss routes and locations, using words like 'in front of' and 'behind'.</p> <p>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc.</p> <p>Combine shapes to make new ones – an arch, a bigger triangle, etc.</p> <p>Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</p> | <p>Continue, copy and create repeating patterns.</p> <p>Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.</p> | <b>Mathematics: Shape, space and pattern</b> |

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|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notice differences between people.                                                      | Show interest in different occupations.                                                                                                          | Name and describe people who are familiar to them.                                                             | <b>Understanding the World ELG: Past and Present</b> – Talk about the lives of the people around them and their roles in society;                                                             |
|                                                                                         | Talk about what they see, using a wide vocabulary.                                                                                               |                                                                                                                | <b>Understanding the World ELG: People, Culture and Communities</b> – Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps; |
| Repeat actions that have an effect.<br><br>Explore materials with different properties. | Explore how things work.<br><br>Talk about what they see, using a wide vocabulary.<br><br>Explore and talk about different forces they can feel. |                                                                                                                | <b>Understanding the World</b>                                                                                                                                                                |
| Make simple models which express their ideas.                                           | Develop their own ideas and then decide which materials to use to express them.                                                                  | Return to and build on their previous learning, refining ideas and developing their ability to represent them. | <b>Expressive Arts and Design ELG: Creating with Materials</b> – Share their creations, explaining the process they have used;                                                                |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Explore different materials, using all their senses to investigate them.</p> <p>Manipulate and play with different materials.</p> <p>Use their imagination as they consider what they can do with different materials.</p> | <p>Explore different materials freely, to develop their ideas about how to use them and what to make.</p> <p>Join different materials and explore different textures.</p> | <p>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</p> | <p><b>Expressive Arts and Design ELG: Creating with Materials</b> – Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p> |
| <p>Start to develop pretend play.</p>                                                                                                                                                                                         | <p>Take part in simple pretend play.</p> <p>Begin to develop complex stories.</p>                                                                                         | <p>Develop storylines in their pretend play.</p>                                                  | <p><b>Expressive Arts and Design ELG: Creating with Materials</b> – Make use of props and materials when role playing characters in narratives and stories.</p>                                             |

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