

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

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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	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' Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'. Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	Continue, copy and create repeating patterns. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	Mathematics: Shape, space and pattern

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Notice differences between people.	Show interest in different occupations.	Name and describe people who are familiar to them.	Understanding the World ELG: Past and Present – Talk about the lives of the people around them and their roles in society;
	Talk about what they see, using a wide vocabulary.		Understanding the World ELG: People, Culture and Communities – Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps;
Repeat actions that have an effect. Explore materials with different properties.	Explore how things work. Talk about what they see, using a wide vocabulary. Explore and talk about different forces they can feel.		Understanding the World
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.	Expressive Arts and Design ELG: Creating with Materials – Share their creations, explaining the process they have used;

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

Early Learning Goals taken from: Early Years Foundation Stage Profile 2023 Handbook – Department of Education © Crown copyright 2022

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