	Year group: Year 1	Area/topic: Algorithm – People and teddies (Spring 1)
	(objectives from NC/ELG/Development matters) Pupils to be taught: • Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions.	

Prior learning	Future learning
Children will have been briefly introduced to directions in Reception where they explored using Beebots in Summer 1. During this unit, they would have seen that the Beebots have arrows and the arrows indicate the direction the Beebot will travel to. The children will continue to explore Beebots in more depth during Spring 2 however will spend Spring 1 recapping some of these directions using the correct vocabulary and arrow cards.	During Spring 2, the children will use their knowledge of directions and creating simple sequences to then begin to create an algorithm for the Beebot to follow to get from A to B successfully.

What pupils need to know or do to be secure		
Key knowledge and skills		Possible evidence
• Recap knowledge of internet safety rules during a whole school Safer Internet afternoon (6.02.2024).		• Children to use arrow cards or written

- Children will begin to understand the concept of an 'algorithm' by learning to create simple sequences of instructions either verbally or by using arrow cards for their partner or a teddy to follow.
- Children to understand the four different directions that can be used in a sequence to move a person or teddy (left, right, forwards, backwards – *this will prepare them for the four direction buttons on a Beebot).* Children should know the name of the direction, the arrow card associated and what action relates to it.
- Children to follow a set of instructions created by a partner either by moving their body or moving a prop such as a teddy bear or Lego figure.
- Children to discuss whether their set of instructions were successful in achieving what they wanted to achieve e.g. moving their partner to a certain place in the class.
- Children to edit their set of instructions to improve the outcome.

arrows to create a sequence of directions for their partner or a teddy to follow.
- Children to follow a set of instructions created by their partner.

Key vocabulary

- Beebot – Robot in the shape of a bee.
- Instructions – A direction or order.
- Sequence – A basic algorithm. A set of logical steps carried out in order.
- Directions – A course along which someone or something moves.
- Arrow cards – The arrow cards will represent the buttons on a Beebot. They will be used for the children to begin to create a sequence of instructions for their partner or for a teddy to follow.
- Left
- Right
- Forwards
- Backwards

Common misconceptions	Books linking to this area
• Children may struggle with their understanding of which side is left and which side is right – visual prompts will help with this.	
Memorable first hand experiences	**Opportunities for communication**
• Children to work in pairs to create a set of instructions using different directions for their partner or a teddy to follow. • Safer Internet Day afternoon (6.02.2023).	• Children will be verbally giving their partners instructions to follow.

DCINS Reasonable adjustments for pupils with SEND

Communication and Interaction	Cognition and Learning
• Make sure the children are using the correct equipment for them. • Consider headphones to support the child to hear. • Have someone available to read any text that is on the screen.	• Consider adjusting the brightness and colour so they can see the screen more easily. • Have someone available to read any text that is on the screen. • Shorter steps given at appropriate time. • Simpler logins. • Adult to support with logging in. • Print out which the different functions and tools on. • Step by step guide printed out for them to refer to.
Social, Emotional and Mental health	Sensory and Physical
• Timer so they understand when they will need to log off. • Clear boundaries. • Online safety instructions made clear.	• Larger text/equipment. • Print offs instead of screen time. • Appropriate desk, chair, keyboard and mouse.