	Computing Subject knowledge, discipline and vocabulary		
1661	Year 1 Spring		
Unit	Moving a Robot	Grouping Data	
Previous			
Learning			
Subject	Understanding computer programming.	Understanding how data can be grouped and organised	
Knowledge	NC:	NC:	
(what)			
	 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 Recognise common uses of information technology beyond school Robots follow a clear (fixed) command in a precise and repeatable way. Commands need to be precise. Clear memory buttons are used before a new program. At times, programs need to be debugged. The same outcome can be achieved through multiple approaches. Programmers need to plan what they want to achieve before starting programming. 	 Use technology purposefully to create, organise, store, manipulate, and retrieve digital content Use technology safely and respectfully Objects can be counted Information can be presented Information can be presented in different ways Collected data can be counted Objects can be grouped according to common attributes 	
Subject Discipline (how)	 Make predictions about the outcome of commands. Make comparisons between different movements. Plan and program sequences. Experiment with move and turn commands. Use problem-solving to identify potential solutions. 	 Identify some attributes of an object Collect simple data Describe the properties of an object Choose an attribute to group objects by Group objects to answer questions Objects can be grouped by similarities (attributes) Describe a group of objects (based on a commonality) 	

Key Vocab	Forwards	Object
-	Backwards	Label
	• Turn	• Group
	• Clear	Search
	• Go	Image
	Commands	Property
	Instructions	Colour
	Directions	• Size
	• Left	Shape
	• Right	Value
	• Plan	Data set
	Algorithm	More
	Program	• Less
	Route	Fewest
		Most
		Same