



LEARN TO CODE WITH COMMANDS



An engaging and interactive way to teach coding and computational thinking to your students

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Minecraft Education Coding Cards

The cards are designed to support students in developing algorithms whilst learning commands. The cards are divided into three coloured groups:

Green Beginners 	Orange Intermediate 
Purple Advanced 	Blue Expansion 

The cards can be arranged using any possible colour combination. You may exclude the intermediate and/or advanced cards depending on your year level or curriculum needs. The additional expansion pack can be used for differentiation or a second unit of work. The complementary resources, including the OneNote and training world, also allow for teaching adjustments.

The cards are then divided into five sections designed to write coding algorithms using Minecraft commands. These include:

IF/ON Statements 	IF Statements 	THEN Statements 	Commands 	Additional Statements 
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By either using an additional pack of cards or a different command, you can create adjustments or longer algorithms by using the additional statement cards.

		
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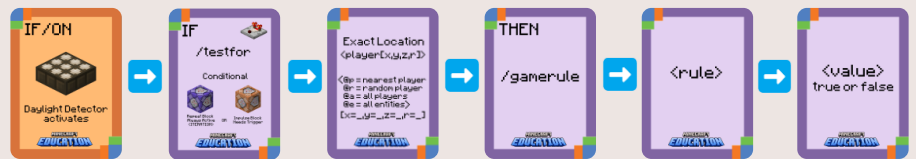
Running an unplugged activity is simple. Students must place the cards correctly to develop a statement that works. You could either provide students with a written statement, such as the example below or describe a scenario:

IF/ON a pressure plate is activated → THEN teleport (/tp) → the nearest player (@p) → a particular position.



This activity could also be done in reverse. As the cards get more difficult, they require a greater understanding of computational language and numeracy skills. For example, the following statement would match the following card combination.

IF/ON a daylight detector activates → IF /testfor → the nearest player (@p) within an exact location, at a radius of 3 → THEN change /game rule → allow mobs → true.



As students engage with the course, they learn the elements required for each command. These are called variables. There are too many to name here; however, a full list is available in the free OneNote lesson plan or on our website.



Command Variables

For example, there are 29 different effect commands whereby the chosen effect can be custom set to a particular strength and time. A student may use the following cards in activities; however, they would write the following statement in planning their algorithms for their own game.

Cards:



Written:

IF/ON a tripwire and string are stood on → THEN apply an /effect → to the nearest player (@p) → for night_vision → amplified to 10 → for 30 seconds.

Each pack contains a welcome card with a link and password giving you access to an extensive range of exclusive support resources and activities including PowerPoints activities and follow along video activities.



Command Combinations

THEN /give	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	<itemName> inventory item	[amount]	THEN /tp	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	[position] [x][y][z]	facing [x][y][z]	THEN /effect	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	[Effect ID]	<time>	<amplifier>
THEN /title	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	<title: subtitle: actionbar>	<titleText> on screen message	THEN /fill	[from] [x][y][z]	[to] [x][y][z]	<itemName> inventory name	THEN /summon	<entityType> name of mob	[spawnPos] [x][y][z]		
IF /testforblocks	Conditional [begin] [x][y][z]	[end] [x][y][z]	[destination] [x] [y] [z]	THEN /gamerule	<rule>	<value> true or false		IF /testforblock	Conditional [position] [x][y][z]	<itemName> inventory name		
											IF /testfor	Conditional Radius <player:radius> @p = nearest player @r = random player @a = all players @e = all entities [=, >, <]

Expansion Pack

THEN /say	<message>	THEN /difficulty	<difficultyName> easy hard normal peaceful	THEN /clear	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	<itemName> inventory item	[data] blocks/items with variations	<maxCount> number of items	THEN /time	set specific time period	[setAmount] change time	<time> name of time of day
THEN /enchant	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	<enchantment Name>	[level]	THEN /playsound	<sound> sound effect	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	/weather	<clear: rain: thunder>	[duration] time in seconds			
THEN /ability	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	<worldbuilder: mute: mayfly>	<value> true or false	THEN /gamemode	<survivals:0> <creative:1> <adventure:2> written in either format	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	THEN /spawnpoint	<player:target> @p = nearest player @r = random player @a = all players @e = all entities	[spawnPos] [x][y][z]			
THEN /clone	[begin] [x][y][z]	[end] [x][y][z]	[destination] [x][y][z]	<replace: masked> at ex tude air	[normal: force: move]	THEN /setblock	[position] [x][y][z]	<itemName> inventory name	[titleData] items with variations	<replace: destroy: keep>		