

Give Code

A give command will place an item or block into the inventory of the desired target. When coding, we must consider the event which will cause the give command to run.

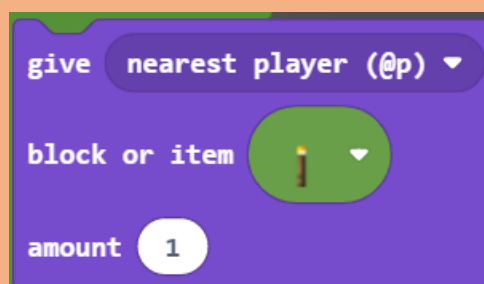
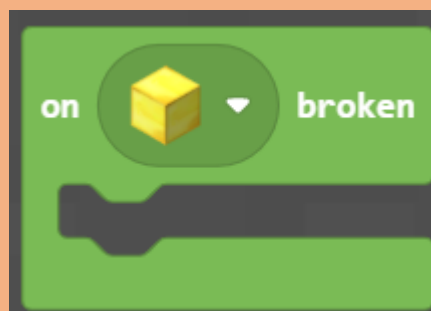
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Let's consider the following example:

IF/ON the player breaks a Gold Block

THEN give the player one torch.



Results - IF/ON the player breaks a gold block THEN the nearest player will receive one torch.



To give the player a different item use the additional item token.



Result - IF/ON the player breaks a gold block THEN the nearest player will receive one shovel.



Increase the amount



Result - IF/ON the player breaks a gold block THEN nearest player will receive three shovels.

```
on gold block broken
  give nearest player (@p)
  block or item item shovel
  amount 3
```

Your Turn

Change this scenario so the player is given three gold ingots if a gold block is broken. Place an image of your final code in the green box.

IF/ON a gold block is broken.

```
on gold block broken
```

THEN give the nearest player three gold ingots.

```
give nearest player (@p)
  block or item item gold ingot
  amount 3
```

Results -

Detect Code

A detect command has the ability to check for a block in a location within your world.

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Example

Let's imagine how we might use this in a game. Our game might have two pathways. If the player takes the wrong path, this will be informed via the chat.

To do this, we will need the following:

Event Handler

forever

Detect Block

detect block



at

~ 0 ~ 0 ~ 0

if found, run command "say Hi!"

For this example, we will code our game to detect a Block of Gold two blocks below the player. If this condition is met, the player will receive the message "WRONG WAY GO BACK".

FOREVER whilst the game is being played

forever

THEN detect for a Block of Gold two blocks below the player

detect block



at

~ 0 ~ -2 ~ 0

if found, run command "say Hi!"

Results - FOREVER check IF a Block of Gold is -2 blocks below the player, THEN run a chat command saying WRONG WAY GO BACK.

forever

detect block



at

~ 0 ~ -2 ~ 0

if found, run command "say WRONG WAY GO BACK"

Your Turn

Using Blocks of Emeralds, can you add to your game a message that will appear when your player finds the correct door?

FOREVER whilst the game is being played

forever

A Scratch 'forever' loop block, which is a green rectangle with a dark grey loop icon on the right side. The word 'forever' is written in white text at the top left of the block.

THEN detect for a Block of Emerald -2 blocks below the player.

Results -






Effect Code

An effect command can apply one of the 29 possible effects possible in Minecraft Education.









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These include:

Icon	Status Effect	Minecraft ID Name	Description
	Absorption	<i>absorption</i>	Adds yellow Absorption health hearts
	Bad Omen	<i>bad_omen</i>	Causes a group of hostile mobs to attack when a player with Bad Omen enters a village
	Blindness	<i>blindness</i>	Creates a thick black fog
	Conduit Power	<i>conduit_power</i>	Improves visibility and mining speed underwater, and adds ability to breathe underwater
	Fatal Poison	<i>fatal_poison</i>	Does damage every 1.25 seconds (can kill player)

	Fire Resistance	<i>fire_resistance</i>	Immunity to fire, lava, and direct hits from fire balls
	Haste	<i>haste</i>	Speeds up how fast you break blocks
	Health Boost	<i>health_boost</i>	Adds additional hearts to your base health
	Hero of the Village	<i>village_hero</i>	Receive discounted trades from villagers after completing a Raid
	Hunger	<i>hunger</i>	Depletes food meter
	Instant Damage	<i>instant_damage</i>	Damages instantly
	Instant Health	<i>instant_health</i>	Heals instantly
	Invisibility	<i>invisibility</i>	Invisible to others
	Jump Boost	<i>jump_boost</i>	Jump higher
	Levitation	<i>levitation</i>	Player will involuntarily float upwards into the sky and continue to rise
	Mining Fatigue	<i>mining_fatigue</i>	Slows down how fast you break blocks
	Nausea	<i>nausea</i>	Wobbles and warps what you see in the game
	Night Vision	<i>night_vision</i>	Increases brightness level to 15 (see better in dark)
	Poison	<i>poison</i>	Does damage every 1.25 seconds (can not kill player)
	Regeneration	<i>regeneration</i>	Restores half heart every 2.5 seconds
	Resistance	<i>resistance</i>	Reduces all damage


	Saturation	<i>saturation</i>	Replenishes food meter
	Slow Falling	<i>slow_falling</i>	Slows down how fast you fall and eliminates fall damage
	Slowness	<i>slowness</i>	Decreases speed
	Speed	<i>speed</i>	Increases speed
	Strength	<i>strength</i>	Increases attack damage (melee attacks)
	Water Breathing	<i>water_breathing</i>	Breathe underwater without using up oxygen bar
	Weakness	<i>weakness</i>	Decreases attack damage (melee attacks)
	Wither	<i>wither</i>	Does damage every 2 seconds (can kill player)

Example

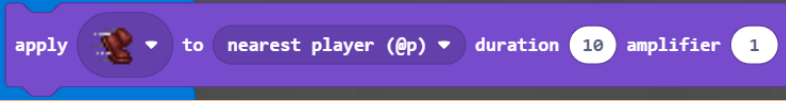
Let's imagine our player needs to use an effect to get past the next part of our game. The player needs to make their way through a dark maze. Without the Night Vision effect, it will be very difficult to achieve. To reach the maze, they must first climb a ladder.

To do this, we will need the following:

Event Handler



Effect Block



For this example, we will code our game to apply Night Vision for 10 seconds at an amplifier of 1 when the player climbs the ladder.

<p>IF/ON a player climbs</p>	
<p>THEN apply the Night Vision effect to the nearest player for 10 seconds at an amplifier of 1</p>	
<p>Results - IF/ON the player climbs the ladder, THEN they can see in the dark for 10 seconds.</p>	

Your Turn

Change the environment of the path to the end so it requires a different effect triggered by a different event handler. For example, you can remove the ladder down, and the player will only receive the effect of slow falling when they break a particular block.

<p>IF/ON -</p>	
<p>THEN -</p>	
<p>Results -</p>	