

Raspberry Pi Minecraft Python coding



Tutorial by Andrew Oakley

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To start Minecraft, click the Pi menu - Games - Minecraft Pi

Click Start Game then click an existing game or click Create New

TAB key to switch between the Minecraft world and the normal mouse on the desktop. The TAB key is to the left of the letter Q.

ESC for the game menu

Mouse to look

WSAD to move

SPACE to jump

Left-click to destroy a block

Right-click to create a block

1-9 to select a type of block

0 to select the sword

E to reassign blocks 0-9

SPACE twice to fly

SPACE twice again to stop flying

SPACE once while flying to go up

SHIFT while flying to go down

To code with Minecraft, leave Minecraft running. Press the TAB key to release the mouse from the game, so you can use the mouse on the desktop.

Click Pi menu - Programming - Python3 (IDLE)

At this point your tutor may want you to open an existing program using File menu - Open.

Alternatively, to create a new program use File menu - New File

Once you have loaded or written your program, use Run menu - Run module or press F5.

Example Minecrtf code:

```
from mcpi.minecraft import Minecraft
from mcpi import block

mc = Minecraft.create()
x,y,z = mc.player.getTilePos()

# Change the block under the player's feet to Glass
mc.setBlock(x, y, z-1, block.GLASS.id)
```

List of block types:

0	AIR	44	STONE_SLAB
1	STONE	45	BRICK_BLOCK
2	GRASS	46	TNT
3	DIRT	47	BOOKSHELF
4	COBBLESTONE	48	MOSS_STONE
5	WOOD_PLANKS	49	OBSIDIAN
6	SAPLING	50	TORCH
7	BEDROCK	51	FIRE
8	WATER_FLOWING	53	STAIRS_WOOD
8	WATER	54	CHEST
9	WATER_STATIONARY	56	DIAMOND_ORE
10	LAVA_FLOWING	57	DIAMOND_BLOCK
10	LAVA	58	CRAFTING_TABLE
11	LAVA_STATIONARY	60	FARMLAND
12	SAND	61	FURNACE_INACTIVE
13	GRAVEL	62	FURNACE_ACTIVE
14	GOLD_ORE	64	DOOR_WOOD
15	IRON_ORE	65	LADDER
16	COAL_ORE	67	STAIRS_COBBLESTONE
17	WOOD	71	DOOR_IRON
18	LEAVES	73	REDSTONE_ORE
20	GLASS	78	SNOW
21	LAPIS_LAZULI_ORE	79	ICE
22	LAPIS_LAZULI_BLOCK	80	SNOW_BLOCK
24	SANDSTONE	81	CACTUS
26	BED	82	CLAY
30	COBWEB	83	SUGAR_CANE
31	GRASS_TALL	85	FENCE
35	WOOL	89	GLOWSTONE_BLOCK
37	FLOWER_YELLOW	95	BEDROCK_INVISIBLE
38	FLOWER_CYAN	98	STONE_BRICK
39	MUSHROOM_BROWN	102	GLASS_PANE
40	MUSHROOM_RED	103	MELON
41	GOLD_BLOCK	107	FENCE_GATE
42	IRON_BLOCK	246	GLOWING_OBSIDIAN
43	STONE_SLAB_DOUBLE	247	NETHER_REACTOR_CORE

Wool is white by default, but can have another colour, for example red:

```
mc.setBlock(x, y, z, block.WOOL.id, 14)
```

0	White	8	Light grey
1	Orange	9	Cyan
2	Magenta	10	Purple
3	Light blue	11	Blue
4	Yellow	12	Brown
5	Lime	13	Green
6	Pink	14	Red
7	Grey	15	Black