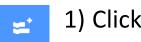


Register/login at <a href="https://scratch.mit.edu">https://scratch.mit.edu</a>

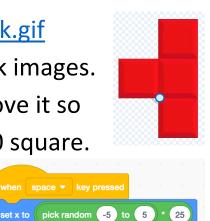
Assemble the blocks as they drop.



1) Click on the **Add Extension** button at the bottom left of the screen, and select the **Pen** extension.



- 2) Download block images from: <a href="https://codeclub67.github.io/images/block.gif">https://codeclub67.github.io/images/block.gif</a>
- 3) Create a new sprite by uploading the block images.
- 4) **Convert each costume to a vector** and move it so the centre is *exactly* at a corner of a 50x50 square.
- 5) Change the sprite size to 50%.
- 6) When the space key is pressed, place the block randomly at the top of the screen (a multiple of 25, half 50x50).
- 7) Pick a costume at random, and show it. *The block falls until it touches something.*
- 8) Make a variable called touching
- 9) Set **touching** to **false**, then **repeatedly** move the block down until it's **true**.
- 10) Make a block called "is it touching?"
- 11) When the loop finishes, **stamp** the sprite slightly above its final position, then **hide** it.



set y to 120

switch costume to pick random 1 to 6

set touching ▼ to false

change y by -5

is it touching?

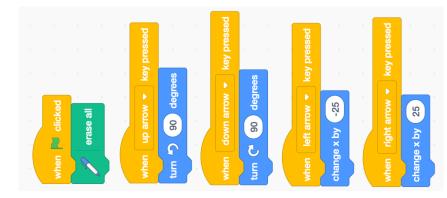
change y by 5

stamp

peat until (touching) = true

The code above stamps a copy of the block where it falls. Now you need to control the fall.

12) Add controls, so you can move the block left and right and rotate it. Use the flag to clear the screen.



define is it touching?

touching (edge ▼ )?

touching ▼ to true

touching ▼ to true

touching color

The new code block detects when it's touching the edge, or touching another block.

- 13) First, detect when the block touches the edge of the screen.
- 14) Add the code to detect a block colour.
- 15) Drop a block then click on the colour swatch in touching colour.
- 16) Use the colour picker tool to select the block colour.
- 17) Duplicate the **touching colour** code above and drop more blocks, until you've picked out the colours of all six costume shapes.

Remember to **Save** your code.

