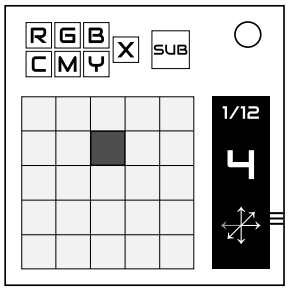
On the Subject of Perspective Stacking



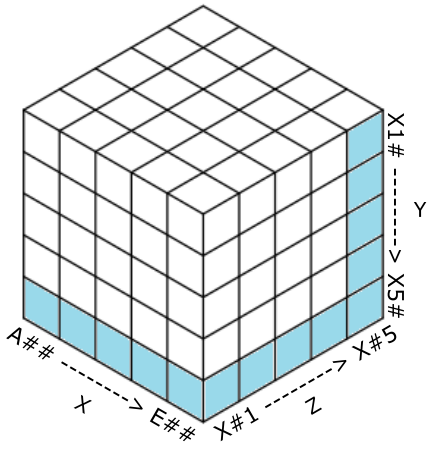
Looks like we need another interactive...

This module contains a 5×5 grid of squares with a display to the right of it and 8 buttons above it.

Initially all squares will be light gray except for one which will be either red, green, blue, cyan, magenta or yellow. The display will be showing the current stage count out of the total number of stages, a number from 1 to 5, and a XYZ graph with one arrow darkened (+X is pointing right, +Y is pointing up and +Z is pointing down left).

Every time a non-ignored module is solved the module will advance one stage. On each new stage the colored square may change along with the number on the display and the darkened arrow on the graph. Once all stages have been shown the display will show "INPUT", two numbers from 0-3 and all squares will become light gray.

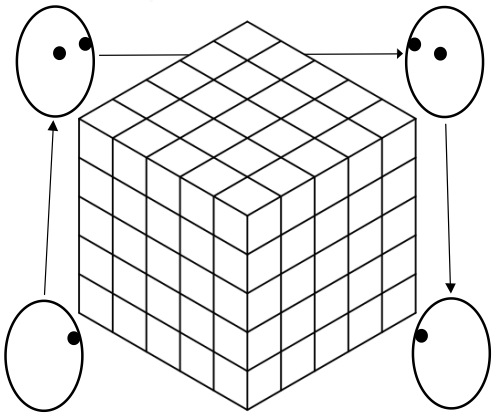
The expected input is a 5×5×5 cube that is stored internally in the module viewed at a certain rotation (ignoring empty subcubes). The subcubes of this cube follow the coordinate system below.



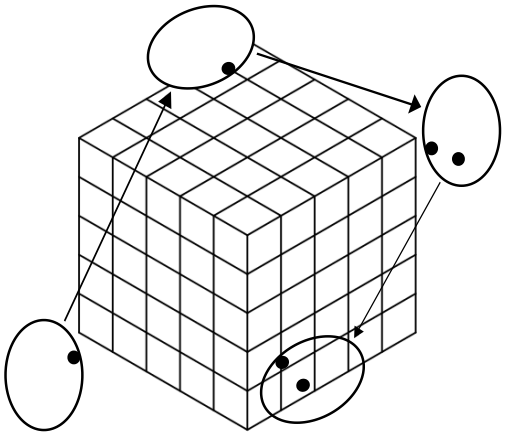
When the module is displaying stages, the top left of the 5×5 grid is an A1 subcube, and the bottom right is an E5 subcube. The number on the display is tacked onto each square's coordinate for that stage.

At each stage take the colored square and fill it in on the cube at its coordinate. If that subcube is already filled then override it with the new color. Then, apply the force of gravity given by the darkened arrow to all subcubes in the cube. If at any point two subcubes of the same color collide due to gravity they merge into one subcube.

To get the correct rotation to view the cube from take the first number and rotate your view that number of times around the cube as shown below.



Then do the same with the second number as shown below.



Once you have your cube and rotation use the R, G, B, C, M and Y buttons to select a color and press a square on the grid to place the selected color there. If you make a mistake you can press the X button and then any square to clear that square's color. Once you are satisfied press the SUB button to submit your answer.

If the answer is incorrect the module will briefly show all correctly colored squares in green and all incorrectly colored squares in red. Then it will cycle through all the stages slowly until the SUB button is hit again. Note that the two numbers that appear on the display may be different after a strike.