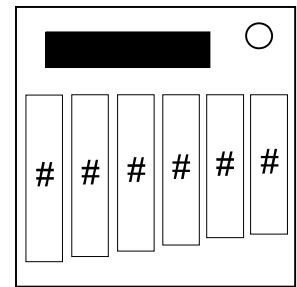# On the Subject of Bordered Keys

These keys look a little different. Did they lose weight?

This module consists of 6 coloured keys, each of which is labelled with a coloured number, and a black reset button.

Highlighting each key reveals a coloured border and a number on the display.

The possible colours for the keys, their borders, and the numbers labelling them are: (R)ed, (G)reen, (B)lue, (C)yan, (M)agenta, and (Y)ellow.

Any of the numbers 1 – 6 may appear on each of the keys, and on the display when each key is highlighted.

The information given by each key is used to locate six cells within a 12x18 grid, each of which will have a value in the range 1 – 6.

These cells will be used to calculate the value of the key, which is in the range 1 – 6.

A key is valid if its value is equal to the number of pressed keys after each reset plus one.

After each reset, there is at least one valid key.

If none of the remaining keys are valid, push the black button to reset the remaining keys.

The module is solved if–

- all six keys have been pressed.
- the module has been reset once five keys have been pressed.

A strike will be issued if–

- an invalid key is pressed.
- the reset button is pressed when any remaining key is valid.

The value of each key if calculated by:

1. Summing the numbers in the six cells located by the information given by the key.
2. Adding the number in the display when the key is highlighted.
3. Evaluating the remainder of the total when divided by six.

		Key Colour						Label Colour						Border Colour					
		R	G	B	C	M	Y	R	G	B	C	M	Y	R	G	B	C	M	Y
Label	1	4	3	5	1	6	2	3	5	2	1	6	4	6	1	3	2	5	4
	2	2	1	6	3	4	5	1	3	6	5	4	2	4	6	1	5	3	2
	3	5	2	1	4	3	6	6	4	1	3	2	5	1	5	2	4	6	3
	4	3	6	2	5	1	4	2	1	5	4	3	6	3	2	6	1	4	5
	5	1	5	4	6	2	3	4	6	3	2	5	1	5	3	4	6	2	1
	6	6	4	3	2	5	1	5	2	4	6	1	3	2	4	5	3	1	6
Position (Left to Right)	1	1	6	3	2	4	5	3	2	6	1	5	4	4	3	6	5	2	1
	2	3	4	2	5	1	6	6	1	5	4	3	2	3	1	5	2	4	6
	3	6	2	1	3	5	4	1	4	2	3	6	5	5	6	2	1	3	4
	4	5	1	6	4	2	3	2	5	1	6	4	3	1	2	3	4	6	5
	5	4	3	5	1	6	2	4	6	3	5	2	1	2	4	1	6	5	3
	6	2	5	4	6	3	1	5	3	4	2	1	6	6	5	4	3	1	2