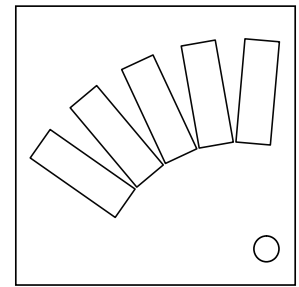# On the Subject of M&Ns

If the status light is not in the bottom-right, you are looking at a different module.

Take the serial number, but ignore one character. The character to ignore is determined by the color of the text on the second button (left to right):

- Red: 1st character
- Green: 2nd character
- Orange: 3rd character
- Blue: 4th character
- Yellow: 5th character
- Brown: 6th character

Treat each character as a base-36, and convert it to base-10. Use whether this number is odd or even to form a 5-digit binary number, with odd being 1 and even being 0.

Treat every button label as a 5-digit binary number. If the number of batteries is even, M = 0 and N = 1, otherwise, N = 0 and M = 1.

The colors of the text on the buttons correspond to different bitwise operators:

- Red: and
- Green: or
- Orange: xor
- Blue: nand
- Yellow: nor
- Brown: xnor

Perform the corresponding operation for each button, using the text on the button and the binary obtained from the serial number.

The correct button to press is the one whose resulting 5-digit binary number, when converted back to base-36, forms a character in the serial number.