NeoPixel Logic

Assumptions:
1. Square grid
2. Start counting at 0

pixelSide = 8
a = current position

Movement Operations

Left = a - 1
Right = a + 1
Up = a - pixelSide
Down = a + pixelSide

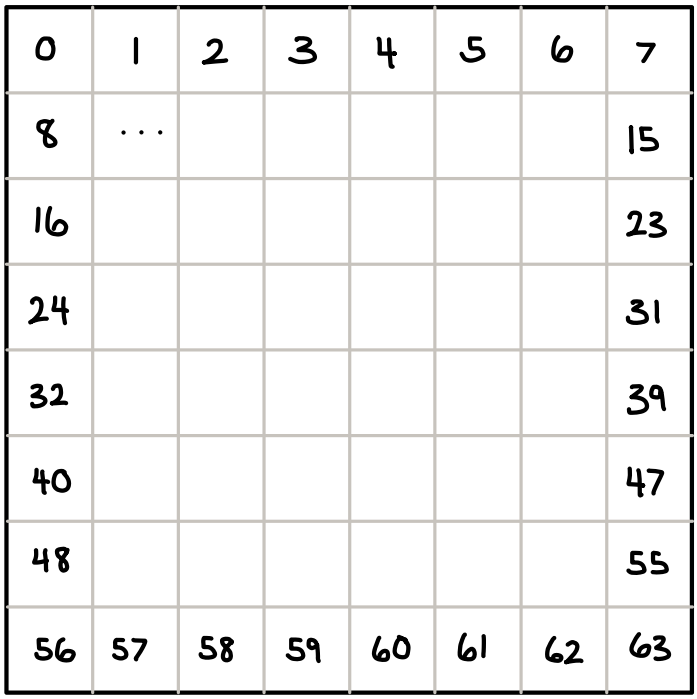
Border Checks to permit movement:

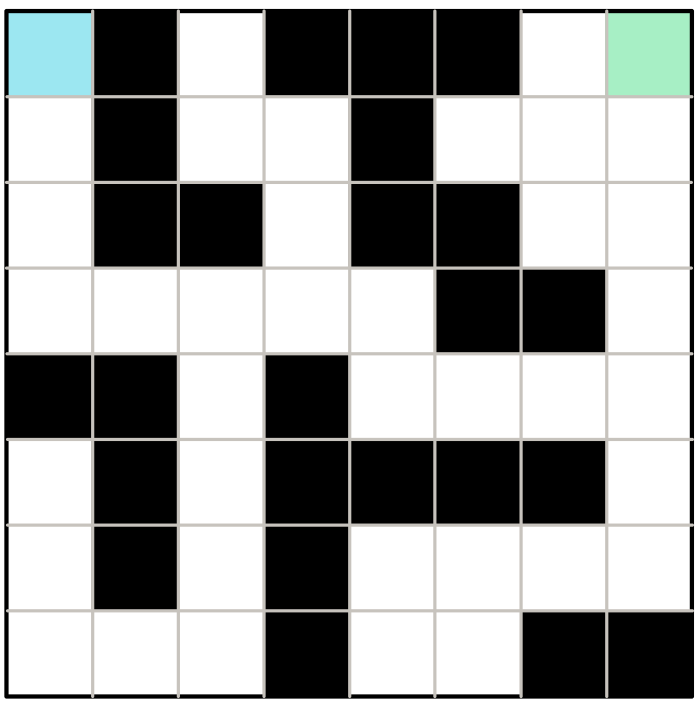
Up:
a - pixelSide >= 0

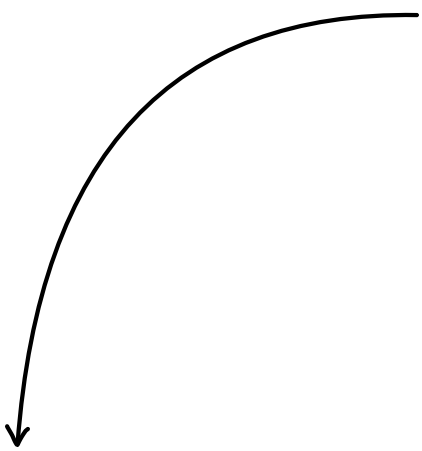
Down: a + pixelSide <= pixelSide^2 - 1

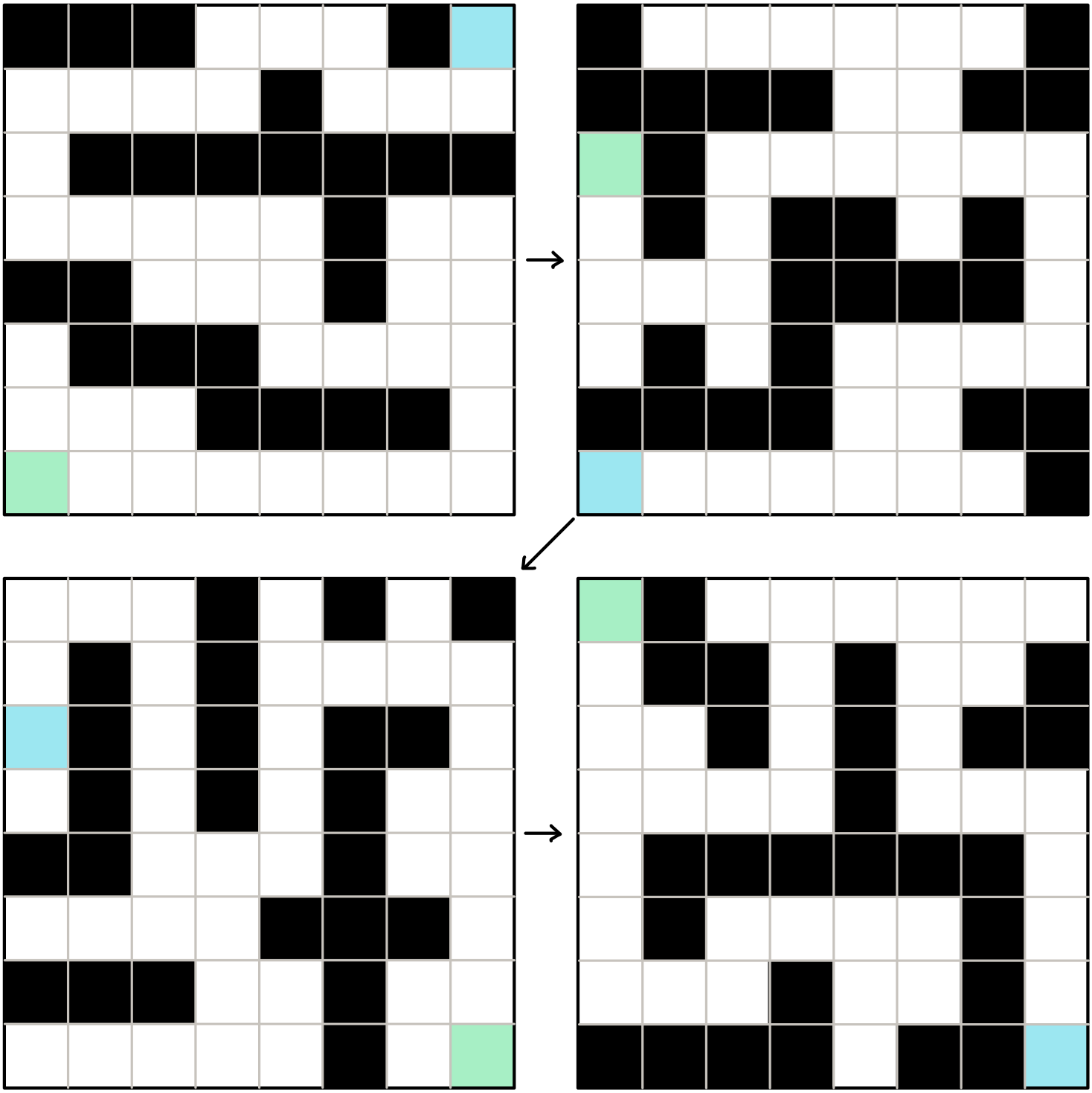
Left:
a % pixelSide != 0

Right:
a % pixelSide != pixelSide - 1



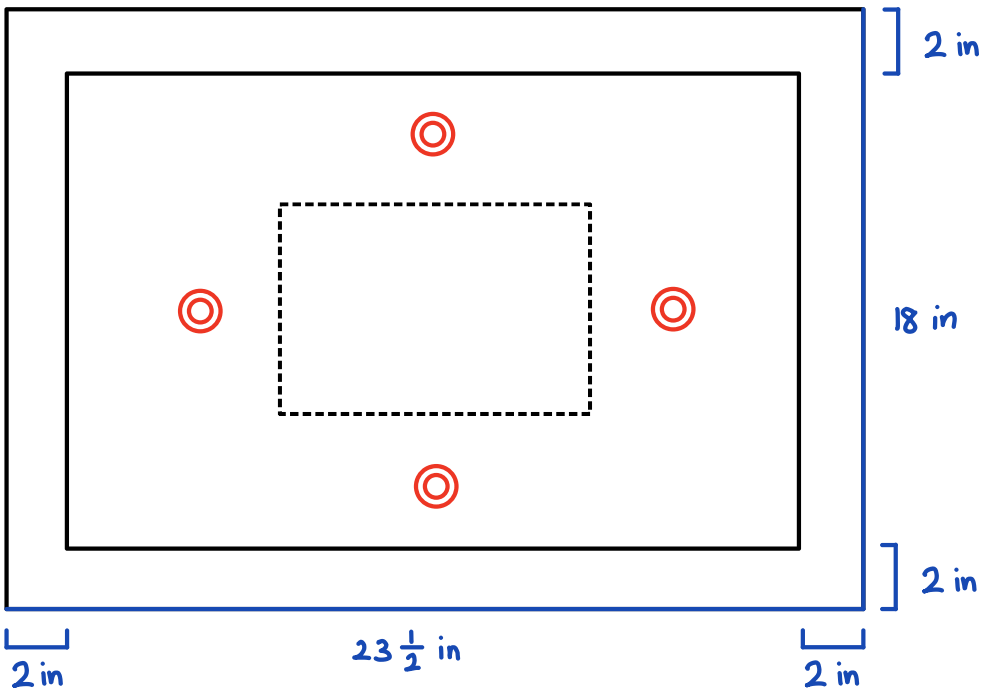




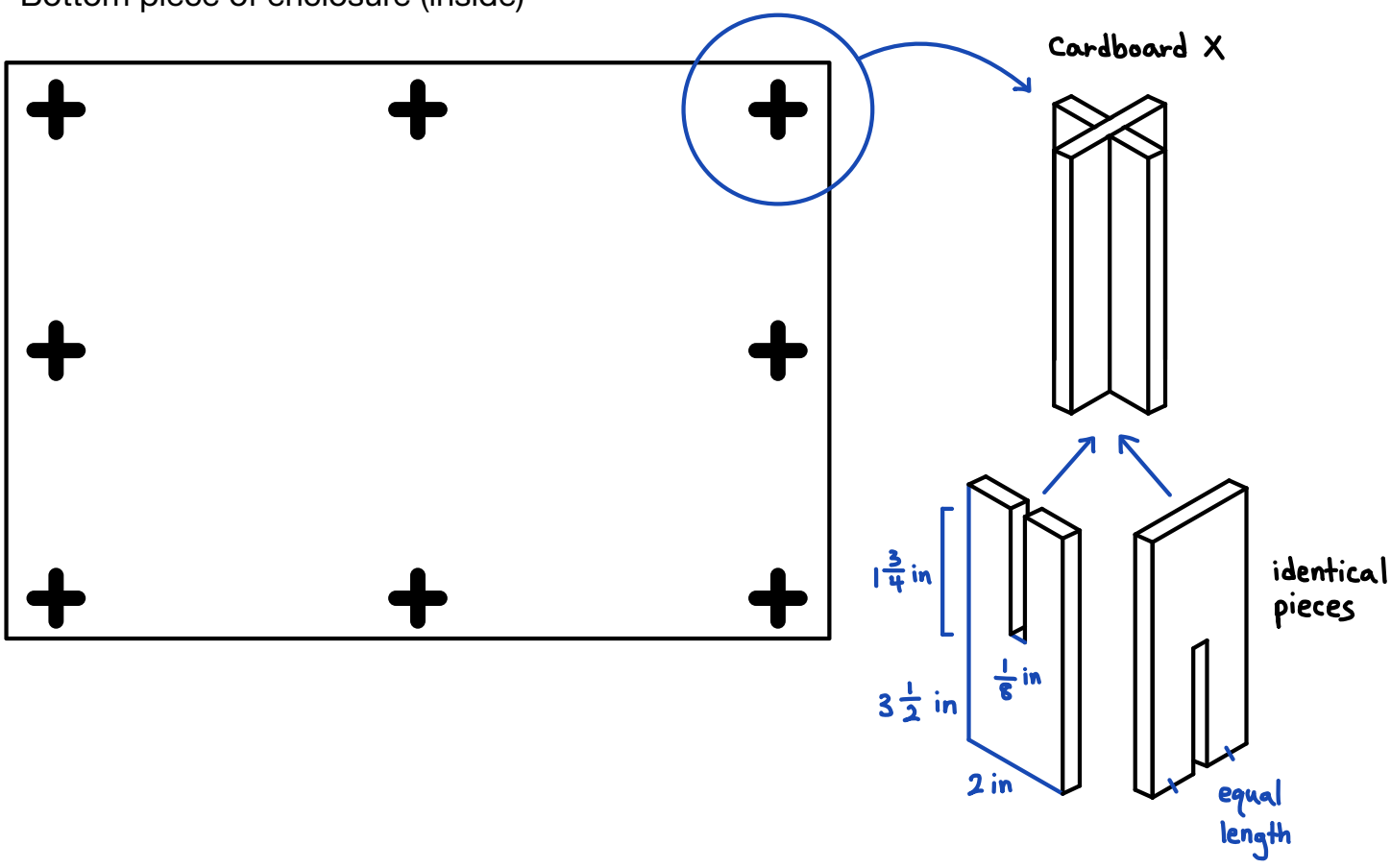


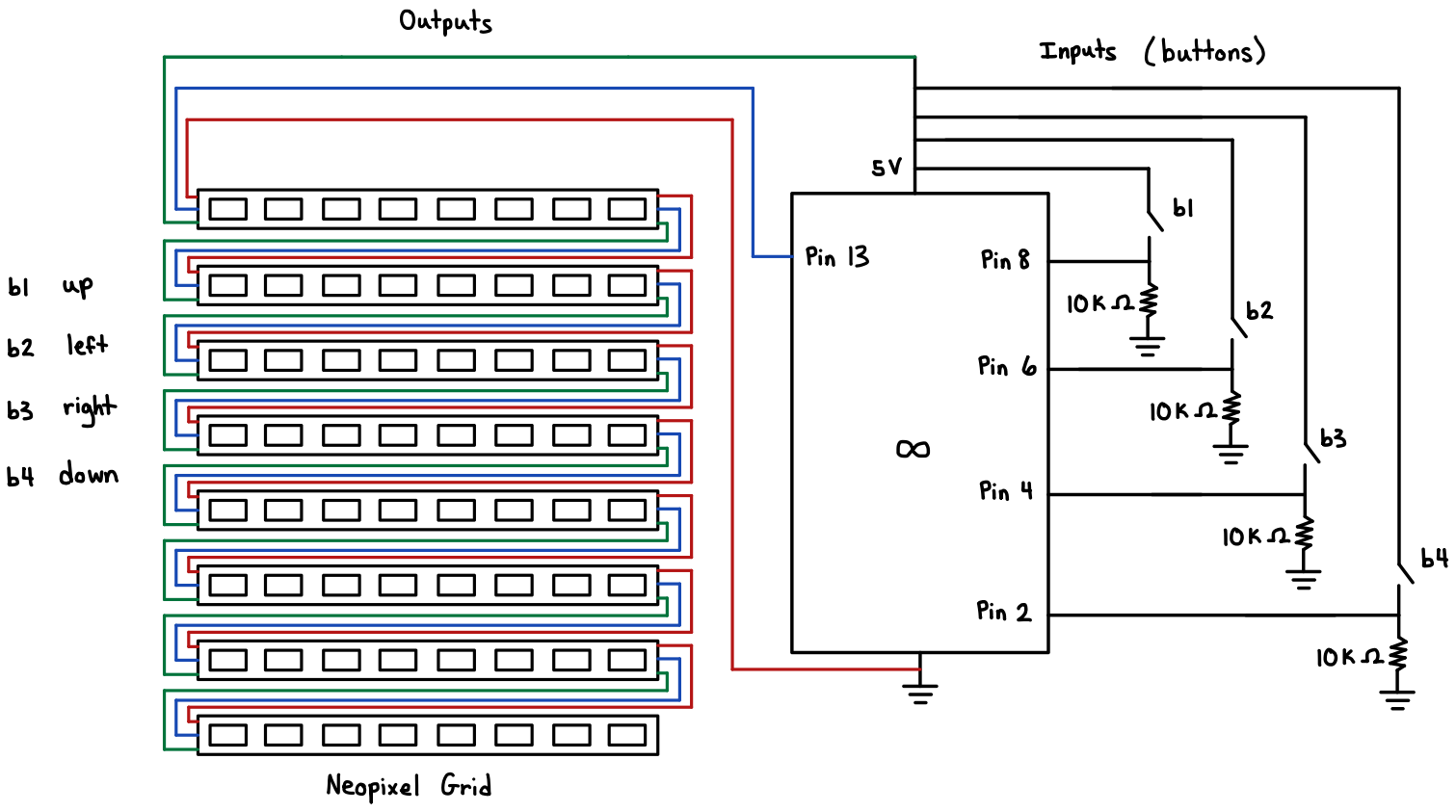
Play Testing Prototype

Top piece of enclosure (cardboard piece + frame)



Bottom piece of enclosure (inside)




Outputs
Inputs (buttons)
b1 up
b2 left
b3 right
b4 down
5V
Pin 13
Pin 8
Pin 6
Pin 4
Pin 2
b1
b2
b3
b4
10K Ω
10K Ω
10K Ω
10K Ω
Neopixel Grid