Agenda 9/8

- Questions?
- A few updates
- Online Collaboration Poll Results
- Drawing Activity (without Computers)
- Project 1: Generative Art
- Intro to p5.js
  - Web-editor
  - Grid System
  - Shapes, Colors, Rotate
- In-class exercise #2

Updates

- Electronic Art & Intermedia Open House Exhibition **10/21**
- Project Changes & Deadlines

Drawing Activity

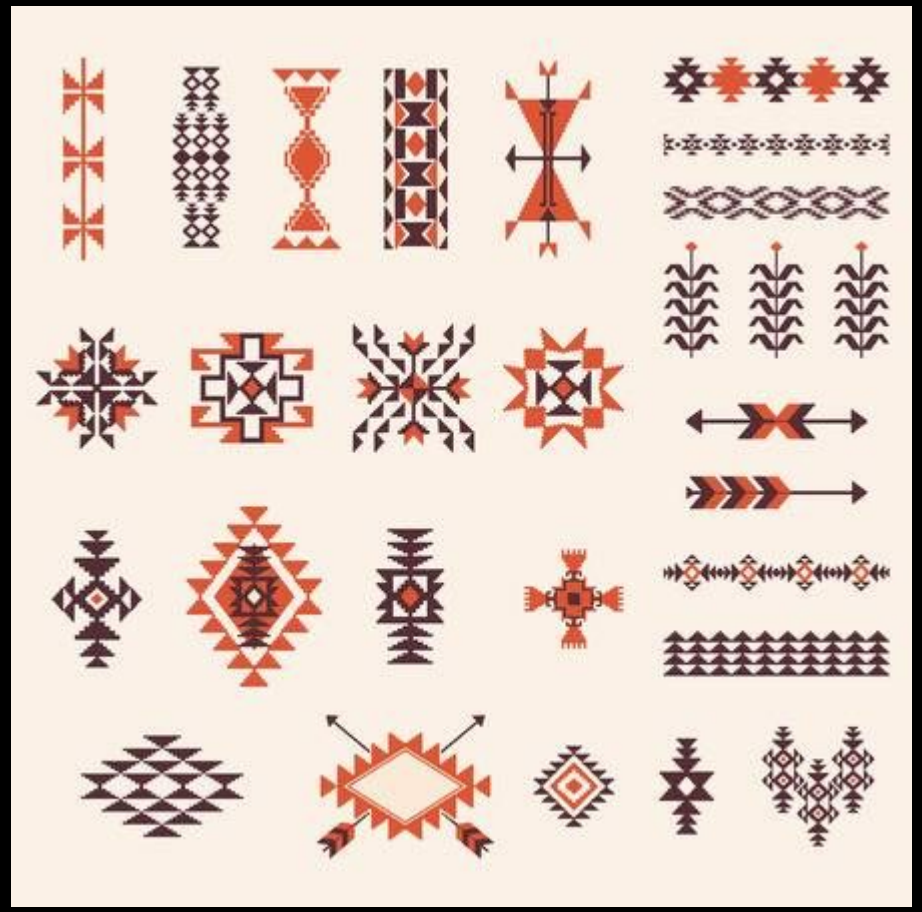
Project 1: Generative Art
Due: 9/27 before class

Patterns: Decoration, Ornate, Culture

James Harden

Ancient Egyptian Textiles (~1500 BC)

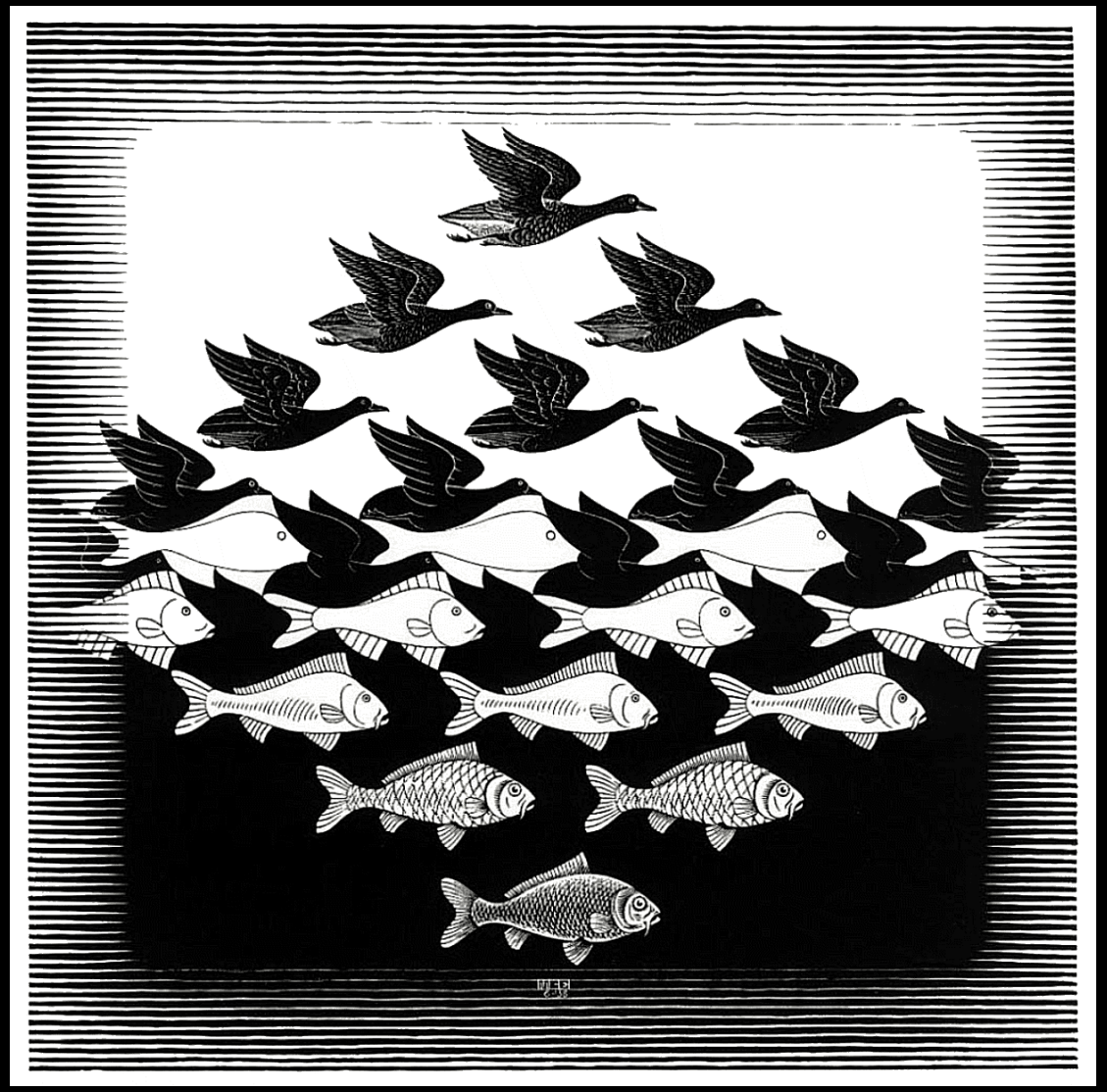
Patterns: Decoration, Ornate, Culture

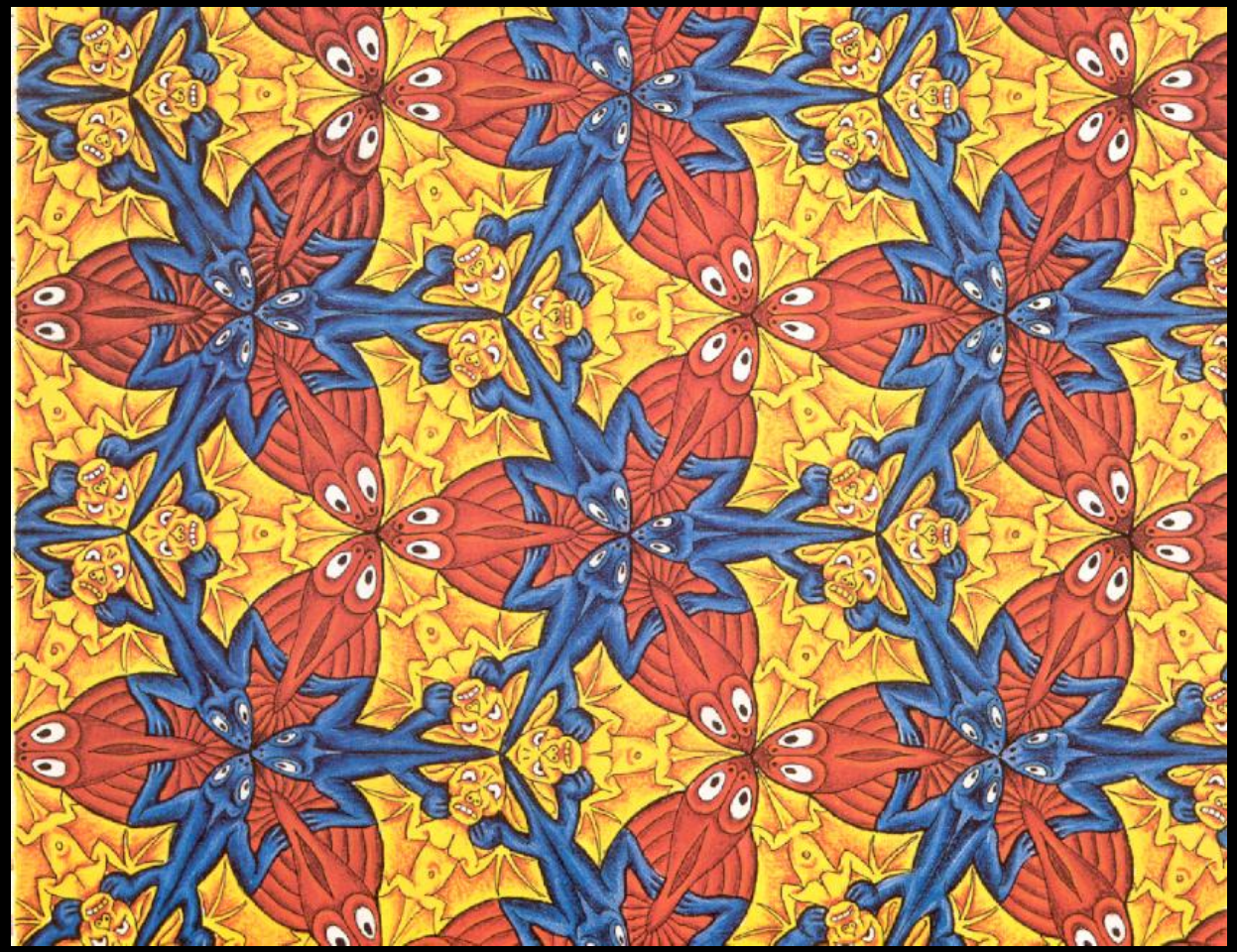


Native American Crafts

Jacquard Loom (1804) – Programmable Textile Machine

Inspiration



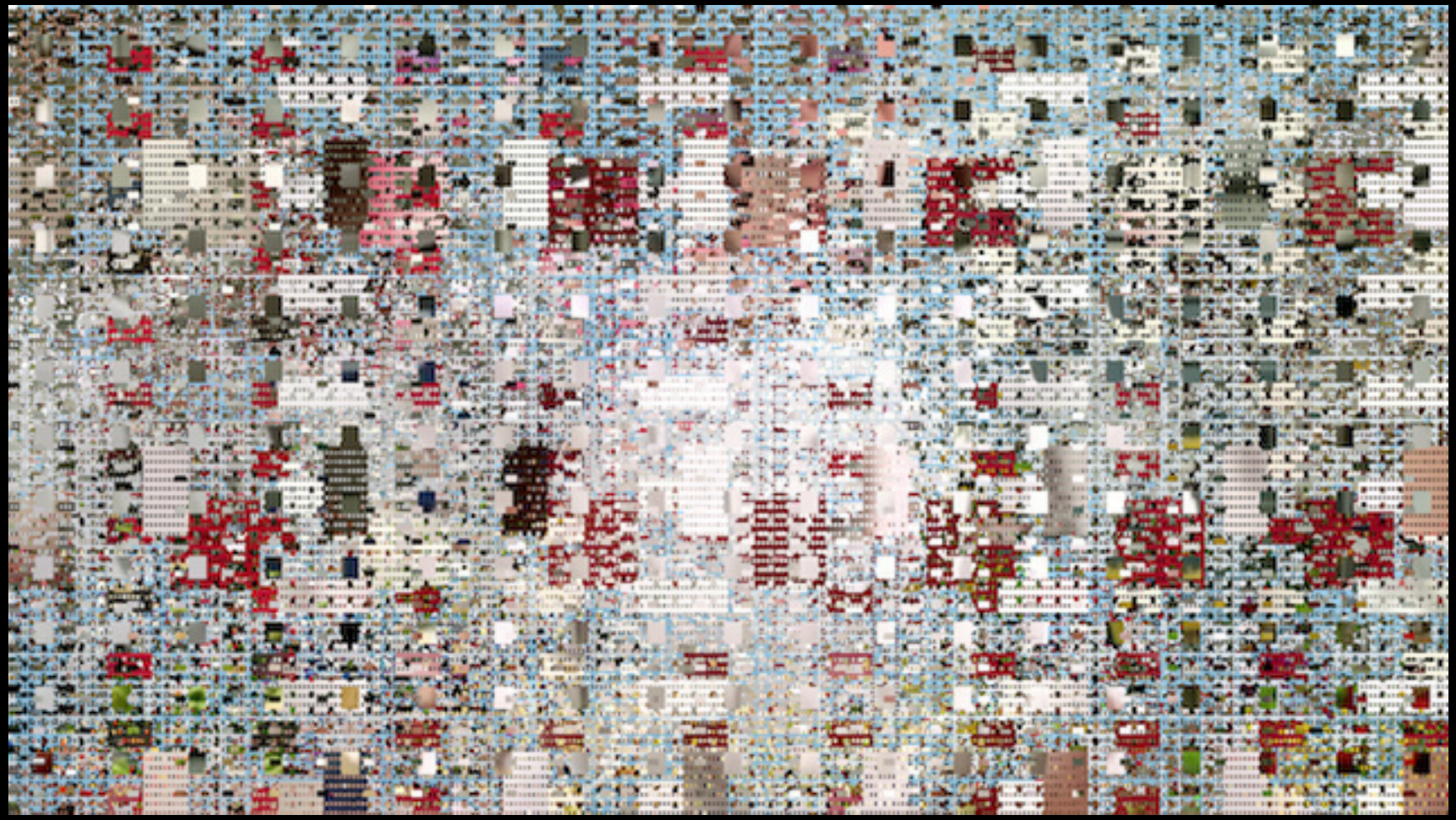


Escher – Tessellations

Inspiration

Islamic Art – Geometry & Patterns

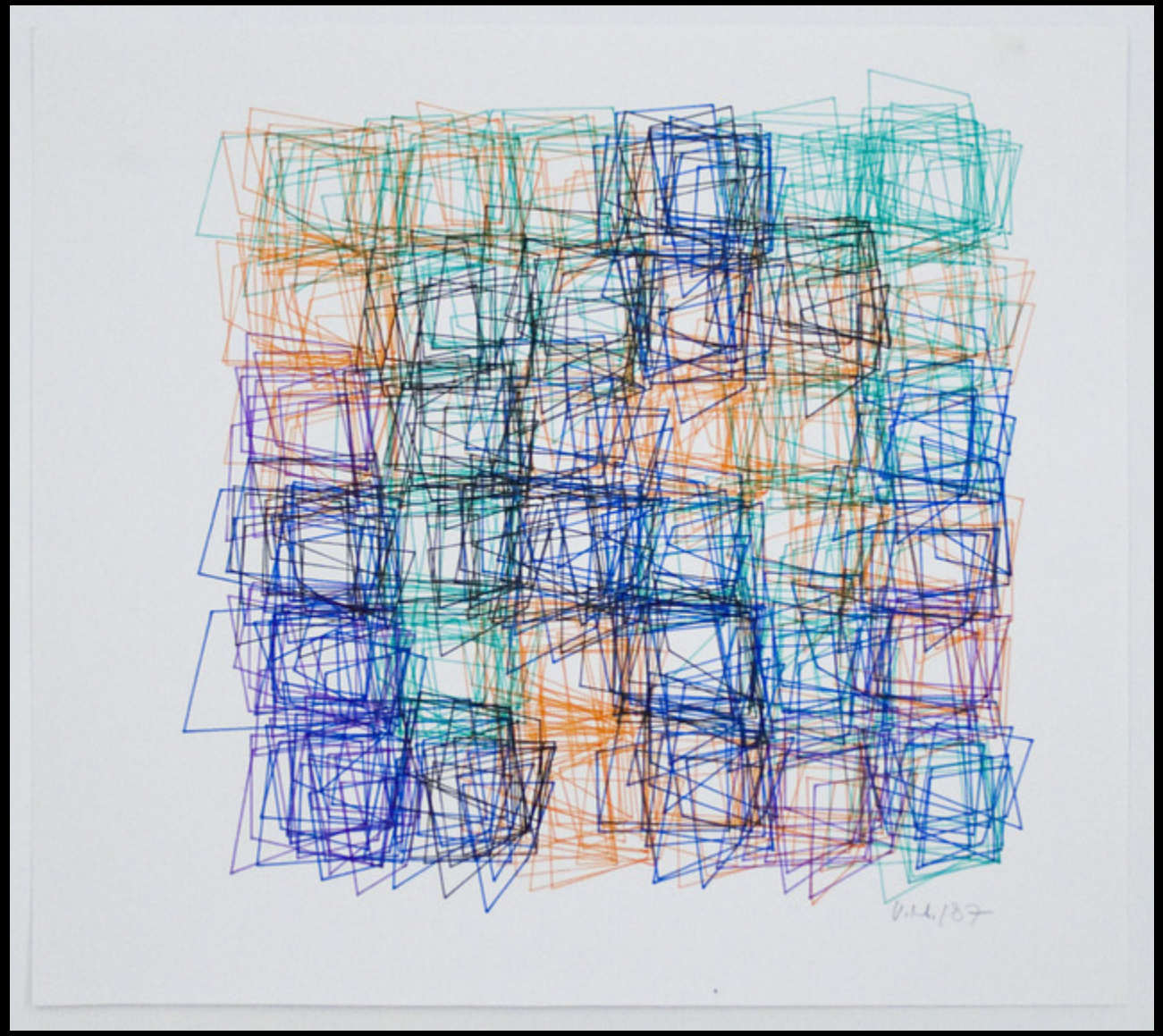
Inspiration



https://www.vice.com/en/article/9an9da/casey-reas-launches-new-exhibition-at-bitforms-gallery

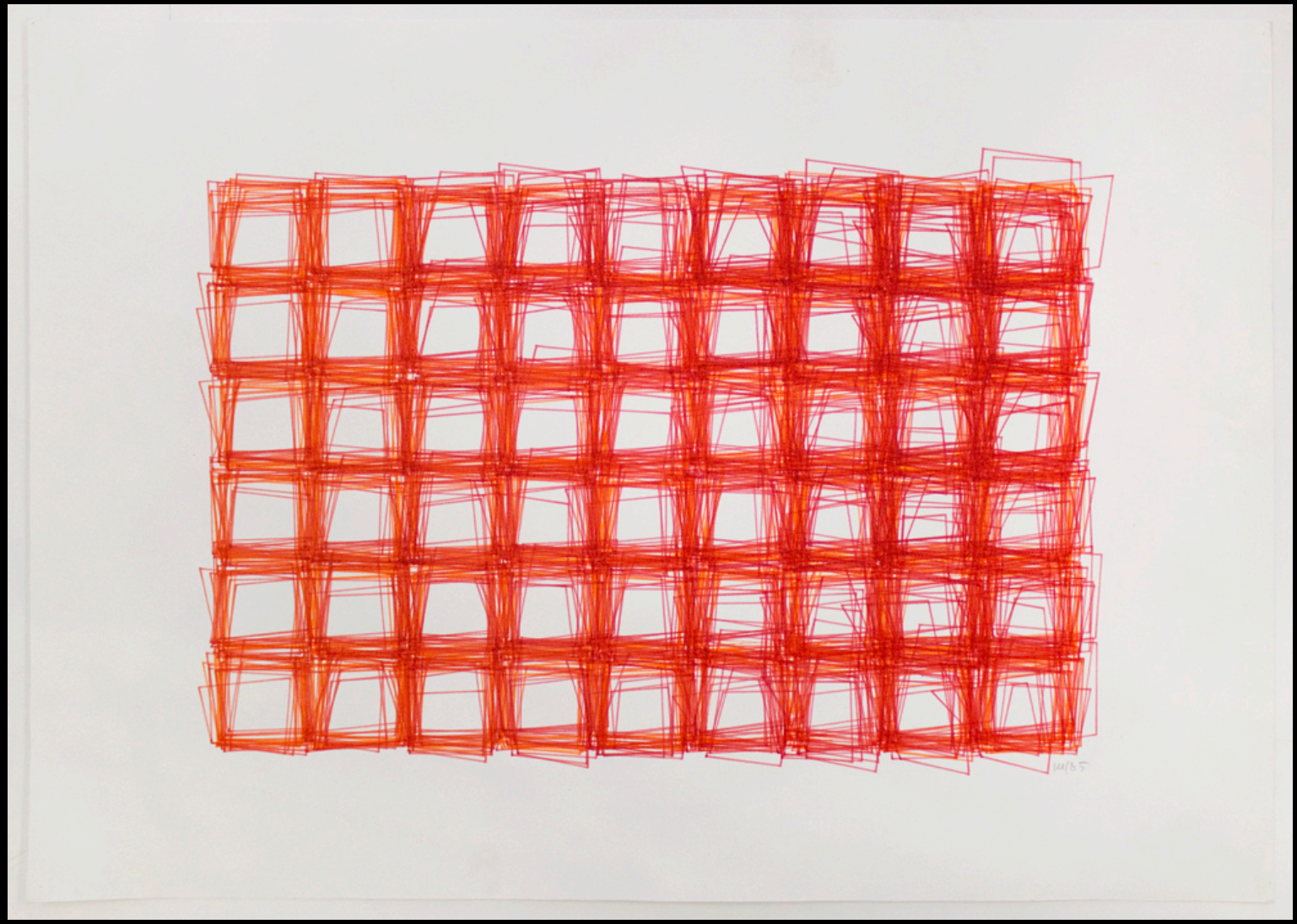
Casey Reas

Inspiration



Vera Molnar

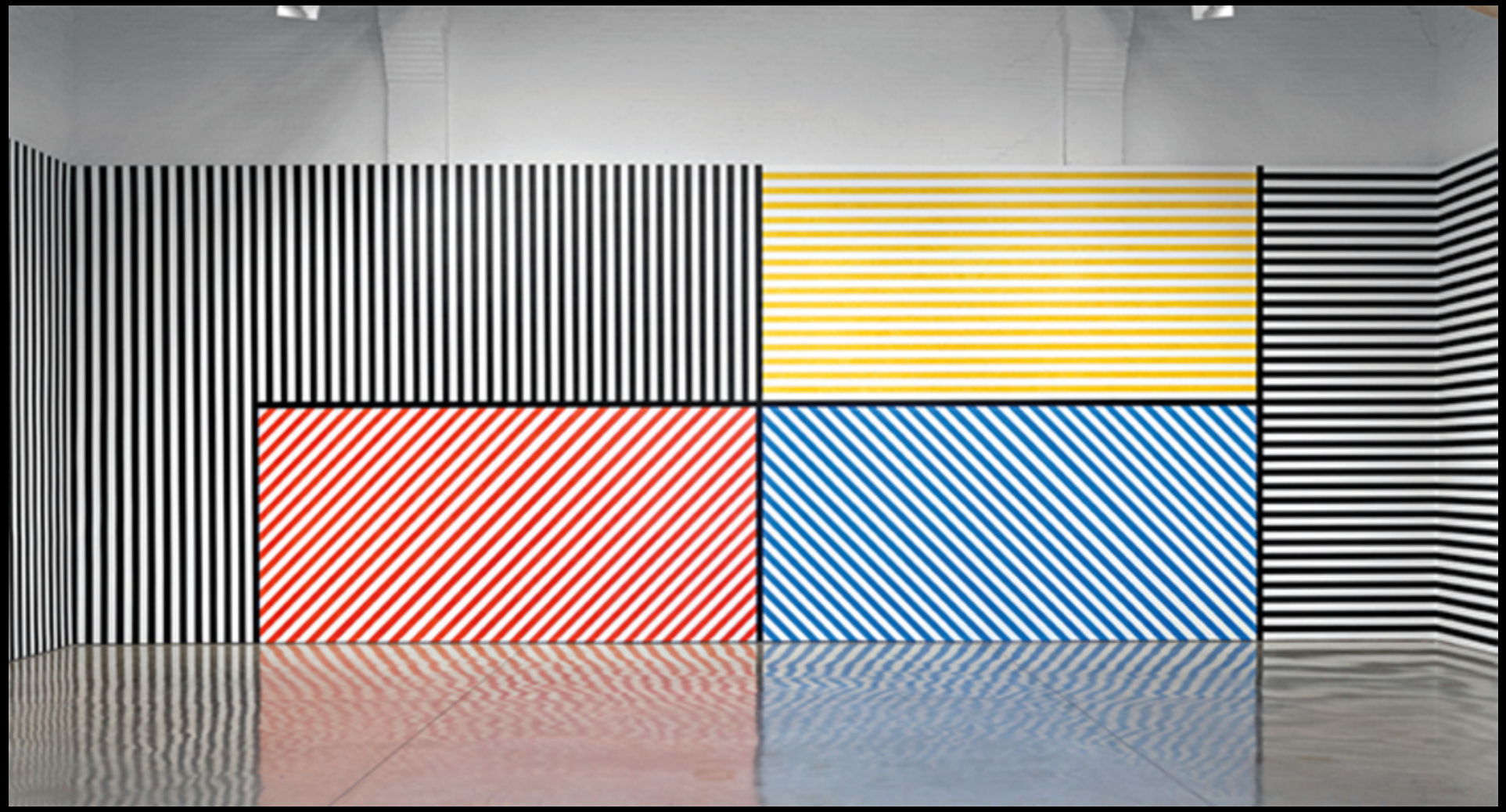
Inspiration



https://www.calvertjournal.com/articles/show/9879/this-new-york-exhibition-is-celebrating-hungarys-unsung-computer-art-pionee

Vera Molnar

Inspiration



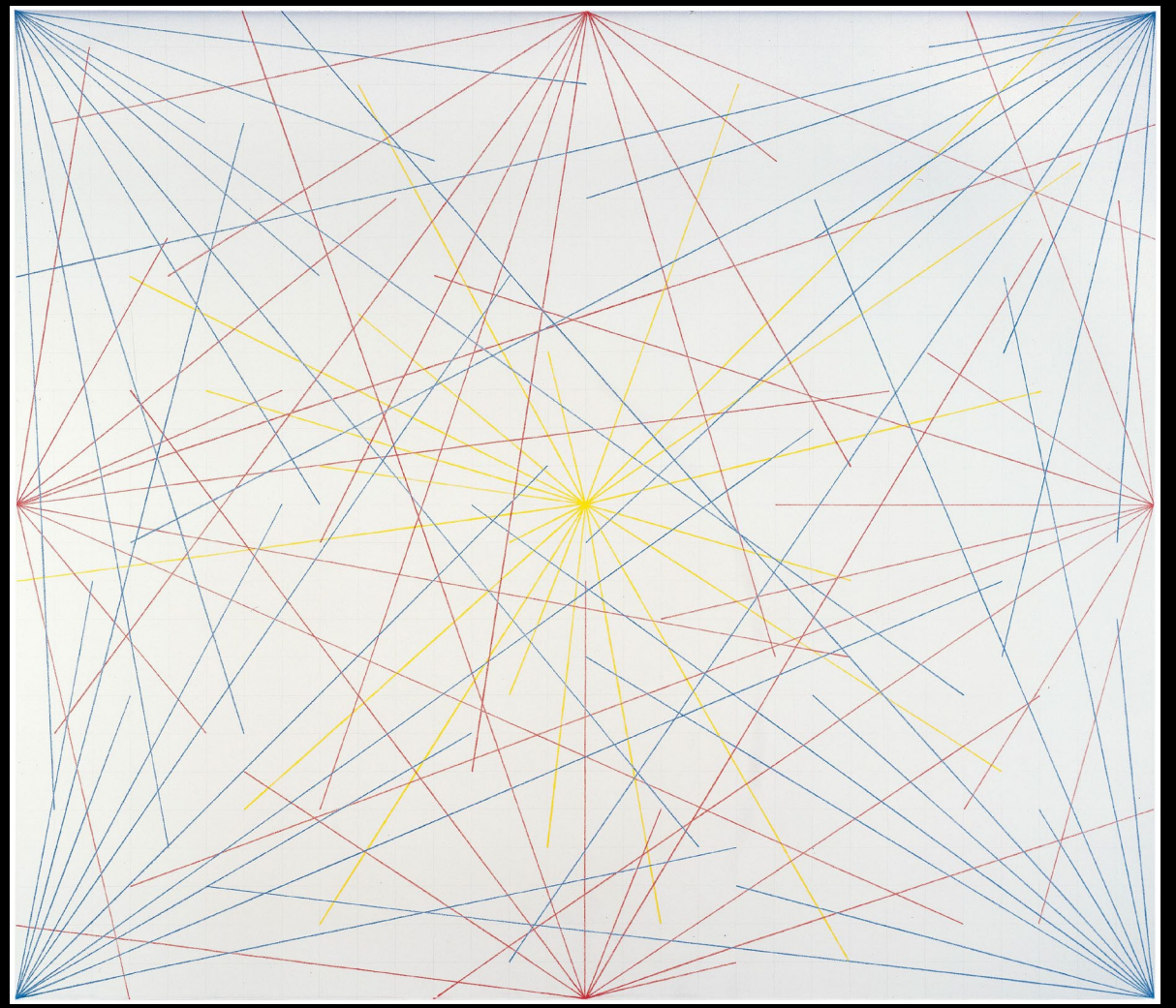
Sol LeWitt : Instruction Based Drawings

Inspiration

WALL DRAWING
BOSTON MUSEUM

On a wall surface, any
continuous stretch of wall,
using a hard pencil, place
fifty points at random.
The points should be evenly
distributed over the area
of the wall. All of the
points should be connected
by straight lines.

SOL LEWITT
Wall drawing, Boston Museum
Pencil



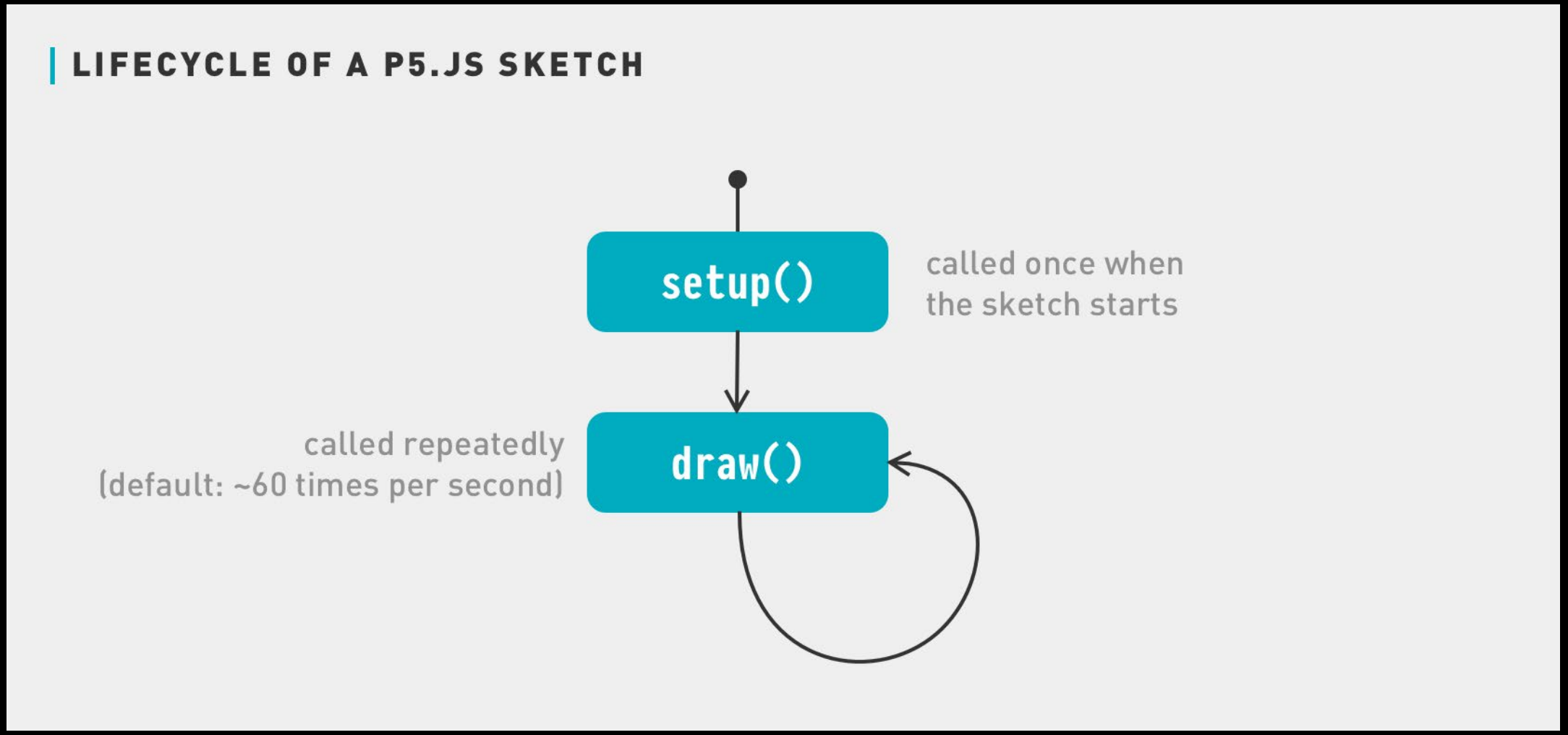
Sol LeWitt

p5.js web editor

- Great way to save and share your sketches here:
  - https://editor.p5js.org/

- Create an account now!
  - When submitting assignments, you can submit the link to your sketch
  - File > Share > Copy link to “Present”
  - Make sure to save your sketch first!

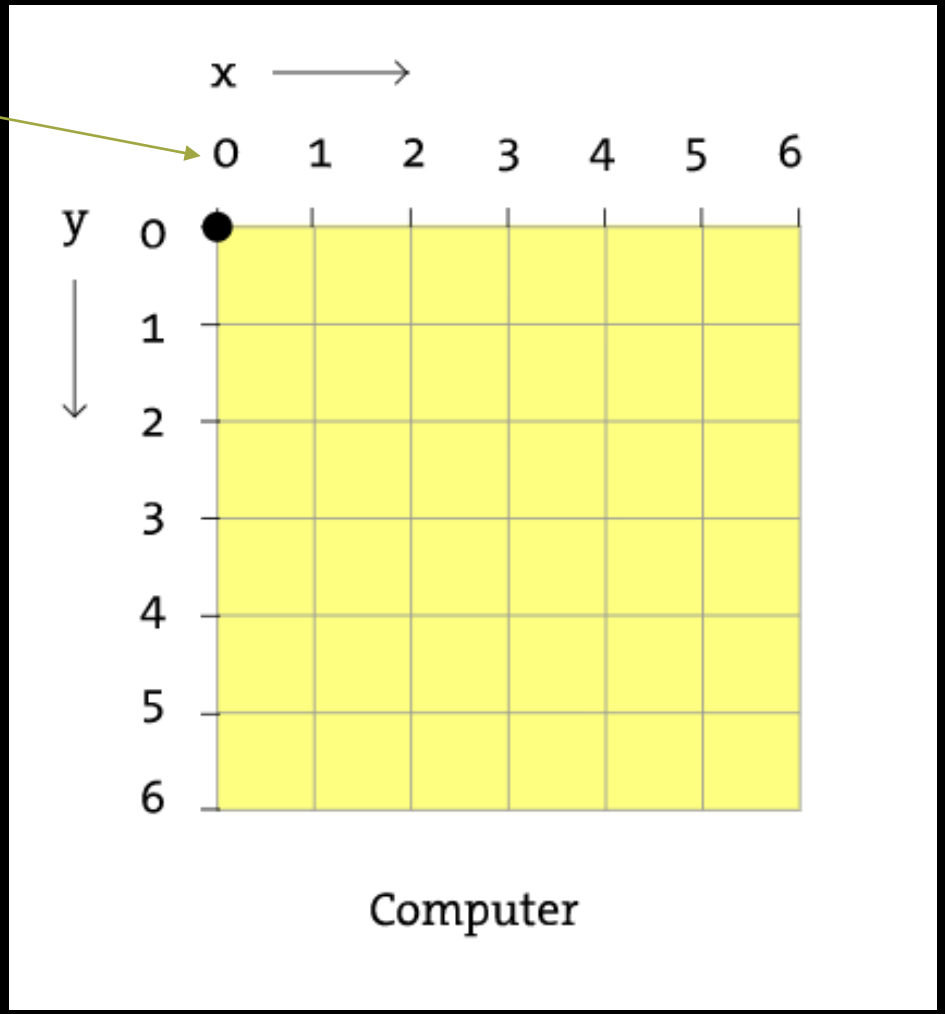
p5.js structure



https://medium.com/comsystoreply/introduction-to-p5-js-9a7da09f20aa

p5.js Canvas | Grid system

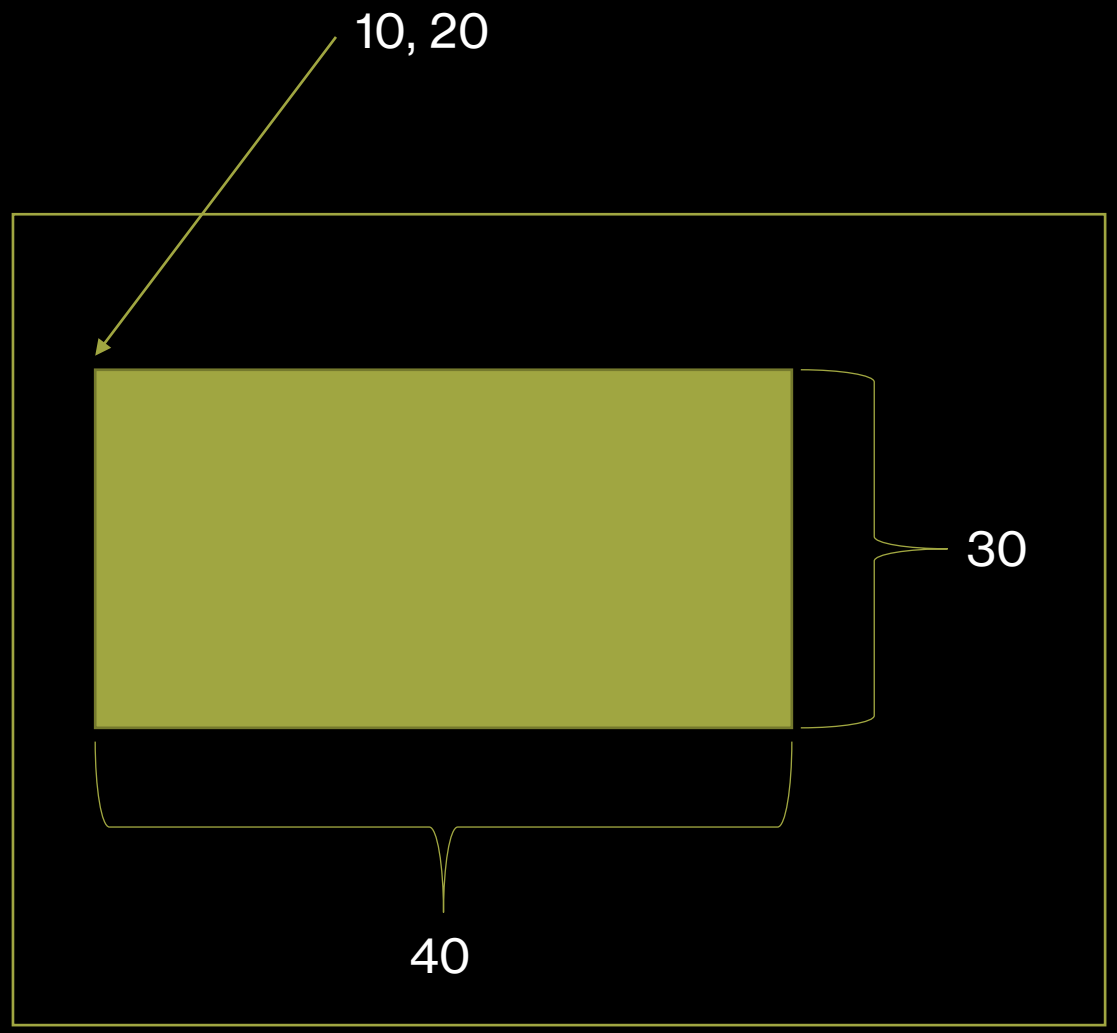
Pixels



p5.js Shapes.....but first

https://p5js.org/reference/ <- All you will ever need to know how to draw something!

p5.js Shapes



rect(x, y, width, height) <- *Has 4 arguments*

X -> starting point of the square in x
Y ->starting point of the square in y
Width -> width of rectangle
Height -> height of rectangle

E.g.

rect(10, 20, 40, 30)

p5.js Shapes

Some shapes need more arguments

triangle(x1, y1, x2, y2, x3, y3)

x1 : x-coordinate of the first point
y1: y-coordinate of the first point
x2: x-coordinate of the second point
y2: y-coordinate of the second point
x3: x-coordinate of the third point
y3: y-coordinate of the third point

p5.js Shapes

Some shapes need less arguments

circle(x, y, d)

x : x-coordinate of the centre of the circle.
y : y-coordinate of the centre of the circle.
d : diameter of the circle.

p5.js Colors

Using fill before shape colors that shape

fill(r, g, b,a*)
r: red color range 0 -255
g: green color range 0 -255
b: blue color range 0 -255
a: alpha / transparency 0-255

fill(g,a*)
g: grayscale range 0 -255
a: alpha / transparency 0-255

* -optional

p5.js Colors

Try these other color commands

- nofill()
- stroke(
- strokeWeight()
- background()
- colorMode()

p5.js rotate

rotate(angle) is a little tricky as it rotates the entire canvas

To use it correctly you must first move the origin to the shape you are trying to rotate with the **translate(x,y)**

rotate(angle) uses radian but can be used to degrees by using **angleMode(DEGREES)** before rotate

Since **rotate(angle)** will rotate the entire canvas you should use these commands between **push()** & **pop()**

In-class exercise#2