Mini Draw

```
strokeWeight(10);

function loop()
{
    if (mouseIsPressed)
        line(mouseX, mouseY, pmouseX, pmouseY);
}
```

Flying plane 1

```
background('Desert');
let p = sprite('plane.fly', 400, 200, 0.5);

function loop()
{
    p.x += 5;

    if (p.x > 900)
        p.x = -100;
}
```

Dino

```
background('PinkMountain');
let dino = sprite('dino.walk', 400, 430, 0.5);
let dir = 1;

function loop()
{
    dino.x += 5 * dir;

    if (dino.x > 900 || dino.x < -100)
    {
        dir *= -1;
        dino.mirrorX(dir);
    }
}
```

DVD Logo

```
let x = 400, y = 300;
let dx = 4, dy = 4;
let w = 120, h = 80;
let color = 255;

noStroke();
background(0);

function loop()
{
    clear();

    fill(color);
    rect(x, y, w, h);

    fill(0);
    textSize(50);
    textAlign(CENTER, CENTER);
    text('DVD', x + w/2, y + h/2);

    x += dx;
    y += dy;

    if (x <= 0 || x + w >= 800)
    {
        dx = -dx;
        color = randomColor();
    }

    if (y <= 0 || y + h >= 600)
    {
        dy = -dy;
        color = randomColor();
    }
}
```

Jungle run

```
background('Jungle');

let player = sprite('adventure_girl.idle', 400, 400, 0.5);

function loop()
{
    player.show("idle");

    if (keyIsDown(LEFT_ARROW))
    {
        player.x -= 8;
        player.mirrorX(-1);
        player.show("run");
    }
    else if (keyIsDown(RIGHT_ARROW))
    {
        player.x += 8;
        player.mirrorX(1);
        player.show("run");
    }
}
```

Wormhole 1

```
let x = 400;
let y = 300;
let xSpeed = 5;
let ySpeed = 5;

background(0);

function loop()
{
    fill(randomColor());
    circle(x, y, 25);

    x += xSpeed;
    y += ySpeed;

    if (x > width || x < 0)  xSpeed = -xSpeed;
    if (y > height || y < 0) ySpeed = -ySpeed;
}
```

Flying plane 2

```
let plane = sprite('plane.fly', 0, 100, 0.5);
plane.velocity.x = 1;

background('Trees');

function loop()
{
    if (plane.x > 900)
        plane.x = -100;

    if (plane.x % 100 === 0)
    {
        let coin = sprite('coin', plane.x, plane.y, 0.5);
        coin.depth = -1;
        coin.velocity.y = 3;
    }
}
```

Random lines

```
background(0);

function loop()
{
    let x1 = random(800);
    let y1 = random(600);
    let x2 = random(800);
    let y2 = random(600);

    let color = randomColor();

    stroke(color);
    strokeWeight(2);
    line(x1, y1, x2, y2);
}
```

Snow flakes

```
const snowFlake = "❄";
let snowFlakes = [];
background('WinterNight');

function loop()
{
    clear();

    fill("white");
    noStroke();

    for(let el of snowFlakes)
    {
        textSize(60);
        text(snowFlake, el[0], el[1]);

        el[1] += el[2];
    }
}

function mousePressed()
{
    snowFlakes.push( [mouseX, mouseY, random(1, 3)] );
}
```

Turtle lines

```
background("midnightblue");
colorMode(HSB);
pensize(1.5);

var n = 5;
var h = 179;

for(var i = 1; i <= 400; i++)
{
    var clr = color(h++ % 360, 100, 100)
    pencolor(clr);
    forward(n);
    right(89.5);
    n += 0.75;
}
```

Magnetic needles

```
function loop()
{
    clear();

    for (let x = 0; x < width; x += 30)
        for(let y = 0; y < height; y += 30)
            needle( x, y, 30 );
}

function needle(x, y, d)
{
    let angle = atan2( mouseY - y, mouseX - x );

    let x2 = x + d * cos(angle);
    let y2 = y + d * sin(angle);

    line(x, y, x2, y2);
    ellipse(x2, y2, 5);
}
```

Fading circles

```
let circles = [];
background(0);

function loop()
{
    clear();

    circles.push({ x: mouseX, y: mouseY, size: 30, alpha: 255 });

    for (let c of circles)
    {
        fill(0, 255, 0, c.alpha);
        circle(c.x, c.y, c.size);
        c.size += 2;
        c.alpha -= 5;
    }

    circles = circles.filter(c => c.alpha > 0);
}
```

Random circles

```
function loop()
{
    fill(randomColor());
    circle(random(800), random(600), random(30, 100));
}
```

Eyes following the mouse

```
function loop()
{
    clear();

    drawEye(200, 300, 60);
    drawEye(380, 300, 60);
}

function drawEye(x, y, r)
{
    fill("white");
    ellipse(x, y, r * 2);

    drawEyePupil(x, y, 0.75 * r, 0.5 * r);
}

function drawEyePupil(x1, y1, r, pr)
{
    let angle = atan2(mouseY - y1, mouseX - x1);

    let x2 = x1 + r * cos(angle);
    let y2 = y1 + r * sin(angle);

    fill("black");
    ellipse(x2, y2, pr);
}
```

Mini draw 3

```
function loop()
{
    if (mouseIsPressed)
    {
        let color = randomColor();
        fill(color);
        circle(mouseX, mouseY, 20);
    }
}
```

Star field

```
let stars = [];
background(0);
fill('white');

function enter()
{
    for (let i = 0; i < 100; i++)
        stars.push({ x: random(800), y: random(600), speed: random(1, 5) });
}

function loop()
{
    clear();

    for (let star of stars)
    {
        circle(star.x, star.y, 3);
        star.x -= star.speed;

        if (star.x < 0)
        {
            star.x = 800;
            star.y = random(600);
        }
    }
}
```

Radar scanner

```
let angle = 0;

function loop()
{
    clear();

    fill(0, 255, 0, 50);
    arc(400, 300, 400, 400, angle, angle + 20);

    angle += 2;
}
```

Falling spiders

```
let spider = img(`
    0 0 f f f f 0 0
    0 f f f f f f 0
    f f 0 f f 0 f f
    f f f f f f f f
    f 0 f f f f 0 f
    f 0 f 0 0 f 0 f
    f 0 f 0 0 f 0 f
    0 0 f 0 0 f 0 0
`);

function loop()
{
    if (random() > 0.05)
        return;

    let speed = random(1, 3);
    let size = random(3, 5);

    let s = sprite(spider, random(800), 0, size);
    s.velocity.y = speed;
    s.life = 300;
}
```

Dancing squares

```
frameRate(10);

function loop()
{
    clear();

    for (let i = 0; i < 10; i++)
    {
        fill(randomColor());
        rect(random(800), random(600), 50, 50);
    }
}
```

Matrix rain

```
let symbols = [];
background(0);

function enter()
{
    for (let i = 0; i < 40; i++)
    {
        symbols.push({
            x: random(800),
            y: random(600),
            char: char(random(33, 126)),
            speed: random(2, 6) });
    }
}

function loop()
{
    clear();
    textSize(20);
    fill(0, 255, 0);

    for (let s of symbols)
    {
        text(s.char, s.x, s.y);
        s.y += s.speed;
        if (s.y > 600) s.y = 0;
    }
}
```

Random lines from center

```
function loop()
{
    let x = random(800);
    let y = random(600);
    let color = randomColor();

    stroke(color);
    line(400, 300, x, y);
}
```

Balloons

```
let balloons = [];
background('Summer');

function enter()
{
    for (let i = 0; i < 10; i++)
    {
        balloons.push({ x: random(800), y: random(600),
                    speed: random(1, 3), c : randomColor() });
    }
}

function loop()
{
    clear();

    for (let b of balloons)
    {
        fill(b.c);
        ellipse(b.x, b.y, 40, 50);
        line(b.x, b.y + 25, b.x, b.y + 40);

        b.y -= b.speed;

        if (b.y < -50) b.y = 650;
    }
}
```

Fractal tree

```
background('Field');

function loop()
{
    clear();

    setposition(400, 500);
    plant(150);
}

function plant(size)
{
    if (size < 1)
        return;

    pensize( map(size, 100, 1, 10, 0.1) );
    pencolor( size > 10 ? 'black' : 'green' );

    forward(size);

    let [x, y] = position();
    let h = heading();

    let nextSign = 1;

    repeat(random([2,3]), () => {
        let angle = nextSign * random(10, 45);
        nextSign *= -1;

        right(angle);
        plant(size * random(0.5, 0.7));

        setposition(x, y);
        setheading(h);
    });
}
```