Shape5.js

Basic Structure
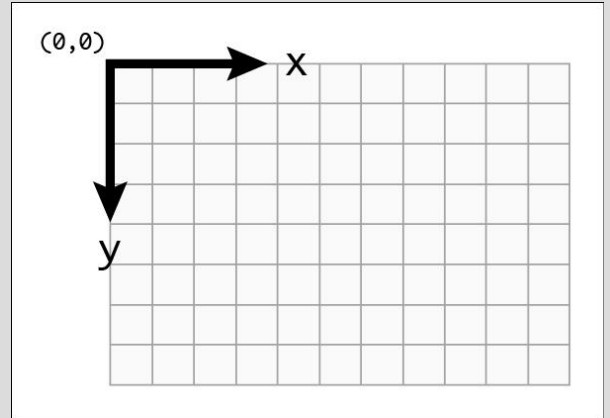
```
void setup() {
  createCanvas(400, 400);
  noLoop();
}

void draw() {
  background('white');
}
```

Note: the numbers represent the size of the picture, and the color represents the background color

Coordinate System

Note: the x-position controls horizontal location, the y-position controls the vertical location

Declaring a Variable

```
void draw() {
  background('white');

  let sun = new Circle();
}
```

Note: use the keyword 'let' and then your variable name, variables need to be assigned one of the shapes (see page 3)

Modifying a shape

```
void draw() {
  background('white');

  let sun = Circle();
  sun.x = 50;
  sun.y = 75;
}
```

Note: after the variable name, use a "." followed by the attribute of the shape (see page 3 for the list of attributes for each shape)

Drawing a Shape

```
let sun = Circle();
sun.show();
```

Note: use the ".show()" method to draw the shape to the canvas

Colors

aliceblue	antiquewhite	aqua	aquamarine	azure	beige	bisque
black	blanchedalmond	blue	blueviolet	brown	burlywood	cadetblue
chartreuse	chocolate	coral	cornflowerblue	cornsilk	crimson	cyan
darkblue	darkblue	darkcyan	darkgoldenrod	darkgray	darkgreen	darkgrey
darkkhaki	darkmagenta	darkolivegreen	darkorange	darkorchid	darkred	darksalmon
darkseagreen	darkslateblue	darkslategray	darkslategrey	darkturquoise	darkviolet	deeppink
deepskyblue	dimgray	dimgrey	dodgerblue	firebrick	floralwhite	forestgreen
fuchsia	gainsboro	ghostwhite	gold	goldenrod	gray	green
greenyellow	grey	honeydew	hotpink	indianred	indigo	ivory
khaki	lavender	lavenderblush	lawngreen	lemonchiffon	lightblue	lightcoral
lightcyan	lightgoldenrodyellow	lightgreen	lightgrey	lightpink	lightsalmon	lightseagreen
lightskyblue	lightslategray	lightslategrey	lightsteelblue	lightyellow	lime	limegreen
linen	magenta	maroon	mediumaquamarine	mediumblue	mediumorchid	mediumpurple
mediumseagreen	mediumslateblue	mediumspringgreen	mediumturquoise	mediumvioletred	midnightblue	mintcream
mistyrose	moccasin	navajowhite	navy	oldlace	olive	olivedrab
orange	orangered	orchid	palegoldenrod	palegreen	paleturquoise	palevioletred
papayawhip	peachpuff	peru	pink	plum	powderblue	purple
red	rosybrown	royalblue	saddlebrown	salmon	sandybrown	seagreen
seashell	sienna	silver	skyblue	slateblue	slategray	slategrey
snow	springgreen	steelblue	tan	teal	thistle	tomato
turquoise	violet	wheat	white	whitesmoke	yellow	yellowgreen

Note: these colors do not use capital letters or spaces, also do not forget to use the quotations marks

Circle

```
let c = new Circle();
c.x = 100; //horizontal position
c.y = 50; //vertical position
c.r = 20; //radius of the circle
c.color = 'blue'; //color of the circle
c.spin = 45; //degrees of rotation
c.show(); //draw to canvas
```

Square

```
let s = new Square();
s.x = 100; //horizontal position
s.y = 50; //vertical position
s.size = 20; //length of a side
s.color = 'blue'; //color of the square
s.spin = 45; //degrees of rotation
s.show(); //draw to canvas
```

Triangle (equilateral)

```
let t = new Triangle();
t.x = 100; //horizontal position
t.y = 50; //vertical position
t.size = 20; //length of a side
t.color = 'blue'; //color of the triangle
t.spin = 45; //degrees of rotation
t.show(); //draw to canvas
```

Polygon

```
let p = new Polygon();
p.x = 100; //horizontal position
p.y = 50; //vertical position
p.size = 20; //length of a side
p.sides = 8; //number of sides
p.color = 'blue'; //color of the circle
p.spin = 45; //degrees of rotation
p.show(); //draw to canvas
```

Oval

```
let o = new Oval();
o.x = 100; //horizontal position
o.y = 50; //vertical position
o.width = 20; //width of the oval
o.height = 40; //height of the oval
o.color = 'blue'; //color of the circle
o.spin = 45; //degrees of rotation
o.show(); //draw to canvas
```

Rectangle

```
let r = new Rectangle();
r.x = 100; //horizontal position
r.y = 50; //vertical position
r.width = 20; //width of the oval
r.height = 40; //height of the oval
r.color = 'blue'; //color of the circle
r.spin = 45; //degrees of rotation
r.show(); //draw to canvas
```

Rhombus

```
let r = new Rhombus();
r.x = 100; //horizontal position
r.y = 50; //vertical position
r.width = 20; //width of the oval
r.height = 40; //height of the oval
r.color = 'blue'; //color of the circle
r.spin = 45; //degrees of rotation
r.show(); //draw to canvas
```

RightTriangle

```
let t = new RightTriangle();
t.x = 100; //horizontal position
t.y = 50; //vertical position
t.width = 20; //width of the triangle
t.height = 60; //height of the triangle
t.color = 'blue'; //color of the circle
t.spin = 45; //degrees of rotation
t.show(); //draw to canvas
```

IsoscelesTriangle

```
let t = new IsoscelesTriangle();
t.x = 100; //horizontal position
t.y = 50; //vertical position
t.width = 20; //width of the triangle
t.length = 40; //length of equal sides
t.color = 'blue'; //color of the circle
t.spin = 45; //degrees of rotation
t.show(); //draw to canvas
```

Stripe

```
let s = new Stripe();
s.x = 100; //horizontal position
s.y = 50; //vertical position
s.length = 20; //length of the line
s.width = 8; //fatness of the line
s.color = 'blue'; //color of the circle
s.spin = 45; //degrees of rotation
s.show(); //draw to canvas
```

Semicircle

```
let s = new Semicircle();
s.x = 100; //horizontal position
s.y = 50; //vertical position
s.size = 20; //radius of the semicircle
s.degrees = 90; //degrees of the semicircle
s.color = 'blue'; //color of the circle
s.spin = 45; //degrees of rotation
s.show(); //draw to canvas
```