

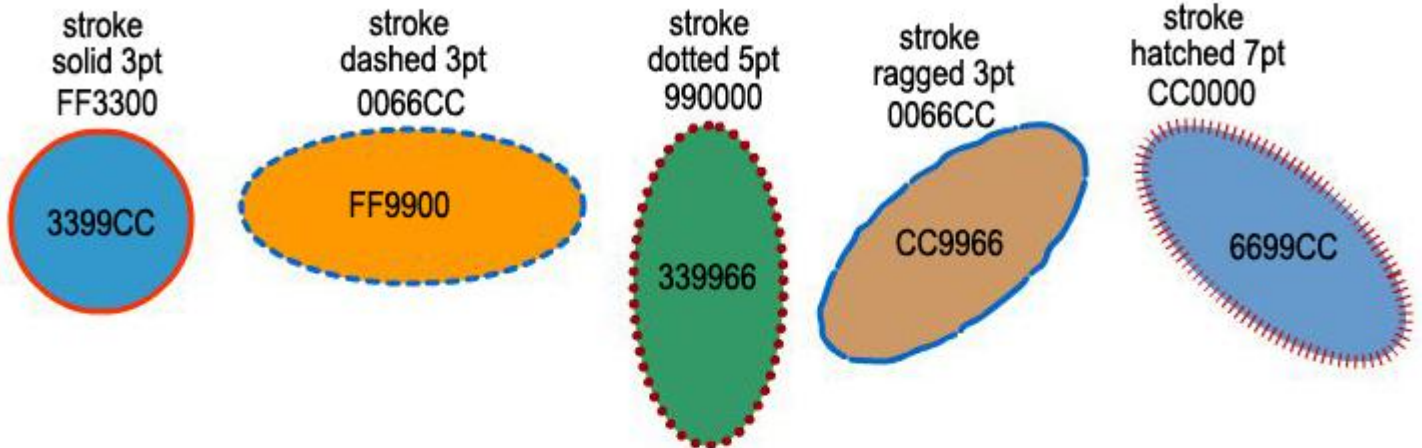
# Lesson1 (Working with Shapes)

Draw the basic Vector Shapes.

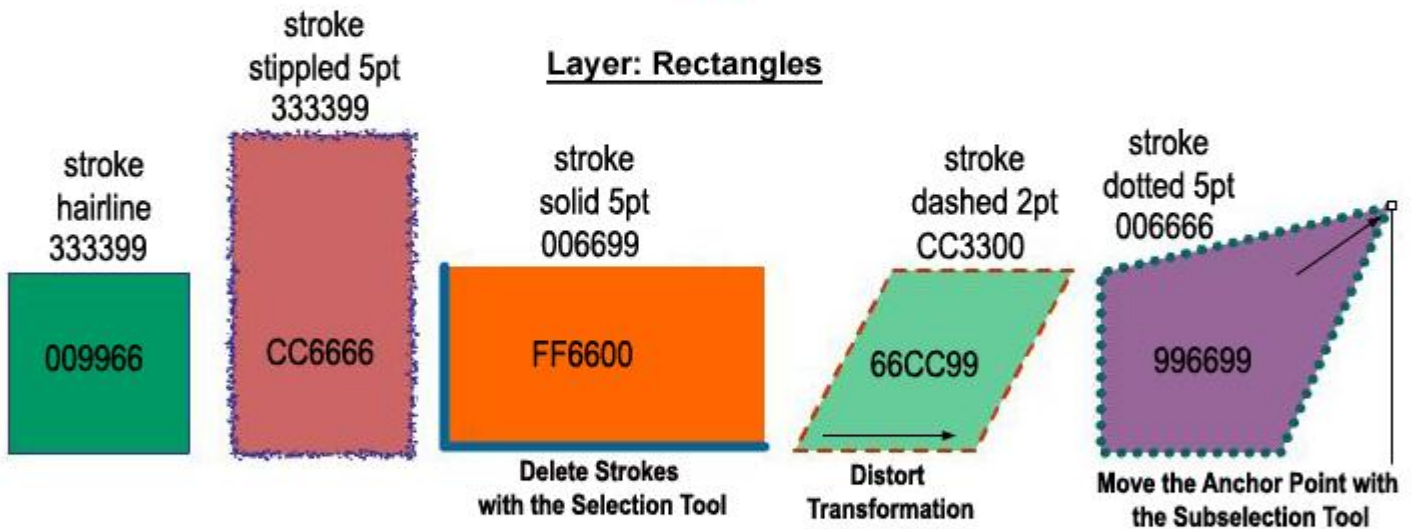
Use Property Inspector to further modify the shape or specify fill and stroke colors.

Apply various transformation to the Vector Shapes.

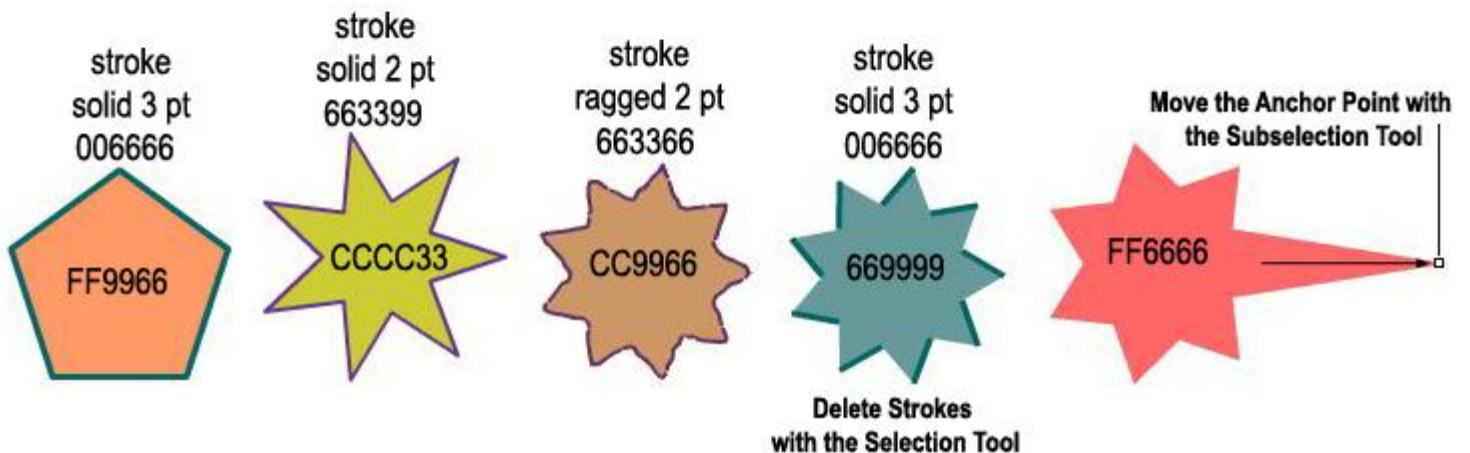
## Layer: Ovals



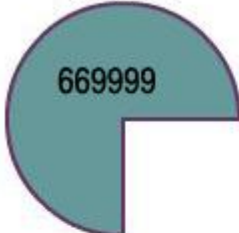




## Layer: Rectangles








## Layer: Polystar Shapes



## Layer: Oval Primitives

<p>stroke solid 2pt 663366</p>  <p>669999</p>	<p>stroke solid 3pt 336666</p>  <p>FF9933</p>	<p>stroke dotted 5pt 336666</p>  <p>999933</p>	<p>stroke solid 5pt CC3333</p>  <p>empty</p>	<p>no stroke</p>  <p>336666</p>
<p>▼ OVAL OPTIONS</p> <p>Start angle: <input type="text" value="90.00"/></p> <p>End angle: <input type="text" value="0.00"/></p> <p>Inner radius: <input type="text" value="0.00"/></p>	<p>▼ OVAL OPTIONS</p> <p>Start angle: <input type="text" value="90.00"/></p> <p>End angle: <input type="text" value="0.00"/></p> <p>Inner radius: <input type="text" value="50.00"/></p>	<p>▼ OVAL OPTIONS</p> <p>Start angle: <input type="text" value="0.00"/></p> <p>End angle: <input type="text" value="360.00"/></p> <p>Inner radius: <input type="text" value="45.00"/></p>	<p>▼ OVAL OPTIONS</p> <p>Start angle: <input type="text" value="209.00"/></p> <p>End angle: <input type="text" value="140.00"/></p> <p>Inner radius: <input type="text" value="30.00"/></p>	<p>▼ OVAL OPTIONS</p> <p>Start angle: <input type="text" value="300.00"/></p> <p>End angle: <input type="text" value="45.00"/></p> <p>Inner radius: <input type="text" value="0.00"/></p>

## Layer: Rectangle Primitives

<p>stroke solid 2pt 993300</p>  <p>8BB1B1</p>	<p>stroke stippled 5pt 336699</p>  <p>CC9999</p>	<p>stroke solid 3pt 333366</p>  <p>6699FF</p>	<p>stroke solid 5pt CC3300</p>  <p>empty</p>	<p>stroke solid 3pt 3366FF</p>  <p>FF9966</p>
<p>▼ RECTANGLE OPTIONS</p> <p><input type="text" value="14.00"/> <input type="text" value="14.00"/></p> <p><input type="text" value="14.00"/> <input type="text" value="14.00"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>	<p>▼ RECTANGLE OPTIONS</p> <p><input type="text" value="32.00"/> <input type="text" value="32.00"/></p> <p><input type="text" value="32.00"/> <input type="text" value="32.00"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>	<p>▼ RECTANGLE OPTIONS</p> <p><input type="text" value="-25.00"/> <input type="text" value="-25.00"/></p> <p><input type="text" value="-25.00"/> <input type="text" value="-25.00"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>	<p>▼ RECTANGLE OPTIONS</p> <p><input type="text" value="-36.50"/> <input type="text" value="14.00"/></p> <p><input type="text" value="14.00"/> <input type="text" value="-36.50"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>	<p><b>Distort Transformation</b></p> <p>▼ RECTANGLE OPTIONS</p> <p><input type="text" value="18.00"/> <input type="text" value="18.00"/></p> <p><input type="text" value="18.00"/> <input type="text" value="18.00"/></p> <p><input type="checkbox"/> <input type="checkbox"/></p>

Lock corner radius is unlinked

# Lesson1a

## Manipulation with Vector Shapes

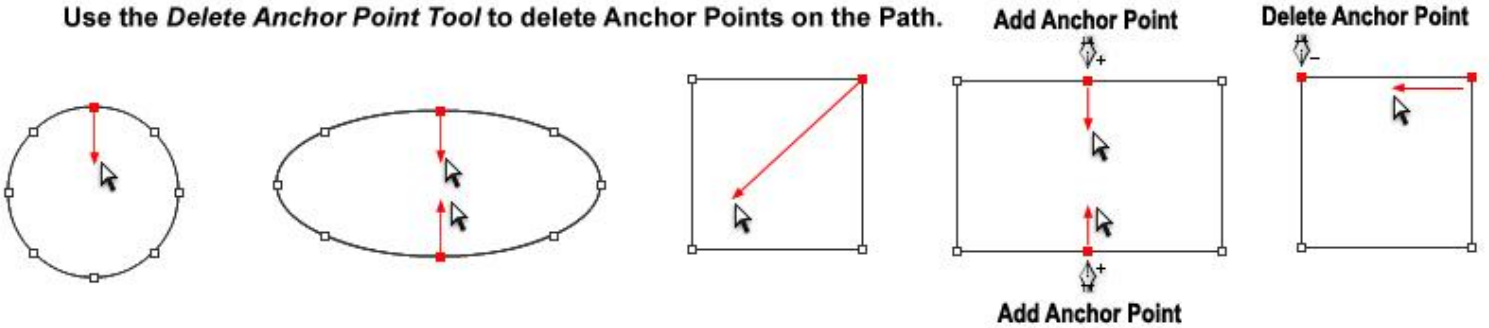
### Basic Shapes



**Step1:** Drag the Anchor Points with the *Subselection Tool*.

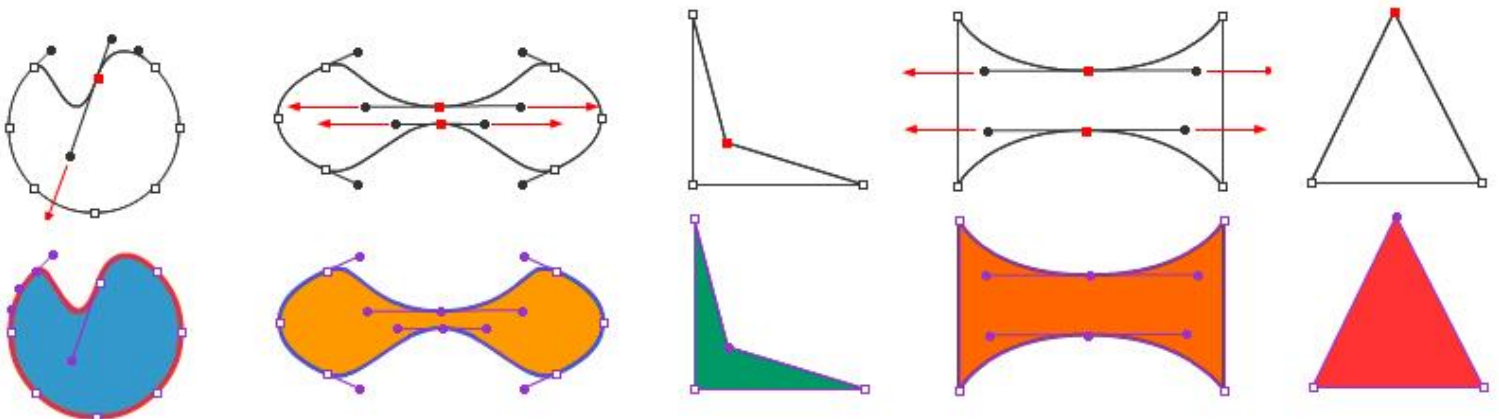
Use the *Add Anchor Point Tool* to add Anchor Points to the Path.

Use the *Delete Anchor Point Tool* to delete Anchor Points on the Path.

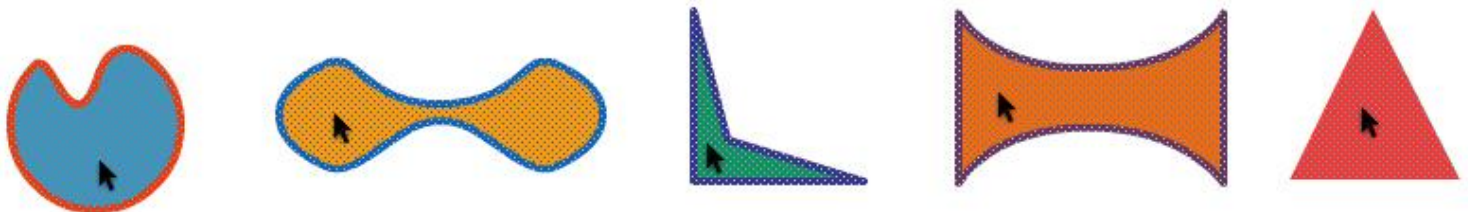


**Step2:** Use the *Subselection Tool* to manipulate with Bézier handles

that appear on curve segments to change the shape of the vector path.



**Step3:** Select the shape and its stroked outline with the *Selection Tool*.



Convert Shapes into Groups. Choose *Modify > Group*.



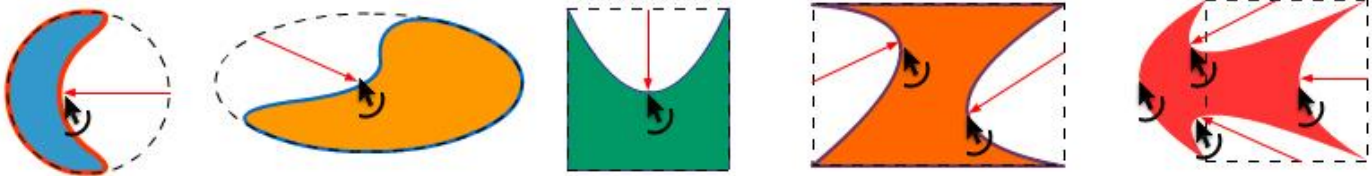
## Manipulation with Vector Shapes (Pushing and Pulling)

### Basic Shapes



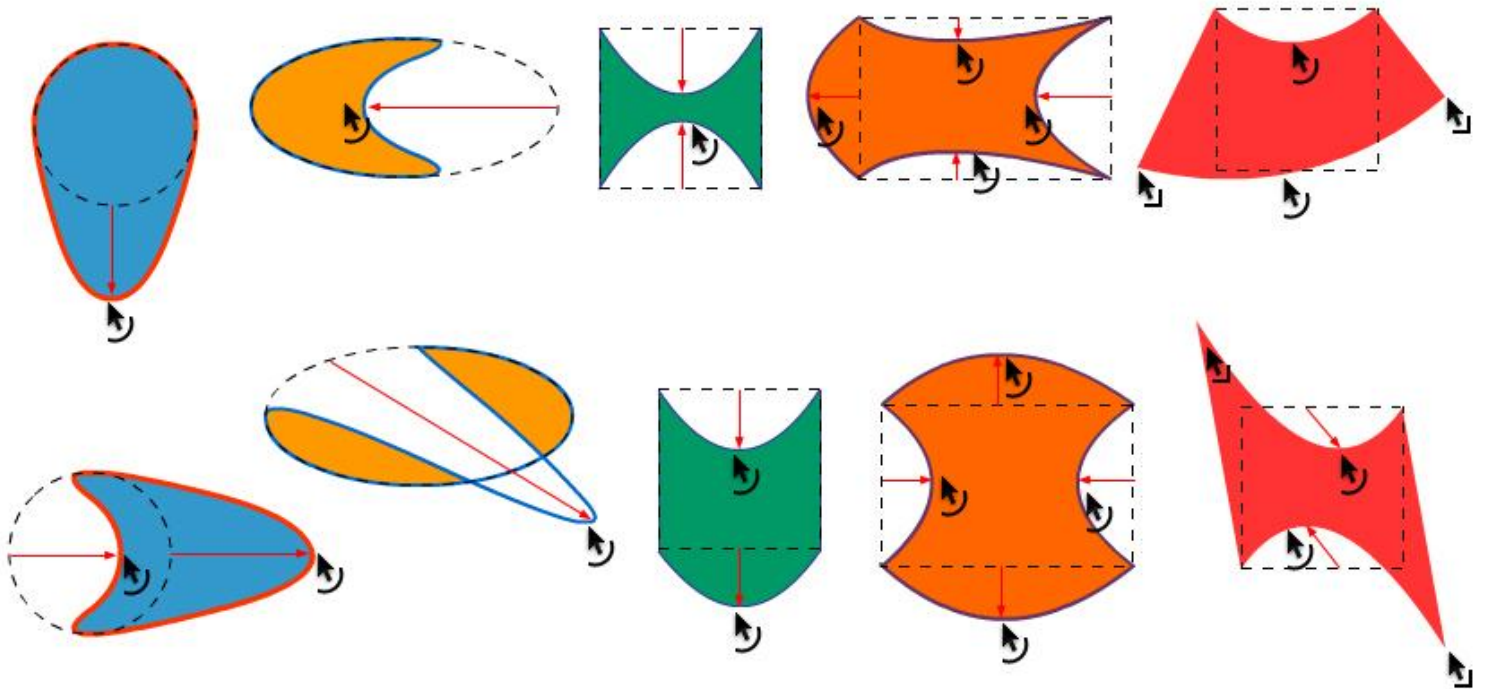
**Step1: Choose the Selection Tool from the Tool Panel.**

Hover the Selection Tool over the shape's edge. The icon next to the Selection Tool changes to the curve. Once you see this icon, click on the shape's edge and drag it to create a curved shape.



**Step2: Choose the Selection Tool from the Tool Panel.**

Hover the Selection Tool close to a corner of the rectangle shape. The icon next to the Selection Tool changes to a corner. Once you see this icon click on the shape's corner and drag. The rectangle shape will change.



## Lesson1b (Compound Objects)

### Combination of several shapes

**Step1: Draw several basic shapes. Choose color for the fill and stroke.**

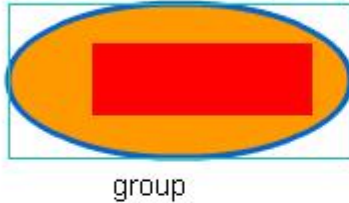
**Use Paint Bucket Tool for the fill. Use Ink Tool for the stroke.**

**You can also use the Properties Inspector to apply adjustment to fill and stroke.**

**Create several compositions out of these shapes.**

**Move one shape over, so that it overlaps another, or ends up inside of the other shape.**

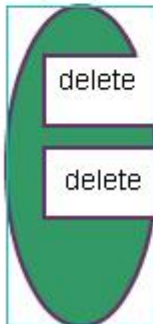
**Group the shapes, when you done.**



**Step2: Subtraction of one shape from another.**

**Select shape that you want to subtract with the Selection Tool and then delet it.**

**Group the shapes, when you done.**



**Step3: Combination lines and shapes.**

Draw several basic shapes. Choose color for the fill and stroke.

Use Paint Bucket Tool for the fill. Use Ink Tool for the stroke.

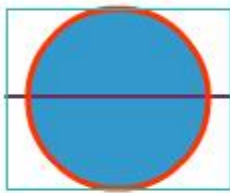
You can also use the Properties Inspector to apply adjustment to fill and stroke.

With the Line Tool draw the straight lines over the shapes.

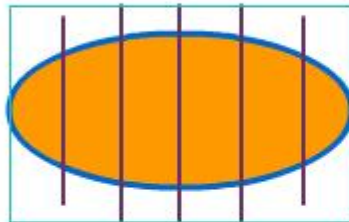
With the Pencil Tool draw the curved lines over the shapes

With the Properties Inspector you can apply adjustment to the lines.

Group the shapes and lines when you done.



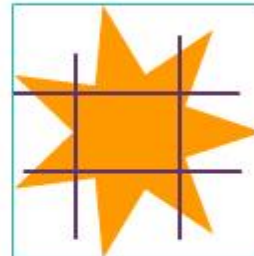
group



group



group



group

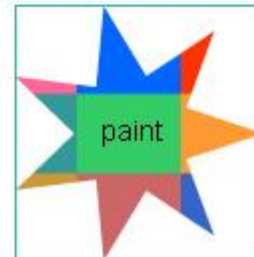
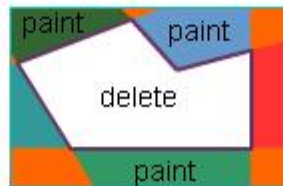
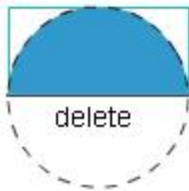


group

**Step4: Results of intersection lines and shapes. Lines divide shapes into parts.**

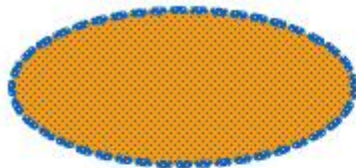
You can select these parts and fill them with the different colors or you can delete them.

Group the shapes and lines when you done.



# Working with Vector Shapes in the Properties Inspector

## Oval Characteristics in the Properties Inspector



Oval Shape is selected on the Stage

Stroke Color Box

Shape

POSITION AND SIZE

X: 140.00 Y: 18.00

W: 171.00 H: 77.00

FILL AND STROKE

Stroke Color Box: [Blue]

Fill Color Box: [Orange]

Stroke: [Slider] 3.00

Stroke Height

Style: Dashed

Stroke Style

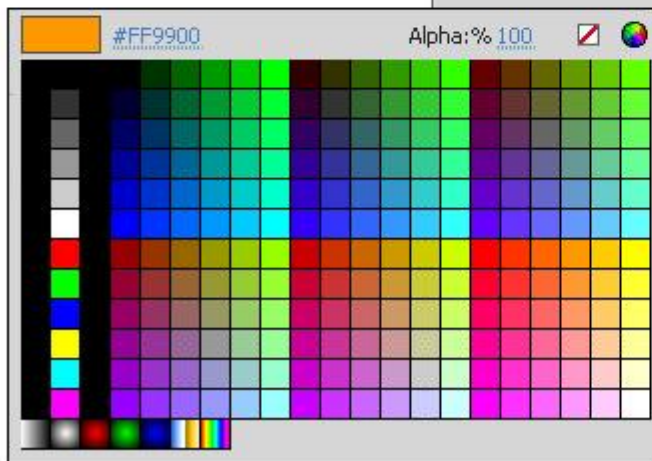
Cap: Dashed

Join: Dotted, Ragged, Stippled, Hatched

Fill Color Box

Stroke Height

Stroke Style

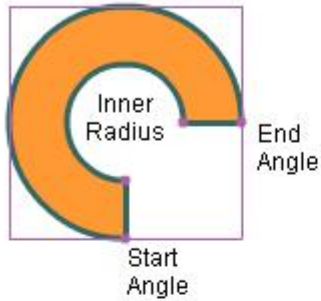


Swatches Panel

To access Swatches Panel click the Stroke Color Box or the Fill Color Box.

## Oval Primitive Characteristics in the Properties Inspector

Oval Primitive is selected on the Stage



Fill Color Box

The Properties Inspector for an oval primitive, showing various settings:

- PROPERTIES** | TRANSFORM | LIBRARY
- Oval primitive
- POSITION AND SIZE**
  - X: 188.00 Y: 452.00
  - W: 116.00 H: 116.00
- FILL AND STROKE**
  - Stroke Color Box (dark green)
  - Fill Color Box (orange)
  - Stroke: 3.00
  - Style: Solid
  - Scale: Normal
  - Cap: [ ]
  - Join: [ ] Miter: 3.00
- OVAL OPTIONS**
  - Start angle: 90.00
  - End angle: 0.00
  - Inner radius: 50.00
  - Close path
  - Reset

Stroke Color Box

Stroke Style

To access Color Panel click the Color Panel icon

The Color Panel interface, showing color selection options:

- COLOR | SWATCHES
- Color selection tools (brush, fill, stroke)
- Color swatches (Solid color)
- Color picker (H: 30°, S: 80%, B: 100%, R: 255, G: 153, B: 51, A: 100%)
- Color code: # FF9933
- Color bar and gradient bar

The Color panel lets you modify the color of the Stroke and Color of the Fill.