



# Coding a Mouse in SVG on a 600 by 600 grid

To get started, copy the code at this link into your editor: <http://steamcoded.org/lessons/numberedgrid600x600.svg.txt>

Save the file as **Mouse.svg** and open the file in a browser. Keep both applications open.

In the editor, add the SVG elements (per instructions below) where indicated in the SVG code, i.e. inside the second grouping (<g> element).

**Important:** Save the file and refresh the browser after each step.

## Syntax Examples:

An circle centered at (300,300) with a radius of 200 would have the following code:

```
<circle cx="300" cy="300" r="200" />
```

An ellipse centered at (300,420) with an x-radius of 50 and a y-radius of 20 would have the following code:

```
<ellipse cx="300" cy="420" rx="50" ry="20" />
```

- 1: Draw a circle at (300,300) with a radius of 200  

```
<circle cx="300" cy="300" r="200" />
```
- 2: Draw a circle at (100,100) with a radius of 82
- 3: Draw a circle at (500,100) with a radius of 82
- 4: Draw a circle at (250,250) with a radius of 20
- 5: Draw a circle at (250,250) with a radius of 10 and attribute: style="fill:black;"  

```
<circle cx="250" cy="250" r="10" style="fill:black;" />
```
- 6: Draw a circle at (350,250) with a radius of 20
- 7: Draw a circle at (350,250) with a radius of 10 and attribute: style="fill:black;"
- 8: Draw a circle at (300,330) with a radius of 20
- 9: Draw an ellipse at (300,420) with an x-radius of 50 and a y-radius of 20 and attribute: style="fill:black;"  

```
<ellipse cx="300" cy="420" rx="50" ry="20" style="fill:black;" />
```
- 10: Draw an ellipse at (300,420) with an x-radius of 40 and a y-radius of 15 and attribute: style="fill:red;stroke:none;"

When complete, change the style attribute of the first element from "display:initial" to "display:none" which hides the grid. Then change the style style attribute of the second element from "opacity:0.5" to "opacity:1"

For added fun, change the fill and stroke colors. There are 16 million colors to choose from, but only about 140 have names. All colors can be entered using a hex number like #FF0000 for red. For example: style="fill:#00FFFF;stroke:#000000;" is the same as style="fill:aqua;stroke:black;"

**Reference:** [http://www.w3schools.com/colors/colors\\_names.asp](http://www.w3schools.com/colors/colors_names.asp)

Note the Hex column. Click on the Shades link for more colors.