

**Begin:** Put VSG\_Module.py into folder with script, start script with 'from VSG\_Module import \*'

**Primitives and examples of how to specify position and color** QuickRef: VSGDC 7/20/20

**vline**(x1=1,y1=1,x2=8,y2=8,stroke=red,popup='you clicked my line')  
**vrect**(xc=5,yc=5,width=3,height=2,fill='rgb(12,15,222)',stroke=black,label='MyRect')  
**vellipse**(xc=5,yc=5,xr=2,yr=2) **vcircle**(xc=5,yc=5,r=2)  
**vpolyline**(points=[1,4,4,7,6,3],stroke=red) [points] can be specified with alternate x,y pairs **vconnect==vpolyline**  
**vpolygon**(points=[(1,2),(2,4),(3,4)],stroke=blue,fill=0.4) [points] list can also include (x,y) 2-ples and VSGitems  
**varc**(xc=50,yc=15,r=12,ao=0.2,ad=0.4,fill=blue,outline='#223311')  
**vtext**(text="moose",xc=50,yc=15,font='courier 12 Bold') **vtile**(text="...") **vlegend**(<text=>)

**Specifying Positions**

x1=left edge y1=bottom edge  
x2=right edge y2=top edge  
xc=h-center yc=v-center  
width=width height=height  
xr=width/2 yr=height/2  
r=sets xr & yr strokewidth=swidth

**Specifying Color**

(fill='..',stroke='..') black,white,gray,  
green,purple,red,blue,yellow,orange,cyan,magenta,brown,maroon,lime  
=rgb(r,g,b) r,g,b integers 0-255  
=#rrggbb rr,gg,bb two digit hex  
=f<real number> 0.0<f<1.0 linear heatmap  
=i<integer> 0<f<1088 log heatmap  
="string" best-guess (or random, string-specific) color

**Add a link to object** xlink='http://firelab.stanford.edu' | **Add text label to object** label='text'

**Add a mouse action to object** popup='brush your teeth', mouseover='watch your mouse'

**Associate an object with a x,y, or color value:** xg=5,yg=5,colorindex=12

**Draw a grid based on xg/yg values** **vgrid()** **Draw a color key** **vcolorkey()**

**Show/Save drawing** **vdisplay()** (optional: name.type, e.g. 'f1.svg','f1.ps' ...) **Clear** **vclear()**