# Cheatsheet

# **PROPERTIES**

```
.property.value // gives the value of property
```

- .property.keyValue(key) // gives value of property at a keyframe index
- .property.valueAtTime(time) // gives value of proprty at time in seconds

```
var shape = b.rect(100, 100, 100, 100); // all creation functions or effects return a Properties object shape.props(); // print all properties available for animation
```

# **COLOR**

```
b.color(r,g,b,[a]); // creates a color Array from parameters r, g, b, a
b.fill(r,g,b,[a]); // set the color of fill
b.stroke(r,g,b,[a]); // set the color of stroke
b.toRgba(r,g,b,[a]); // Convert from HSBA to RGBA color mode
```

Note: Color can be manipulated in a range of [0 - 255] or [0 - 1] for RGBA, and [0 - 360], [0 - 1] for Hue, [0 - 100], [0 - 1] for Saturation, Brightness and Alpha. Color manipulation of [0 - 1] range is preffered

# **DRAWING**

```
b.solid(); // create a solid
b.rect(x,y,width,height); // draws a rectangle
b.ellipse(x,y,width,height); // draws an ellipse
b.polygon(x,y,radius,n); // draws a polygon of n sides
b.line(x1,y1,x2,y2); // draws a line from one point to another
b.nullLayer(); // creates a null layer
b.strokeWeight(weight); // set the stroke current unit
b.anchorMode(mode); // bounding box position of anchor point mode: 1-9 number
b.set3DMode(mode); // b.ENABLE, b.DISSABLE

b.beginShape([mode]); // start drawing of shape
b.vertex(x, y); // add vertex to shape
b.endShape([close]); // build shape

b.shapeTrimPaths(layer); // apply effect to shape layer (check different types of effects in the documentation)
```

### **TEXT**

```
b.text("text",x,y); // draws string text
b.textAlign(mode); // set text align mode
b.textSize(size); // set text size
b.textFont("Helvetica-Regular"); // set font with type
b.textAnchorPoint(layer); // apply effect to text layer (check different types of effects in the documentation)
```

### **KEYFRAMES**

- b.key(prop, value); // set property value
- b.key(prop, time, value); // set property value at time
- b.interpolationMode(mode); // b.BEZIER, b.LINEAR, b.HOLD set keyframe interpolation mode
- b.spatialMode(mode); // b.LINEAR, b.AUTO\_BEZIER set keyframe spatial mode
- b.speed(prop,index,speed,influence); // manipulates keyframe speed
- b.speedAll(prop, speed, influence); // apply speed manipulation to all keyframes of a property
- b.expression(prop, expression); // apply expression to property

### **LAYERS**

- b.getLayer(name); // get layer by name as Properties object
- b.getAllLayers(); // get Array of all layers in the composition as Properties object
- b.addFX(layer, name); // add and effect to layer
- b.addPreset(layer,path); // add preset to layer
- b.getAllFXProperties(layer); // get all animatable properties from all effects in a layer
- b.trackMatte(layer, mode); // set track matte for layer
- b.getIndex(layer); // get layer index
- b.selectedLayers(); // get manually selected layer from a composition
- b.makeParent(parent,children); // set parent children relationship
- b.anchor(layer, mode); // change anchor point bounding box position for a layer
- b.audioToKeyframes(layer); // create keyframes from amplitude audio analysis
- b.createShapes(layers); // create ShapeLayer from illustrator layer
- b.blendingMode(mode); // set global blending mode for layers

#### //Useful attributes from AE current API

- shape.layer.name // read-only layer's name
- shape.layer.startTime // set and get layer's start time
- shape.layer.inPoint // set layer's in point
- shape.layer.outPoint // set layer's out point
- shape.layer.width // read-only layer's width
- shape.layer.height // read-only layer's height

# **COMPOSITIONS**

- b.getComp(name); // get composition reference by name
- b.setComp(name); // set current composition to work with
- b.cleanComp(); // clean composition from previous created items
- b.background(color); // set background colora
- b.getTotalFrames(); // get total frames of current composition
- b.getDuration(); // get total duration of curret composition
- b.setDuration(); // set total duration of new composition
- b.numLayers(); // get total number of layers current composition
- b.getAllComps(); // get Array of all compositions in project
- b.getCenter(); // get x and y center coordinates of current composition

# **MASKS**

```
b.maskMode(prop,value); // set global mask mode
-
b.beginMask([mode]); // start drawing of mask with mode
b.vertex(x,y); // set global mask mode
b.endMask(layer,[close]); // set global mask mode
-
```

# **DATA**

- b.loadItem(path); // loads an item from data folder: audio, images, illustrator files, video
- b.loadSequence(path); // loads a sequence from data folder
- b.loadAI(path); // loads Al Illustrator file and creates shapes from layers on file

# **RENDER**

- $b. add To Render (comp, template, path); \ // \ add \ compositin \ to \ render \ queue \ in \ AE \ and \ apply \ output \ module \ template \ b. render (); \ // \ render \ AE \ quere$
- b.addToRenderAME(comp, template, path); // add compositin to render queue in Adobe Media Encoder
- b.renderAME(); // render Adobe Media Encoder queue

# **ENVIRONMENT**

Default values are:

/\* go() function is to setup the environment, if none parameter is given it creates a 1920x1080 "untitled" composition with a duration of 10 seconds and 24 frame rate.

```
name: "untitled"
width: 1920
height: 1080
durations: 10 s
frameRate: 24;

Syntax:
b.go();
b.go(name);
b.go(name, duration);
b.go(name, width, height);
b.go(name, width, height, duration);
b.go(name width, height, duration, frameRate);
b.go(name, width, height, duration, frameRate);
```