

SIMPLE OBJECTS

circle (center, size, color)
cone (center, size, color)
cube (center, size, color)
cylinder (center, size, color)
line (from, to, color)
point (center, size, color)
polygon (count, center, size, color)
prism (count, center, size, color)
pyramid (count, center, size, color)
sphere (center, size, color)
square (center, size, color)

ADVANCED OBJECTS

construct (expression, size, color)
 A+B, A-B, A*B, (...)
convex (src, size, color)
group (object, object, ...)
 .add (object, object, ...)
model (filename, center, size)
 .save (filename, [object, object, ...])
surface (center, curve, count, size, color)
text3d (text, fontname, center, size, color)
tube (center, curve, radius, count, size, color)

spline (src, closed, interpolating)
 [[x,y,z], ... [x,y,z]]
spline (function, param1, param2)
 func (u, pl, p2)
splane (src, closed, interpolating)
 [[[x,y,z], ... [x,y,z]],
 :
 :
 [[x,y,z], ... [x,y,z]]]
splane (function, param1, param2)
 func (u, v, pl, p2)

SUICA

```
<script src="suica.js"></script>  
<suica> ... </suica>
```

background (color)
proactive ()
oxyz (size, color)
demo (distance, altitude, speed)
orbit (distance, altitude, speed)
lookAt (from, to, up)

perspective (near, far, fov)
orthographic (near, far)
fullWindow ()
fullScreen ()
stereo (distance)
anaglyph (distance)
vr ()

capture (filename, time, fps, format, skipframes)

LMS

scorm
 .api, .studentName, .score, .getValue (value)
 .setValue (name, value), .derandomize (seed)

EVENTS

onPointerEnter, **onPointerLeave**, **onPointerMove**,
onPointerDown, **onPointerUp**, **onClick**, **onTime**

obj.**addEventListener** (eventName, eventHandler)
obj.**removeEventListener** (eventName)
obj.eventName = eventHandler

function pointerEventHandler (event) { ... }
function timeEventHandler (time, dTime) { ... }

MISC

its
obj.**clone**
obj.**style** ({ name: value, ... })
allObjects ()

findPosition (event)
findObject (event)
findObjects (event)
objectPosition (local)
screenPosition (local, global)

radians (degrees)
degrees (radians)
random (from, to)
random (array)

DRAWINGS

drawing (width, height, color)
moveTo (x, y, x, y, ...)
lineTo (x, y, x, y, ...)
curveTo (m_x, m_y, x, y)
arc (x, y, radius, from, to, cw)
stroke (color, width, closed)
fill (color)
fillText (x, y, text, color, font)
 "bold 20px Courier"
clear (color)

ROPERTIES

center = [x, y, z]
size = width
size = [width, height, depth]
spin = spinH
spin = [spinH, spinV, spinT]
color = 'colorName'
color = 0xFFFFFFFF
color = [r,g,b] r,g,b∈[0.0,1.0]
color = **rgb** (r, g, b) r,g,b∈[0,255]
color = **hsl** (h, s, l) h∈[0,360], s,l∈[0,100]
image = drawing
image = **image** ('fileName')
image = 'fileName'
images = count
images = [count_x, count_y]
wireframe = true/false
count = count
count = [count, count]
threejs = THREE.Mesh
 .material = THREE.Material
 .geometry = THREE.BufferGeometry

Suica 2.0

for JavaScript

<https://boytchev.github.io/suica>