| \# | is |
| :---: | :---: |
| // | === |
| and | isnt |
| \& \& | !== |
| or | not |
| \|| | ! |
| true, yes, on true | false, no, off false |
| @ | @prop |
| this | this.prop |
| v \|| $=\mathrm{x}$ | ** |
| $v=v \\| x$ | exponential operator |
| ARRAYS |  |
| $\operatorname{arr}=[$ |  |
|  |  |
| 3 |  |
| ] |  |
| [1..6] |  |
| ${ }^{* *}$ creates a range of [1, 2, 3, 4, 5, 6] |  |
| [1...6] |  |
| **non-inclusive: [1, 2, 3, 4, 5] |  |
| myArr[2..3] |  |
| ${ }^{* *}$ selects the second and third items |  |
| OBJECTS |  |
| customer = name: "Bob", age:34 |  |
| client = |  |
| name:"Anne" |  |
| age:27 |  |

## NEAT TRICKS

console.log "Hey \#\{name\}, what's up? I was hoping I would find you here." **easy variable escaping with double quotes, block text ignores whitespace.
elvis?
**true if it exists (i.e. not undefined or null)
couldBeFalseOr0 ?= default
-
write.javascript();
if name is "Steve" console.log name
if 4 is 4 then alert "The same!"
mood = "happy" unless monday
coat $=$ if cold "parka"
else
"jacket"

## LOOPS

for number in array number +1
**returns an array with each iteration's result
nums $=($ num +1 for num in arr $)$
for key, value of myObject console.log key, value
count += 1 until count is 10
**'until' is 'while not', loop body can proceed loop

## FUNCTIONS


total $=$ sum $\mathrm{x}, \mathrm{y}$
**can call without parentheses
returnDefault $=($ default $=0)$-> default
${ }^{* *}$ can set defaults in the parameters list
list $=$ (first, others...) -> alert first, others
**splats (var...) are the tail end of JS's 'arguments' array
thisFunc = =>
console.log @
**fat arrow passes in 'this' from outer scope

## CLASSES

class Car
drive: (mpg) ->
class Hybrid extends Car drive: ->
super 50
**extend both parent classes and parent methods, uses pseudoclassical class style

