JavaScript Cheat Sheet

Variables – a “box” we can remember values in

```
var score = 0
var title = “The Best Game”
var highScores = [ 3, 2, 1 ]
var gameLost = false
```

Math

```
var addition       = 1 + 1
var subtraction    = 2 – 1
var multiplication = 5 * 2
var division       = 10 / 2
```

```
SCORE = SCORE + 1
SCORE += 1
SCORE++
LIVES -= 1
LIVES--
```

If statements – making decisions

```
if (youAreHappy) {
    clapHands()
}
```

```
if (SCORE == 10) {
    LIVES = LIVES + 1
}
```

Comparisons

```
if (2 < 1) {
    alert(“Math is broken”)
}
if (myScore == yourScore) {
    tieGame = true
}
```

```
a == b   // they are the same
a < b    // a is smaller
a <= b   // a is smaller or the same
a > b    // a is bigger
a >= b   // a is bigger or the same
a != b   // they are not the same
```

Arrays – keeping lists

```
theRainbow = [“Red”,
“Orange”, “Yellow”, “Green”,
“Blue”, “Indigo”, “Violet”]
```

```
highScores.push(5)
highScores.sort(REVERSE_NUMERICAL)
highScores.pop()
```

While loops – keep going *while* something is true

```
while (stillAlive) {
    doScience()
}
```

```
var myNumber = 3
var myGuess = 0
while (myGuess != myNumber) {
    myGuess = newGuess()
}
```

For loops – looping with numbers

```
// count from 0 to 9
for (i=0; i<10; i++) {
    console.log(i)
}
```

```
// great for arrays!
for (i=0; i<theRainbow.length; i++) {
    ctx.fillStyle = theRainbow[i]
    ctx.fillText("RAINBOW", 10, 20*i)
}
```

Functions – remembering how to do a task

```
function jump() {
    if (PLAYER.y == 0) {
        PLAYER.ySpeed = 300
    }
}
```

```
function getAdvice() {
    return "Make a house before dark"
}
var advice = getAdvice()
console.log(advice)
```