The Kotlin Programming Language: Quick Reference Sheet

Declarations	
var	Variable
val	Value
null	Null
as	Cast to a different type
fun	Function
class	Class
super	Superclass
this	Current object
data	Object for only storing data, no functions
object	Singleton / Single-instance objects
interface	Interface

Strings	
"" or ”	Basic string
""" """	Raw / multiline string
|	Default margin character for raw strings
$	Calls a variable within a string
${}	Interpolates the value of the expression withing the braces
\	Escapes the following character

Null Safety	
null	Null keyword
?	Sets a variable as nullable
!!	Non-null assertion
?.	Performs a safe call on a possibly null variable
?:	Returns the value on the right side if the left side is null
as?	Type-safe casting

Mathematical & Assignment Operators	
+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Remainder
=	Assignment
+=	Additive assignment
-=	Subtractive assignment
*=	Multiplicative assignment
/=	Divisible assignment
%=	Remainder assignment
++	Increment
–	Decrement

Logical & Comparator Operators	
&&	And
||	Or
!	Not
==	Equality
!=	Negated equality
===	Referential equality
!==	Negated referential equality
>	Greater than
>=	Greater than or equal to
<	Less than
<=	Less than or equal to

Ranges	
..	Creates a range (from left-hand number to, and including, right-hand number)
downTo	Reversed range
until	Similar to .., but does not include the last number
step	Defines the iteration step in a range

Control Flow	
if () {}	If statement
else {}	Else statement, may be followed by an additional if
for () {}	For loop
while () {}	While loop
do { } while ()	Do-While loop
break	Breaks a loop
continue	Skips the remaining execution code
return	Function return statement
when () {}	Switch case
->	Separates the parameters and bodies of lambdas when expressions

Modifiers	
open	Allows the function or class to be overridden
override	Declares an overriding function
final	Forbids a member from being overridden
private	Member declared to be only visible within the class
protected	Member declared to be only visible in the class and subclasses
public	Member declared to be visible everywhere
abstract	Makes a class or member's implementation dependent on the specific instance

Miscellaneous	
[ ]	Indexing operator
;	Separates multiple statements on the same line
_	Substitute for unused parameters