Objects Covered Cheatsheet

Part 1a

Object []	What it does	Example Arguments (where applicable)
[bang] button	Blinks when clicked or receives any input. Sends a bang message.	
[toggle]	Clickable switch. Off outputs 0, On outputs 1.	
[slider]	Moveable fader that outputs values (0-127 default). Can be vertical or horizontal.	
[dial]	Moveable circular dial that outputs values (0-127 default).	
[print]	Outputs any message to the Max Console Window. Very, **VERY** useful for debugging or checking values.	
[gain~]	Special slider that scales the volume of an audio signal, similar to a fader on a mixing board. Can be vertical or horizontal.	
[integer]	Displays/outputs an integer. Can be clicked/dragged or you can type it in.	
[float]	Displays/outputs a float. Can be clicked/dragged or you can type it in.	
[number~]	Displays values of an incoming signal (normalized -1. to 1.) or generates a constant signal. Click the icon to change modes.	
[kslider]	Outputs MIDI notes and velocity from an onscreen keyboard.	
[nslider]	Displays and outputs MIDI notes on a grand staff. Positive numbers display as sharps, negative numbers display as flats if applicable.	

Part 1b

Object []	What it does	Example Arguments (where applicable)
[+], [-], [*], [/]	Standard math object to combine multiple signals.	Specify for floats - [+ 0.]
[pow]	Raises the left input value to the power of the right or argument	Specify for floats - [pow 2.]
[sqrt]	Calculates the square root of the input	
[maximum]	Outputs the highest value when triggered in the left inlet.	Init value or float
[minimum]	Outputs the lowest value when triggered in the left inlet.	Init value or float
[abs]	Outputs the absolute value of an incoming number.	Specify for floats - [abs 0.]
[expr]	Evaluates a mathematical expression similar to C.	Too many! See the help.
[%]	Modulo - divides two numbers and outputs the remainder	Specify for floats
[<], [<=]	Logical less than and less than or equal to. Outputs 1 for true, 0 for false.	Specify for floats
[>], [>=]	Logical greater than and greater than or equal to. Outputs 1 for true, 0 for false.	Specify for floats
[==], [!=]	Logical equal to and not equal to. Outputs 1 for true, 0 for false.	Specify for floats
[||]	Logical OR - outputs 1 if either number is non-zero, or 0 if **both** numbers are zero.	Specify for floats

[&&]	Logical AND - outputs 1 if **both** numbers are non-zero, or 0 if either number is zero.	Specify for floats
[decide]	Randomly outputs 1 or 0 when it receives a (bang).	
[random]	Generates a random number from 0 to N-1, where N is the argument, every time it receives a (bang).	[random 25]
[urn]	Generates a random number from 0 to N-1, where N is the argument, every time it receives a (bang). But without the possibility of duplicates. When it's used all the numbers, it outputs a (bang) from the right outlet and must be reset with (clear) to generate more numbers.	[urn 25]
[del]	Delays a bang by a specified number of MS.	[del 500]
[uzi]	Outputs a rapid-fire sequence of (bang)'s set by the argument.	[uzi 200]
[counter]	Keeps count of (bang)'s received. Set the mode and max value with the arguments (see the help).	[counter 0 1 4] counts in an upward loop from 1-4
[join]	Joins multiple untyped items into a single list. Set the number of items with the argument and use @triggers to set which inlets are hot.	[join 3 @triggers 0 1]
[route]	Routes the incoming signal to the outlet specified as the first value in an incoming list. Can be integers or symbols.	[route 1 w 3 foo]