From Scratch to CoBlocks
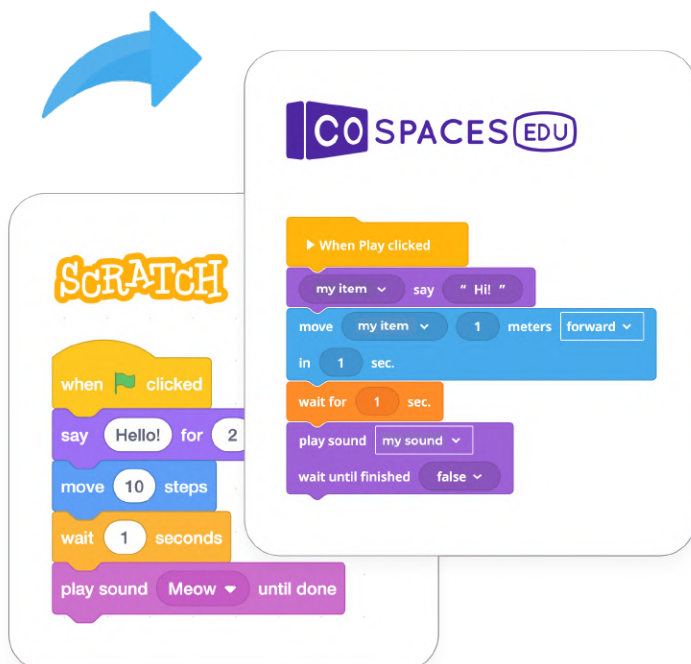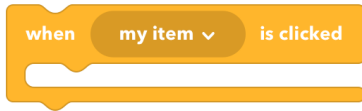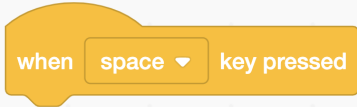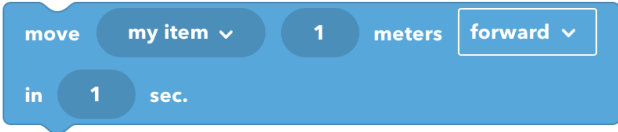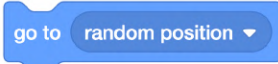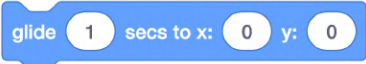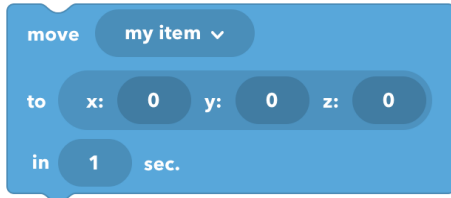
Last updated: April 2021
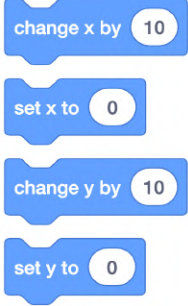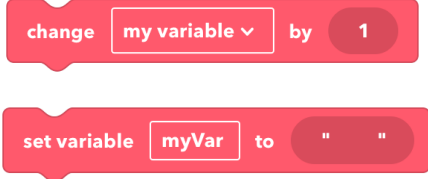
Side-by-side comparison of the key coding blocks
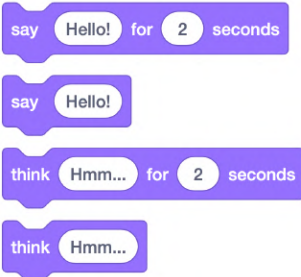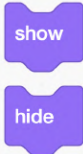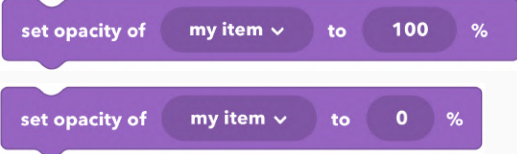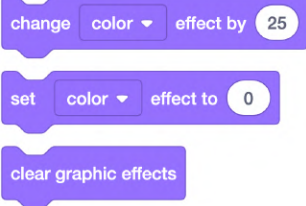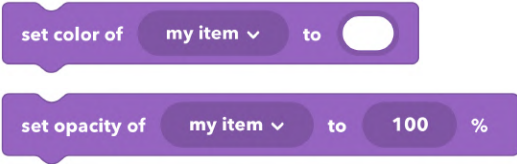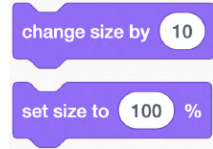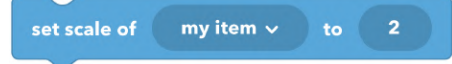
Scratch   CoBlocks

Events	Events
when ⚑ clicked	when [my item ▾] is clicked
when [space ▾] key pressed	when [up ▾] key is [pressed ▾]
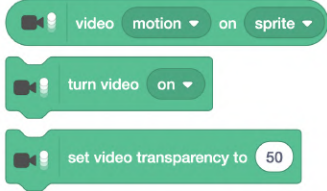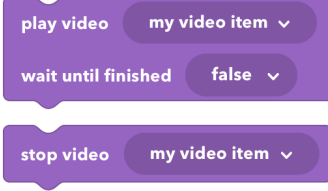
Motion	Transform
move (10) steps	move [my item ▾] (1) meters [forward ▾] in (1) sec.
turn ↻ (15) degrees turn ↺ (15) degrees	turn [my item ▾] [clockwise ▾] by (180°) by (1) sec.
go to [random position ▾] go to x: (0) y: (0) glide (1) secs to x: (0) y: (0)	move [my item ▾] to x: (0) y: (0) z: (0) in (1) sec.
☐ x position ☐ y position ☐ direction	direction of [my item ▾] position of [my item ▾]

Motion	Data
change x by `10`	
set x to `0`	change `my variable ⌄` by `1`
change y by `10`	
set y to `0`	set variable `myVar` to `"    "`

Looks	Actions
say `Hello!` for `2` seconds	
say `Hello!`	`my item ⌄` say `" Hi! "`
think `Hmm...` for `2` seconds	
think `Hmm...`	`my item ⌄` think `" Hm... "`
show	set opacity of `my item ⌄` to `100` %
hide	set opacity of `my item ⌄` to `0` %
change `color ⌄` effect by `25`	
set `color ⌄` effect to `0`	set color of `my item ⌄` to ⬭
clear graphic effects	set opacity of `my item ⌄` to `100` %

Looks	Transform
change size by `10`	
set size to `100` %	set scale of `my item ⌄` to `2`

Sound	Actions
play sound Meow ▾ until done start sound Meow ▾	play sound my sound ⌄ wait until finished false ⌄
stop all sounds	stop sound my sound ⌄

Control	Control
wait 1 seconds	wait for 1 sec.
repeat 10 forever	repeat 1 times forever

if then
 if then
 else
 wait until
	if 1 < ⌄ 2
	 if 1 < ⌄ 2 ⚙
	 else

wait until repeat until stop all ▾	repeat while ⌄ false ⌄ break out of loop

Video Sensing	Actions
video motion ▼ on sprite ▼ turn video on ▼ set video transparency to 50	play video my video item ▼ wait until finished false ▼ stop video my video item ▼

Operators	Operators
( ) + ( ) ( ) - ( ) ( ) * ( ) ( ) / ( )	1 + ▼ 1
pick random 1 to 10	random integer from 0 to 100 random number from 0 to 1
( ) > 50 ( ) < 50 ( ) = 50	1 + ▼ 1
( ) and ( ) ( ) or ( ) not ( )	false ▼ and ▼ false ▼ not false ▼