**Scratch 101: Instructions using Common Blocks**

When you open a new Scratch project, you should see a cat “sprite” (character) in the middle of the stage. Follow the steps below (#1) to change features of the cat using blocks from the LOOKS, CONTROL and EVENTS script menus.

**#1 Change Color (and other features) of Your Sprite**

* Click on the LOOKS menu (purple)
* Drag the “Change Color Effect by 25” block into Scripts workspace
* Click on the EVENTS menu (brown)
* Drag the “When Space Key Pressed” block into Scripts workspace and snap on top of the other block
* ACTIVATE: Click the Space Key on your keyboard one or more times

Try changing the drop down choices (“space” and “color”) and/or effect number (“25”) on the different blocks to see what happens! **Click the red octagon icon (Stop Sign) above the stage to reset to the original form.**

* Delete the “When Space…” block by first separating it from the “Change Color Effect by 25” block (click on the bottom block and pull down to separate from the top block).
* Next, click on the Scissors icon on the top bar above the stage and then click on the “When Space…” to delete it.
* From the CONTROL menu (tan), drag the “Forever” block into workspace and wrap around the “Change…” block
* From the EVENTS menu, drag the “When [green flag] clicked” block into workspace and snap on top
* ACTIVATE: Click the green flag icon above the sprite (click red octagon icon to stop)

**#2 Change Your Sprite**

* Click on the Scissors icon (Delete) above the stage and then click on your sprite with the scissors. **Note: This will delete not only the sprite from the stage but all of the code (blocks) associated with that sprite.**
* Then look for the “New Sprite” icons in the right-bottom corner workspace
* Click on the first icon besides the words “New sprite:” (the icon looks like an elf)
* From the Animals folder, choose a new sprite then experiment with changing color (see #1 above)

Try adding additional new sprites to the sprite screen. You can have multiple sprites on one screen, but each has its own “Scripts” workspace – you will need to add separates action blocks for each sprite.

**#3 Make Your Sprite Move to a Beat**

* Delete any existing sprites using the scissors icon (see #2 above)
* Add a new sprite (see #2 above) – specifically, the “Cassy Dance” sprite from the People folder
* Click on the MOTION menu (blue)
* Drag the “Move 10 steps” block into Scripts workspace
* Click on the SOUND menu (pink)
* Drag the “Play drum 1 for 0.25 beats” block into Scripts workspace; snap underneath the “Move…” block
* Click on the stamp icon (Duplicate) above the sprite screen – it’s to the left of the scissors icon
* Grab the blocks already in the Scripts workspace and pull down; the blocks with be duplicated and you can snap the new pair to the bottom of the original so you have four blocks in all
* Change the number of steps in the second “Move…” block to -10 (instead of the default of 10)
* Change the drum in the second “Play…” block to a different beat like 7:Tramborine
* From the CONTROL menu, drag the “Forever” block into workspace and wrap around the set of four blocks
* Finally, drag the “When [green flag] clicked” block from EVENTS into workspace and snap on top of other blocks
* ACTIVATE: Click the green flag icon above the sprite (click red octagon icon to stop)

Try changing the number values for the move blocks, drums, and beats to see what happens. You can also try different characters – including multiple sprites at the same time – you just have to add scripts for each.

**#4 Add a Backdrop**

* Click on the Stage icon below the main stage (small white box with the label “Stage” underneath)
* Click on the “Backdrops” tab in the middle section of the program (instead of the default “Scripts”)
* Backdrop1 is the default white background; use the paint tools to customize the background - your changes will automatically save and appear behind your sprite
* Now, click on the “Choose backdrop from library” button in the New Backdrop section (looks like two mountains with a sun) and select a backdrop from one of the folders
* That should be the new backdrop for your sprite, but you can still switch back to Backdrop1 if needed

Try customizing your imported picture using the paint tools.

**#5 Animate a Sprite Using Different Versions of the Same Character**

* If you deleted it previously, add the “Cassy Dance” sprite again
* Now click on the “Costumes” tab in the middle section of the program (instead of the default “Scripts”)
* You will notice different versions of the same sprite
* Now, go back to the “Scripts” tab for Cassie and click on the LOOKS menu (purple)
* Drag the “Next costume” block into Scripts workspace
* Click on the CONTROL menu (orange)
* Drag the “Wait 1 secs” block into the workspace; snap the block below the “Next costume” block
* Next, drag the “Forever” block into workspace and wrap around the current stack of two blocks
* Finally, drag the “When [green flag] clicked” block into workspace and snap on top of other blocks
* ACTIVATE: Click the green flag icon above the sprite (click red octagon icon to stop)

Try changing the seconds number value to make the animation go quicker (0.5) or slower (2).

**#6 Add Music to a Scene** (continuation of Activity #5)

* Click on the “Sounds” tab in the middle section of the program (instead of the “Scripts”)
* Click the “Sound Library” icon (looks like a speaker); from the Music Loops folder, select HipHop and click “OK”
* Now, go back to the “Scripts” tab for Cassie and click on the SOUND menu (pink)
* Drag “Play sound HipHop until done” block into the Scripts workspace (not be connected to the other stack)
* Click on the CONTROL menu (orange)
* Drag the “Forever” block into workspace and wrap around the “Play sound…” block
* Finally, drag the “When [green flag] clicked” block into workspace and snap on top of other blocks
* ACTIVATE: Click the green flag icon above the sprite (click red octagon icon to stop)

Try importing a new sound via the “Sounds” tab in the middle section and then changing the “Play sound…” block in Scripts workspace. You can also change the sprite to a different one that has multiple versions of the same person.

**#7 Experiment!**