**Scratch Introductory Tutorials from MIT at:** [**http://scratch.mit.edu/help/videos/#**](http://scratch.mit.edu/help/videos/)

**Objectives/Goals:** Students will learn how to use basic tools within the Scratch program to create animations, simple games and stories and save with a file name within the online Scratch environment.

**Instructions:**

* Students will participate in class instructional activities, including watching each instructional video.
* Students will then use the tools demonstrated in each video to recreate the Scratch program shown.
* Students will save each mini program within their online Scratch account, using the file name specified by the teacher.
* Students will share their Scratch programs files with the teacher as directed.

**Introductory Tutorials Overview with Key Steps:**

1. Make your sprite move forward – save the Scratch program file with the name, “Move\_Forward”

Students will learn how to use:

* **Motion > Step** with the
* **Events > Green Flag** block

1. Make your sprite spin – save Scratch program file with the name, “Sprite\_Spin”

Students will learn how to use:

* the **Motion > Turn** with the
* **Events > Green Flag** block

1. Make your sprite change color – save file with the name, “Change\_Color”

Students will learn how to use:

* the **Looks > Change Color** block

1. Make your sprite dance – save as “Sprite\_Danced”

Students will learn how to:

* delete/add a sprite, use the
* **Looks > Next Costume** block with the
* **Control > Forever** & **Wait** blocks, with the
* **Sound > Play Sound** blocks

1. Make your sprite follow the mouse – save as “SpriteFollowsMouse”

Students will learn how to use:

* the **Motion > Point Towards** & **Move Steps** blocks with the
* **Control > Forever** blocks and the
* **Events > Green Flag** block

1. Make your sprite glide – “Sprite\_Glide”

Students will:

* Change the sprite & learn how to use the
* **Motion > Glide** blocks, along with
* **Sound > Play Sound** block

1. Make your sprite jump when you clap – “SpriteJumpClap”

Students will learn how to use:

* the **Motion > Set y** block with the
* **Sensing > Loudness** block and the
* **Control > Forever** block and the
* **Operators > Multiplication** block

1. Make your sprite spin when you say something – save file as “SpriteSpinSay”

Students will learn how to use:

* the **Sensing > Loudness** block with the
* **Control > If\_ then** block, and the
* **Operators > block** and **Motion > Turn** blocks, along with the
* **Control > Forever** loop block

1. Make a simple game – save file as “SimpleGame”

Students will learn how to use the:

* **Delete/Add Sprite** with the
* **Reduce size** tools with the
* **Control > Forever** block along with the
* **Motion > Move \_ Steps** block & the
* **Motion > If on edge, bounce** block & the
* **Motion > Point in direction** block & the

***\*\*****Add a 2nd sprite\*\**

* **Event > When \_ key pressed** with the
* **Motion > Steps** and
* **Duplicate icon tool**
* **Control > If\_then** block
* **Sensing > Touching** block
* **Sound > Play sound\_until done** block
* **Control > Stop** block
* Embedding the **If\_then** block within the **Forever loop** block

*\*\*Add a 3rd sprite\*\**

* & modify movement with the **Costumes** tools
* **Event > Green flag** block with the
* **Motion > Go to X:\_y:\_** locationblock
* **Control > Wait until\_** “touching” block with
* **Sensing > Touching** block then
* **Event > Broadcast message** block with the
* **Event > When I receive message** block with “key” sprite
* **Sound > Play Sound\_until done** block
* **Control > Stop** “all” block

*\*\*additional sprites can be added to increase the difficulty of the game\*\**

1. Make a story – save file as ScratchStory”
   * More practice with deleting the default “cat” sprite & adding in 2 other sprites
   * Use the “new backdrop” icon to add a background & then delete the white backdrop
   * Use **Event > Green flag** block again
   * **Looks > Say\_for \_secs** block
   * **Event > Broadcast** “new message” block to add in dialog for 1st sprite
   * **Event > When I receive** “new message” then
   * **Looks > say\_for\_ secs** block
   * Use another **Event > Broadcast** “new message” blockto add dialog for 2nd sprite

*\*\*You will use at least 2 sets of When I receive, Say\_for\_secs & Broadcast “new message” blocks for each sprite, in order to create a back and forth conversation between the 2 sprites in your story\*\**

* Add in a 2nd new backdrop using the **New Backdrop tools**

\*\*While the new backdrop is selected, create a new script to make the backdrop change based on an an Event & Looks\*\*

* **Events > Green flag** block
* **Looks > Switch backdrop to\_** block (for 1st backdrop)
* **Events > When I receive**\_ block
* **Looks > Switch backdrop to\_** block (for 2nd backdrop in story)