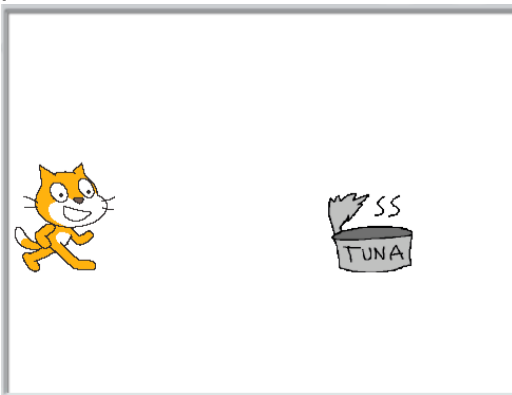




Introduction to Scratch:

Basic Animation

Step 1: Click the **Paint new sprite** icon. Use the drawing tools to draw a can of tuna and then click **OK**. Make sure your new sprite is selected and change its name to 'tuna' in the 'Current sprite info'. Now change the name of 'sprite1' to 'Mr.Kitty'. Now move your sprites in position to match the picture below.



Step 2: Click on the **control** tab in the blocks palette. Drag the first block with a picture of a flag on it into the **scripts area**. This block says when the green flag is clicked start running this script. Your script should so far look like the picture below.



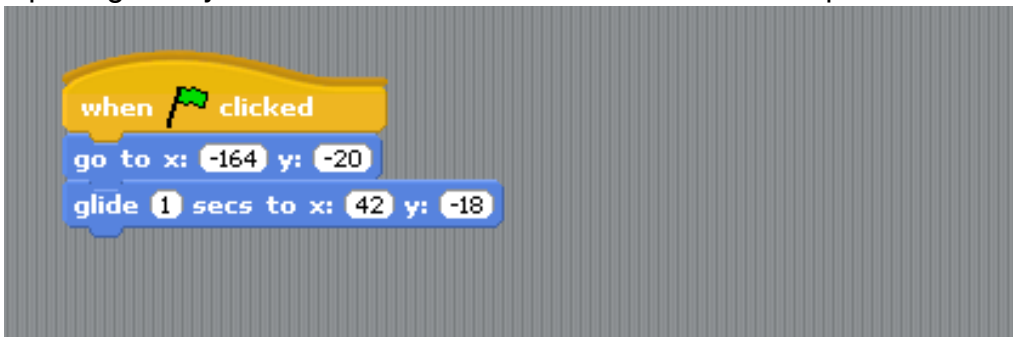
Step 3: Now we'll tell our sprite what to do once the flag is clicked. Click on the **Motion** tab in the blocks palette. Drag block with the word 'Glide' on it. Now change the **x**: to **42** , change the **y**: to **-18**,

and the seconds to 1. What this will do is have 'Mr.Kitty' glide to these coordinates in the time of 1



second.

If you now test your script you'll notice your sprite won't return to it's default position, so lets tell scratch to start our character in the spot we want it to start from using the **go to x: y:** block and inputting the xy coordinates we want it to start at as in the picture below.

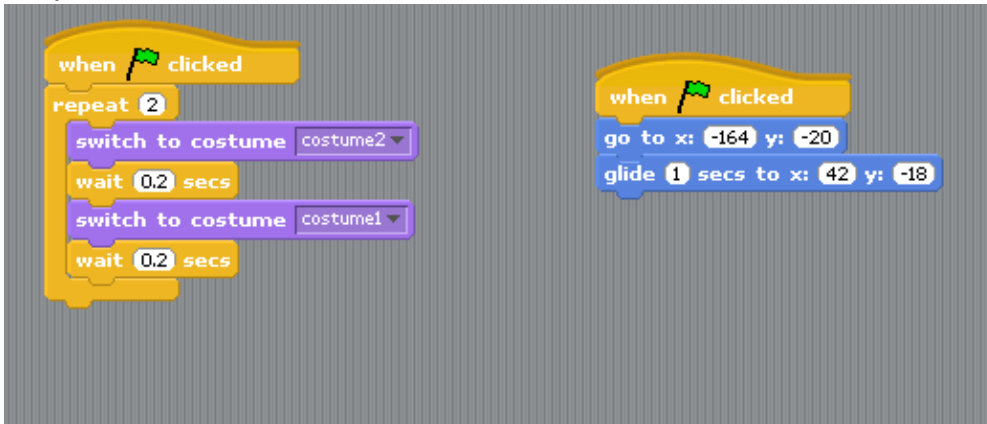


Step 4: This works out great but what if we want 'Mr.Kitty' to look like he is walking while he glides. For this we'll start a new line of script so that he will walk while he glides. First we click the **Looks** tab on the blocks palette and drag out two **switch to costume** blocks. Then we change one to **costume 2**. Now if we put these two blocks together and click them nothing happens: This is because the change is happening so quick we can't see it, so lets slow it down. Click the **Control** tab and the drag out two **wait 1 sec** blocks and place them alternately as shown in the picture.



We need this script to repeat if we want it to look like the cat is walking so we click the control tab and drag out a **repeat** block and change the number to 2. Then we drag our text into the repeat block.

And since we have a new piece of script we'll need to top it all off with a green flag block. So far our script area should look like this.



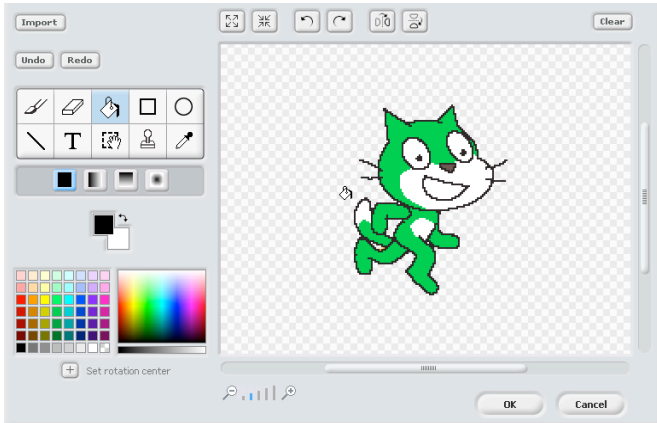
Step 5: Now we want to go back and add some more script to 'Mr.Kitty'. When 'Mr.Kitty' reaches the tuna we want him to let out a meow of joy! To do this we click on the sound tab and take out **play sound meow until done** block. This block lets you select any of the sounds you have saved in your sprite. Since we want a meow we'll just leave it at the default sound 'meow'.



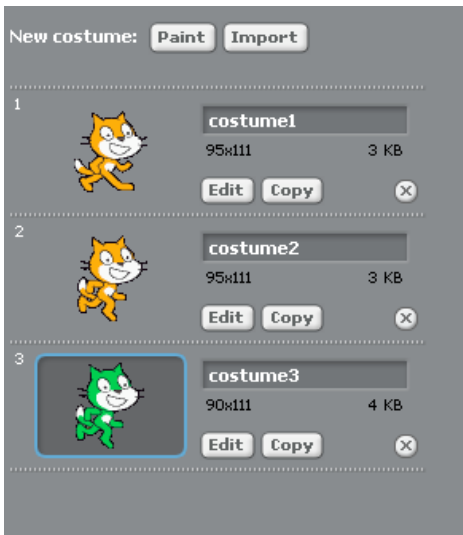
Step 6: Now we want 'Mr.Kitty' to say something. Drag out a **say Hello! For 2 secs** block any type in 'YUMMY!!!' and change the secs to 2.



Step 7: Now we want 'Mr.Kitty' to turn green. Click the **Costumes** tab in the **Current Sprite Info** window. Click the **Copy** button underneath **costume2**. You'll see a copy of costume2 appear named **costume3**. Click edit under **costume3** and use the bucket tool to color 'Mr.Kitty' green like so.



Your new costumes should look something like the picture below.



Now we add a **switch to costume [costume3]** block at the bottom of our script along with a **wait 2 secs** block. Now 'Mr.Kitty' will turn green and wait for two seconds before continuing.



```
when clicked
go to x: -164 y: -20
glide 1 secs to x: 42 y: -18
play sound meow until done
say YUMMY!!! for 2 secs
switch to costume costume3
wait 2 secs
```

If you test your script you'll notice your sprite won't return to it's default costume, so like we did with the position lets add some new code at the beginning to make sure our sprite starts with the proper costume. Add another **switch to costume** to the front of the text and set it to **costume 1** as in the picture below.



```
when clicked
switch to costume costume1
go to x: -164 y: -20
glide 1 secs to x: 42 y: -18
play sound meow until done
say YUMMY!!! for 2 secs
switch to costume costume3
wait 2 secs
```

Step 8: In this step we'll have 'Mr.Kitty' say he thinks he's sick, turn around, and run away. First click the **Looks** tab and get out a **think Hmm... for 2 secs** block. Place the block at the bottom of your script and type "I think I'm going to be sick" in place of the default "Hmm...". Now under the **Motion** tab find and drag out a **point in direction** block and change the number to **-90**. Also be sure to add a **'point in direction set to 90'** block at the beginning of the script so our sprite starts facing the right direction. Get out a **move 10 steps** block and under the **Control** tab drag out a **forever** block. We are going to place the **move 10 steps** block inside the **forever** block. The forever block works like the **repeat** block only it will repeat a script forever. Now you're done and your script should look like this.

