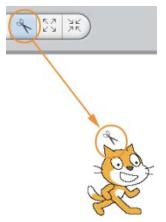**Scratch**
One hour introduction to animation with Scratch

1) Open Scratch (or click the "New" button if its already open)

2) Whenever you create a new project in Scratch you'll get a cat sprite to start with. We want folks to make their own drawings. Use the scissors to cut the cat or sprite out

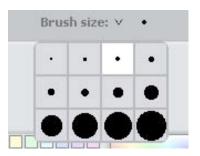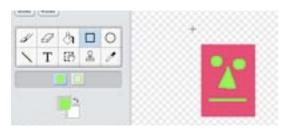3) Make a new sprite by clicking on the paintbrush (new sprite) button

4) When the Paintbox window comes up, click on the smallest magnifying glass to zoom out all the way…

5) Play with the different tools: Paintbrush, Eraser, Paint bucket (Fill) Rectangle tool, Ellipse tool, Line tool, Text tool, Select tool, Stamp tool and Eyedropper.

If you click on "Brush Size" you can change the size of your paintbrush or eraser.

6) Try drawing one object – keeping it simple – a face or bug or ?
   Don't draw the background. We'll do that later

Here's a simple rectangular face…

Click the "OK" button when you're satisfied with your simple drawing.

Next we'll look at your sprite's costumes and create another to animate your sprite…

7) Click the "Costumes" tab for your sprite in the center area of the Scratch program
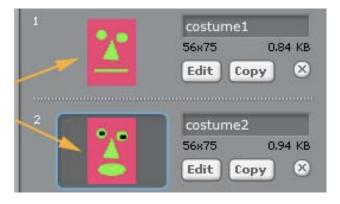
Scripts   **Costumes**   Sounds

8) This will show the costume you just created… click the "Copy" button and this makes an exact copy.

costume1
56x75   0.84 KB
Edit   Copy   ✕

9) Next to the copy of the drawing ("costume2" in this case) click the "Edit" button. We're going to make some small changes to the copy.

costume2
56x75   0.84 KB
Edit   Copy   ✕

10) Click "OK" and you'll see the two costumes of your sprite. To preview the animation, you can click once on each costume icon, back and forth between the two and your sprite will animate!

costume1
56x75   0.84 KB
Edit   Copy   ✕

costume2
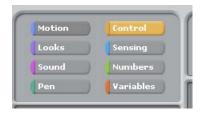56x75   0.94 KB
Edit   Copy   ✕

11) Next we want to create a **script** to make the sprite animate. We'll do this by clicking on the "Scripts" tab and dragging out blocks to create our program
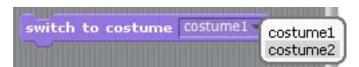
Scripts   Costumes   Sounds

12) Look at the top left are the colored buttons that open the different programming block types. Click the "Looks" button and find the "switch to costume name#" block:

Motion   Control
Looks   Sensing
Sound   Numbers
Pen   Variables

13) Click on the little black arrow next to the name. You'll see a list of the names of all the costumes

14) Back above the blocks click the "Control" button and find the "wait" block. Drag this out and snap it under the "switch to costume" do this again to make this pattern of blocks:

15) One of the blocks has one costume name and the other has the second name. Also the time has been changed from 1 second to 0.1 seconds.

16) Pull out a "Forever" block under the "Control" and then drag the whole script inside the forever block… (you should see a little white line - "glue" - show up when its close enough to stay).

17) Okay! now drag out the Green Flag block and snap it on top so our animation will start when you click the Green Flag button.

18) Click the Green button and your animation should move on its own. It won't stop animating until you click the "Stop" button.

Congratulations! You've created a Scratch animation