SCRATCH INTRODUCTION

Activity description: introduction to Scratch

Age level: 8+

Time frame: 1 hour (additional time could be used to allow students to try experimenting with things on their own)

note: pair programming (working in pairs on one computer) is great for this activity although working individually is also fine.

Introduction

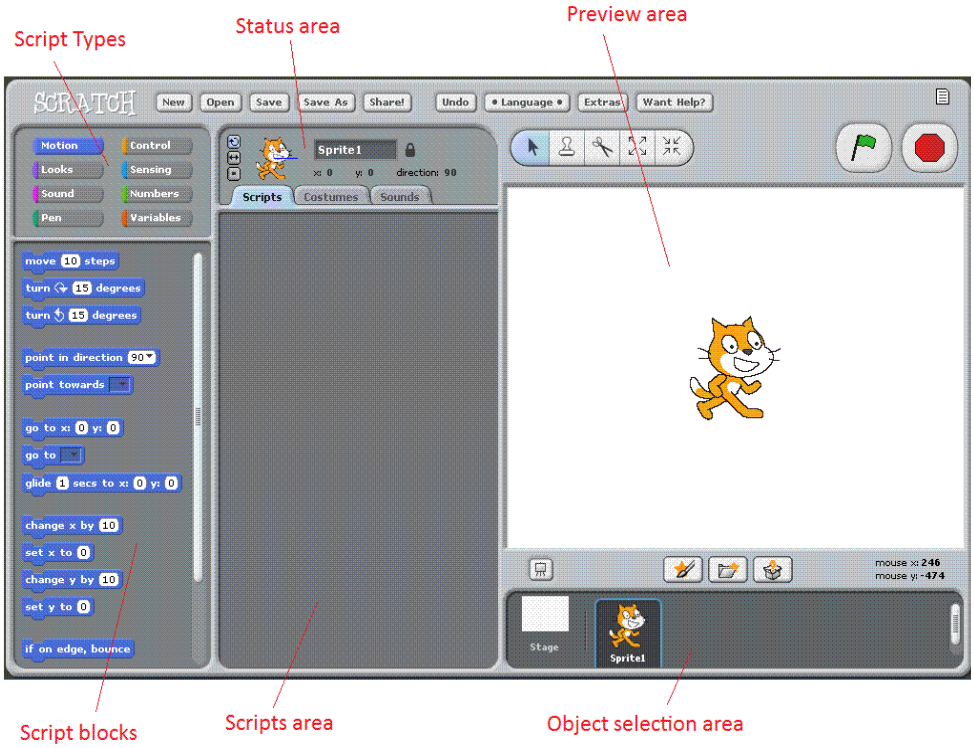
If you have never used Scratch then you might find it a bit intimidating. Don't worry, we'll get you started and you'll never look back!

Step 1 – starting up Scratch

Scratch can be used on the internet by going to http://scratch.mit.edu
You might also have it installed on your computer if you're using a University of Lethbridge machine. Ask your activity leader for instructions as to how to start up Scratch.

Step 2 – learning what's on the screen

Take a look at this picture. Can you match up the parts we have labeled with what's on your screen?



Step 2 – getting started: making your sprite move

- the cat shown on the screen is your sprite. We'll learn later how to change what he looks like
- click on the blue Motion button (at the top under Script types)
- find the 

block and drag it to your Scripts area.
- **double click** on it – does your Sprite move?
- now try changing the number – click on it and type a new number.

TIP: If your sprite goes too far you can drag it back to the center of the stage (or preview area).

Step 3 – more movement

- there are lots of movement blocks that you can choose from. Try the turn block.
- you can drag it to your Scripts area and **join it** with the move block. Now double-click on the top block (doesn't matter which you put on top) and BOTH blocks will be executed.
- Try changing it so that your sprite makes a 90 degree turn. Just click in the white part of the block and type 90.

TIP: You can get rid of blocks by dragging them back to the blocks window.

ANOTHER TIP: To disconnect two blocks drag the **bottom** block away.

Step 4 – fancy stuff

- now you might get a bit bored double-clicking on your blocks just to make your sprite move a bit. So let's make it move **forever**.
- Build this script:

you'll find the forever block with the Control block types

TIP: You can stop a script from running by clicking on the red stop sign in the top right corner.

- You know, if your sprite had a pen dragging along behind it then it might draw really neat pictures. Find the pen down block (with the Pen blocks) and drag it to your scripts area. (you don't need to join it to the other block unless you want to).

- Double click on it and then run your "forever" script again.

TIP: Turn the pen "off" by dragging the pen up block to your scripts area and double-clicking on it.

Step 5 – sound

- if you look at the Sound blocks you might find something interesting. Try dragging this block to your scripts area:

TIP: I have no tips for sound. JUST TRY IT!

Step 6 – backgrounds

- so far all of your experimentation has been with sprites. But you can also play with the stage – click on the stage and try stuff!

Conclusion

You've now been introduced to a very small part of what you can do with Scratch. The best way to learn more is to simply try stuff! The question is now, *WHAT WILL YOU DO WITH IT?*