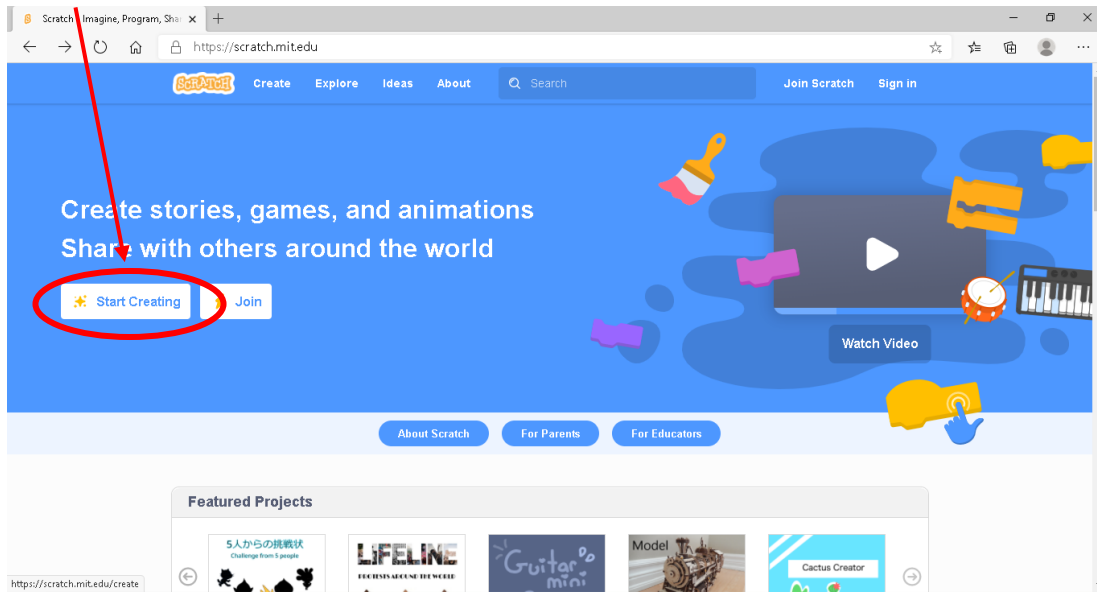


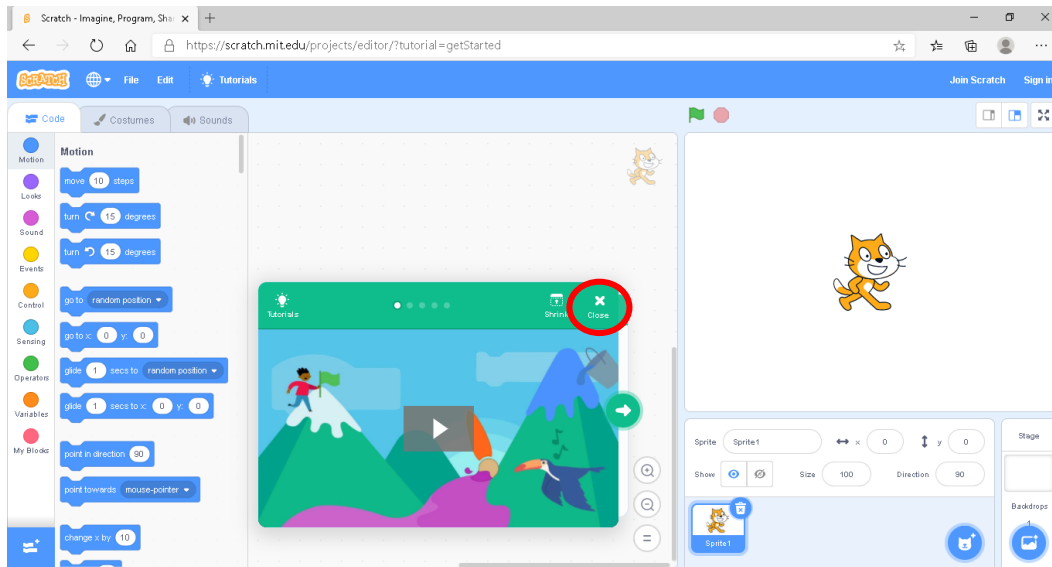
Computing – Scratch

Session 2 (Creating A Sprite) Helpsheet:

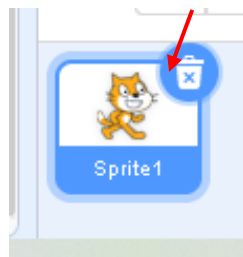
1. Go online to <https://scratch.mit.edu/> . This opens the webpage shown below. Click on **Start Creating**:



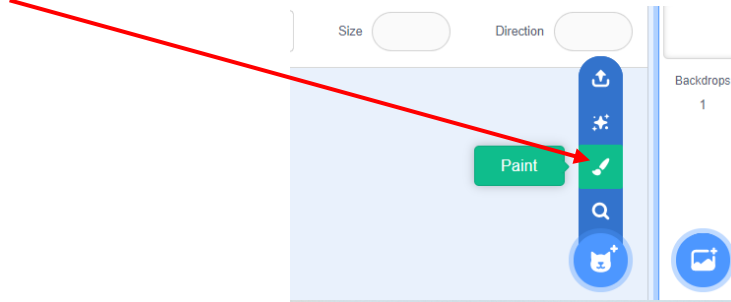
2. Scratch will open a new project. Close the tutorial video by clicking on the small **x** in the corner to clear your code area:



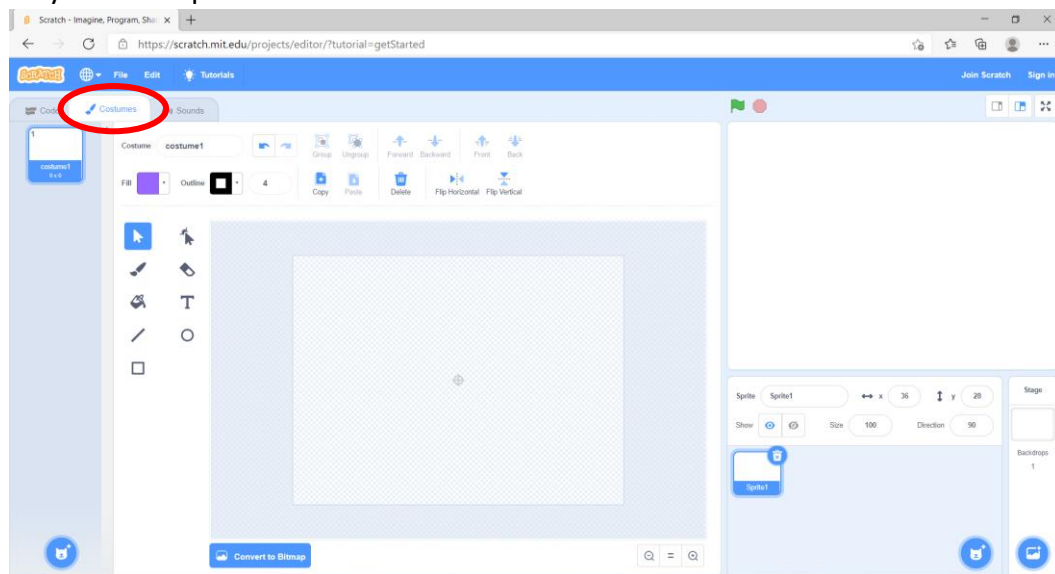
3. Today's challenge is to create your own sprite character. So to begin with we need to get rid of the cat sprite by clicking on the **rubbish bin** shown in the corner:



4. Next, place your mouse over the **'Choose a Sprite'** button and then move up to click on **'Paint'** (the paintbrush icon):

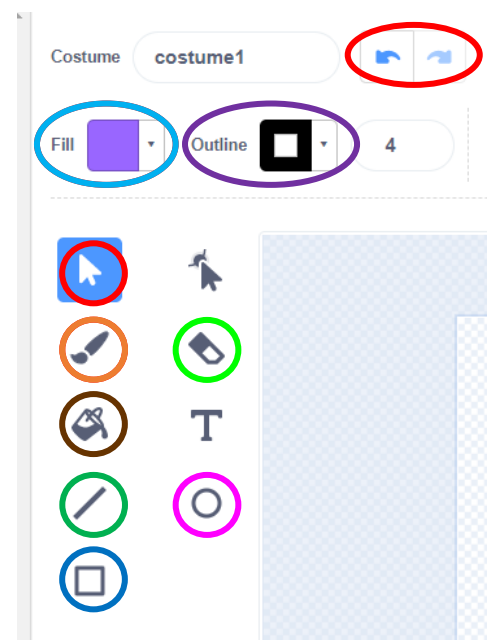


5. This will open up the **'Costumes'** tab, where you will be able to use the drawing tools to create your own sprite character:



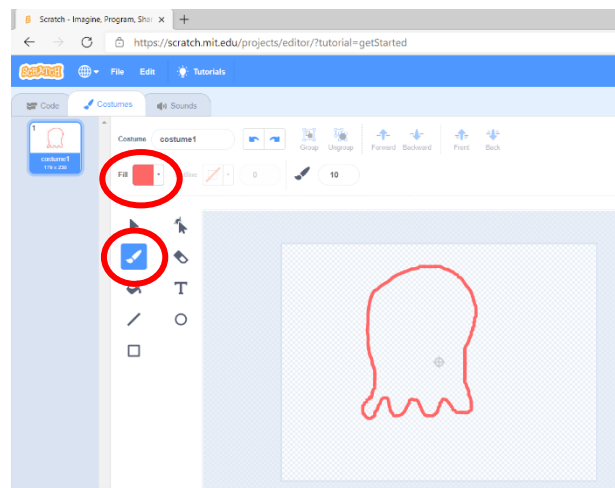
6. There are lots of tools you can use to draw your own sprite:

- **'Brush'** – this lets you draw/paint any line or shape you want to create.
- Before you begin painting with this tool, use the **'Fill'** drop down arrow button to choose the colour you want.
- The **'Select'** tool enables you to click on the elements you have drawn and move them around.
- The **'Line'** tool allows you draw straight lines.
- Again, choose a colour before you begin drawing the line you want, but this time use the **'Outline'** drop down arrow button to select a colour.
- The **'Rectangle'** tool allows you to draw squares and rectangles.
- The **'Circle'** tool allows you to draw circles.
- The **'Fill'** bucket allows you to fill in any closed, hollow shapes with a colour of your choice.
- There is an **'Eraser'** tool which lets you rub out any mistakes.
- Finally, the **'Undo'** and **'Redo'** buttons are helpful when you are creating!

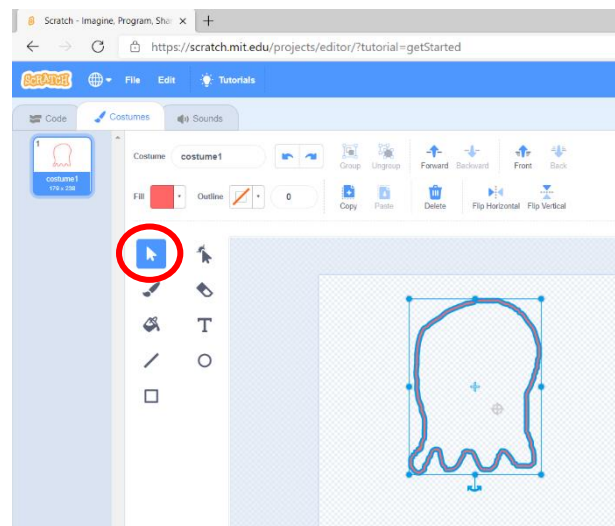


7. Have an experiment with the tools to see what you can do! Then press the **'Undo'** button until your drawing area is clear again and you are ready to start creating a sprite.

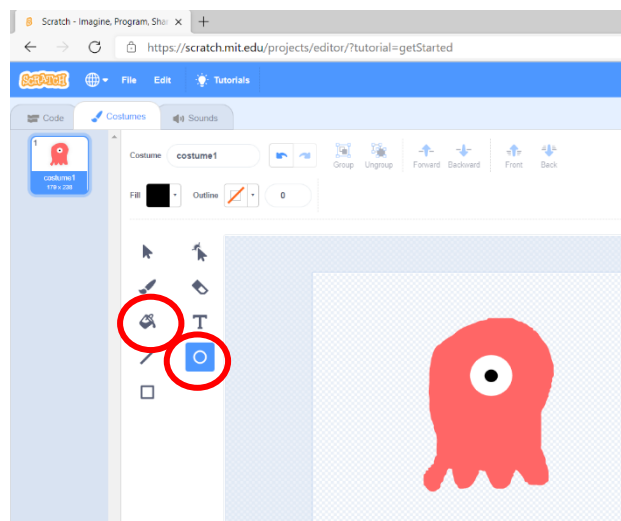
8. We are going to create an alien creature! Begin by selecting the **'Brush'** tool and select the colour you want using the **'Fill'** drop down arrow button before you begin drawing. Draw your alien shape (making sure the lines create a closed shape). You can copy my alien design or make yours different by drawing different shapes and using different colours. It's up to you!



9. Next click the **'Select'** tool and then click on your drawing and move it into the centre of the page:

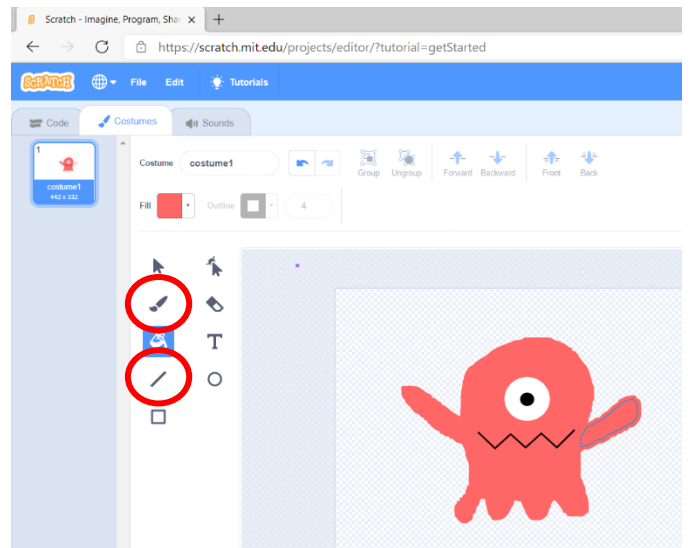


10. Use the **'Fill'** bucket tool to fill your drawn shape with colour and then use the **'Circle'** tool to draw some eyes. Remember to choose the fill and outline colour before you start to draw:

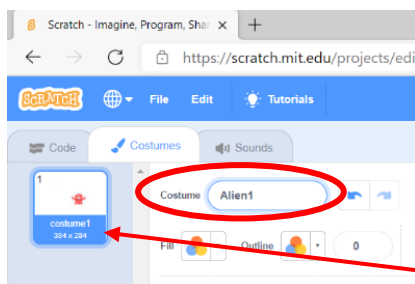
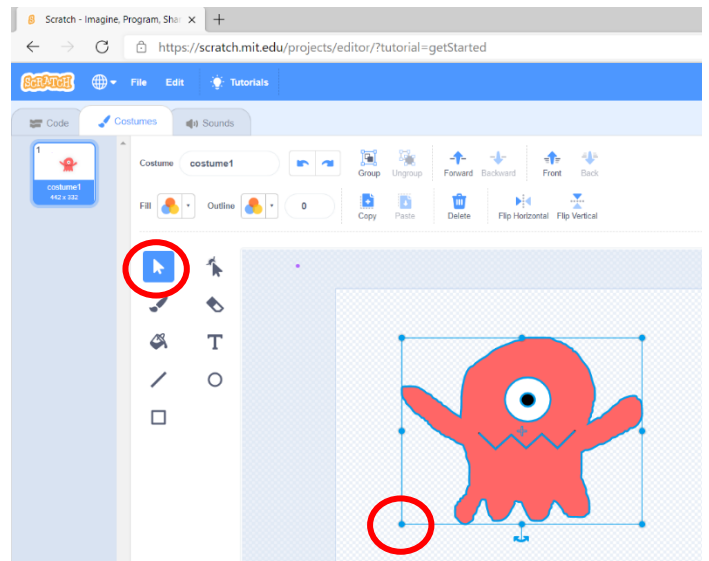


11. Use the **'Brush'** tool to draw some arms on your alien and then use the **'Fill'** bucket to fill these arms with colour:

12. Use the **'Line'** tool to draw a mouth (again choose a colour before you begin to draw):

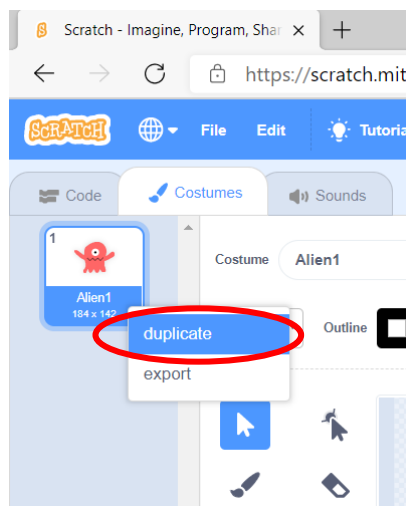


13. Use the **'Select'** tool to draw a box around your alien. Then click and drag one of the corner dots to resize your drawing and make it smaller. Again move your drawing to the middle of the drawing board:



14. Rename your finished alien design as **Alien1** in the **'Costume'** text box:

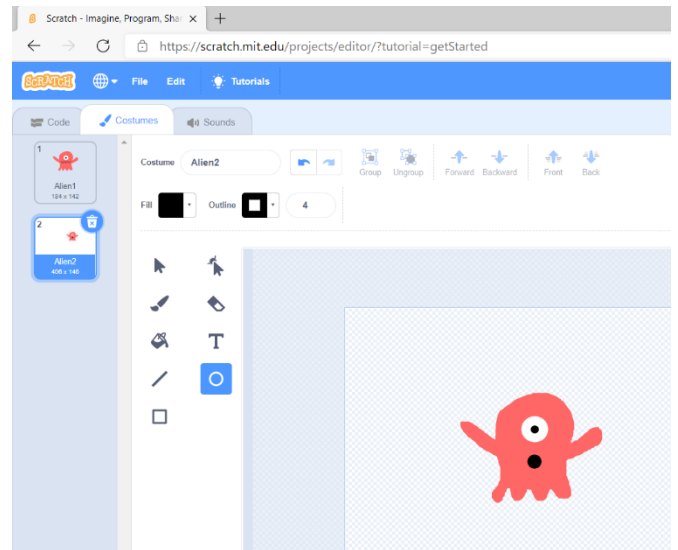
15. Your sprite is now finished! In the left-hand side panel, you will be able to see a small thumbnail of **Alien1**:



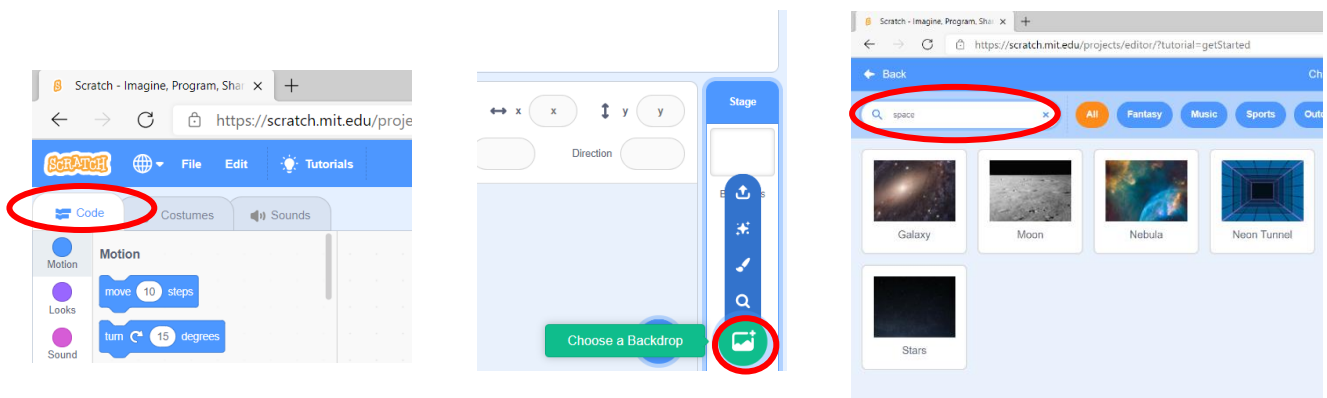
16. In Scratch each sprite can have more than one costume. This means that a slightly different costume can be selected to change how the sprite looks. We are going to create a second costume for your alien.

17. Right click on the thumbnail picture and click **'duplicate'**. This will create another copy of your sprite design, which will be automatically named **Alien2**:

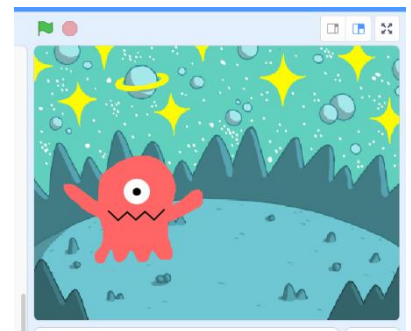
18. With **Alien2** selected, click on the alien's mouth and delete it. Then draw a new mouth design using the drawing tools. (I went for a circular mouth, but you can choose whatever you like, as long as it differs to the first design):



19. Now we are finished designing the costumes of our new sprite, click on the '**Code**' tab to return to the main screen. Click on '**Choose a Backdrop**' in the bottom right-hand corner to open the **Backdrop Library**. Then use the **Search** tool and type in the word **space** to find a space backdrop for you alien (choose whichever you like!)



20. On the stage, you should now see your sprite in one of its costumes, on your chosen backdrop:



21. To finish, we are going to animate your sprite:
22. Drag the code blocks shown here into the code area. When the green flag is clicked your alien should change to its other costume, make a sound, and move across the stage:
23. Experiment adding your own coding blocks, like you did last week and save your project to your computer if you like.

