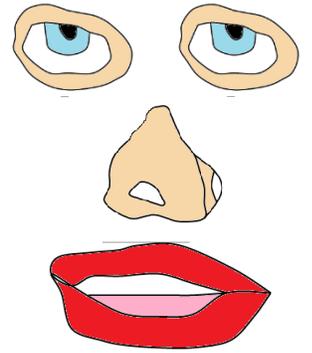


Creating Pictures in Excel

Background:



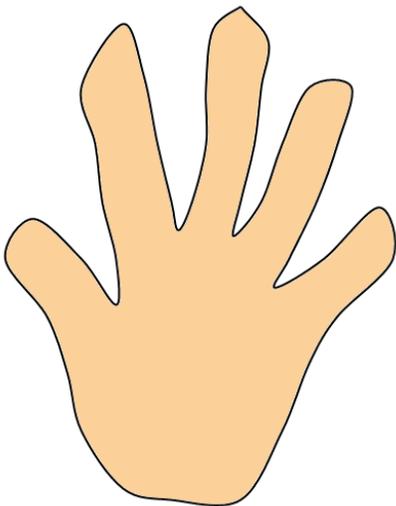
This project was created in order to stimulate student's minds. During this project, students must learn and become familiar with Microsoft Excel and learn how to plot points on a graph. Students are able to have fun drawing anything from body parts to a car while learning about technology.

Objectives:

- Become familiar with excel X,Y Scatter Plots
- Learn to estimate points on a graph
- Come up with creative pictures to draw!

Directions:

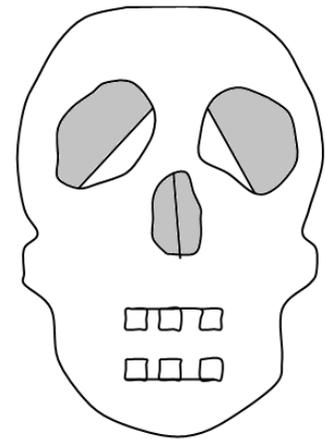
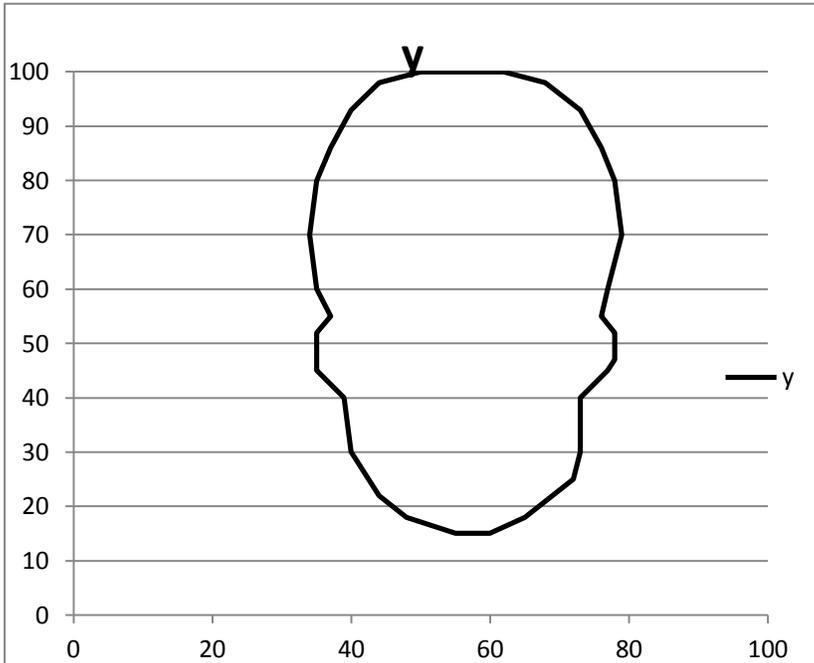
1. Open up Microsoft Excel
2. Locate A1 and B1
 - 2a. Place an x in A1 and y in B1 (underneath these will be where you will be placing your xy coordinates)
3. Go to insert and click scatter
 - 3a. you will see a scatter plot with only dots (markers), choose this one
4. Right click on the graph
5. Click on select data
6. Highlight the x and y as well as boxes below them
 - 4a. by doing this, you are able to see the points which you plot and therefore be able to adjust them
7. After doing this, look at the select data source box
8. Click Select Row/Column
 - 8a. this will switch the y and the points you have created in order to make sure each point is plotted appropriately
9. Select and Right click on the horizontal axis on the graph
10. Mark the minimum and maximum to fixed instead of automatic
 - 10a. this will give you a good range for plotting your points
11. Repeat steps 9-10 for the vertical axis
12. You are ready to begin!
13. If you have chosen a harder picture to draw you can copy and paste a picture from the internet and use the outline of that picture in order to plot your points (otherwise you can begin plotting)
 - Make sure to make your select data longer as you go in order to see your points as you plot them
 - 13a. to do this right click on the graph
 - 13b. click on select data
 - 13c. pull the box highlighting your data down more



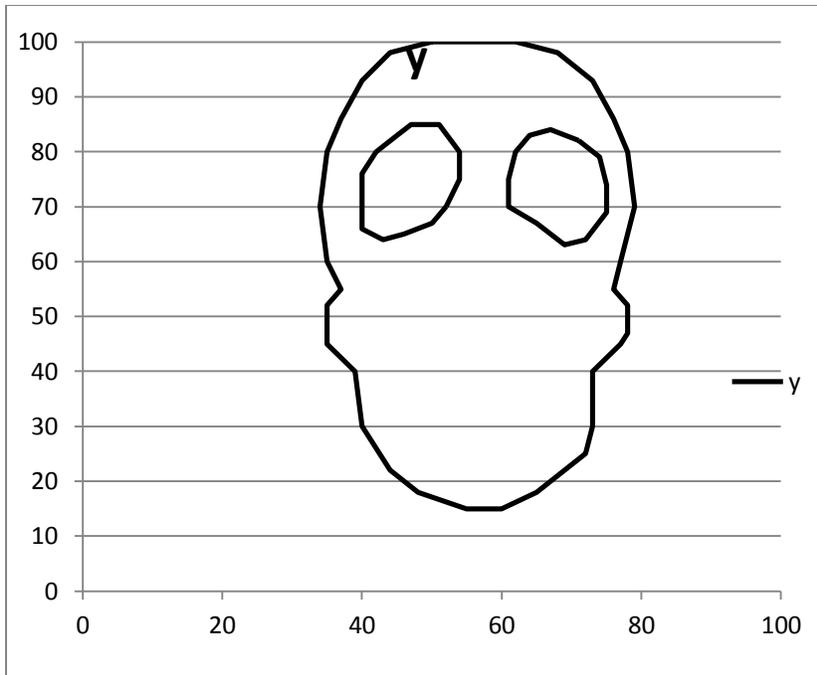
Directions Continued:

14. To check the progress of your picture right click on the graph
15. Select change chart type
16. Choose XY scatter with straight lines or XY scatter with smooth lines
17. To change it back just go back and select xy scatter with markers
18. Once you have finished plotting your points change the graph to XY scatter with smooth lines or XY scatter with straight lines
19. To get rid of the title, gridlines, and axes:
 - 19a. click on the graph
 - 19b. up above select chart tools
 - 19c. select layout
 - 19d. go to chart title, legend, axes, and gridlines and select none for all
20. Copy and paste your picture into paint
21. Design and color your picture!

Drawing a Skull



1. First plot the outline of the head. You will be using a lot of points for this.
2. To check on the progress of the head, switch to XY scatter with straight or smooth lines

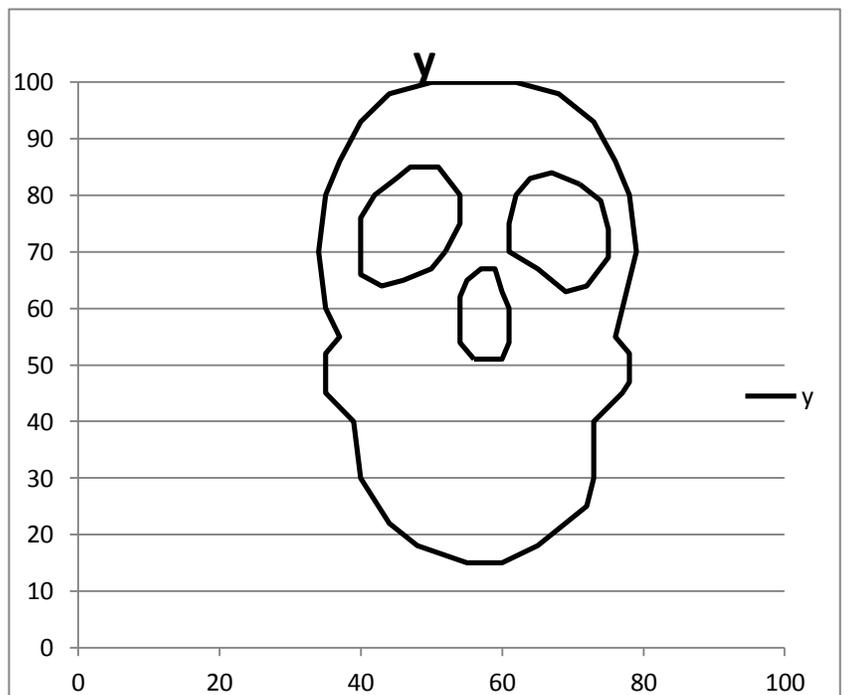


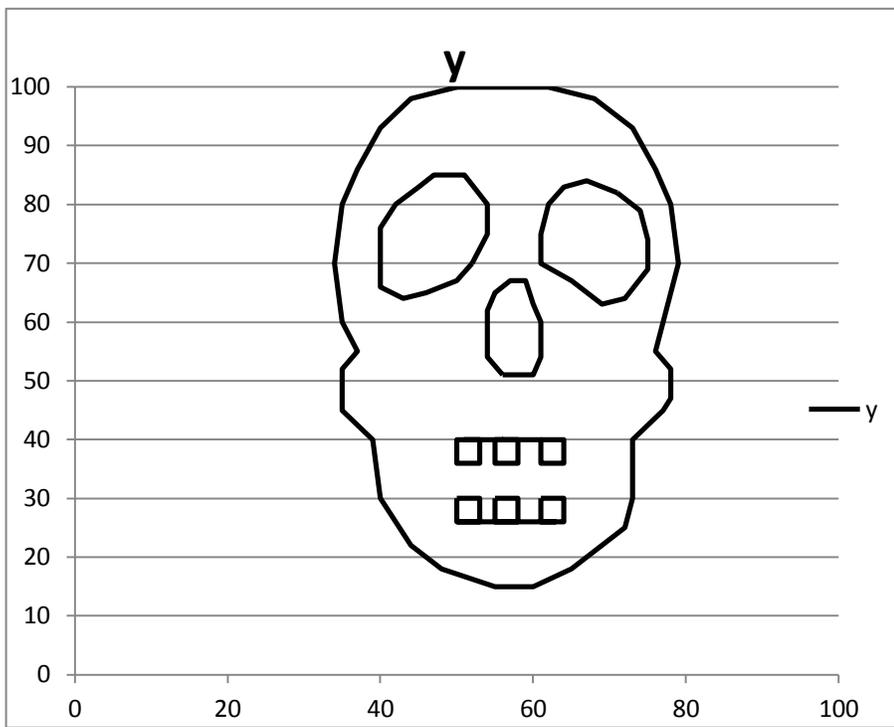
3. Plot the eyes.

4. Make sure to start and end with the same points in order to connect each eye

5. Plot the nose

6. Just like with the eyes, make sure you start and end with the same points to connect the nose





7. Plot the teeth

8. It is easiest to plot the teeth separately

9. After you finish with each square (tooth), make two points connecting the two end teeth on the bottom and top

**You can do this by holding your mouse over the points already on the eyes to see which points you want to connect

10. Finish with the skull by plotting the details; the line in between the nose and the lines in the eyes

11. To do this just pick the two points you want the lines to go from and enter them into your XY data chart in excel

12. Once you are finished, change the graph to XY scatter with straight lines or smooth lines

13. Get rid of the gridlines and axes

14. Copy and paste your skull into paint to add some color!

