Exercise One: Clustered Column Charts

1. Using the data on the Exercise 1 sheet create a 2D Clustered Column chart using the data for deaths resulting from **DEPENDENCE ON DRUGS** only.

   NOTE: make sure to select the both the Regions and the data in the Dependence on Drugs column before inserting your chart.

2. Add a chart title (above chart) that reads 'Deaths Due to Drug Dependence for London (2011)'.

3. Add a horizontal axis that reads 'Region' and a vertical axis that reads 'Number of Deaths'.

4. Add data labels.

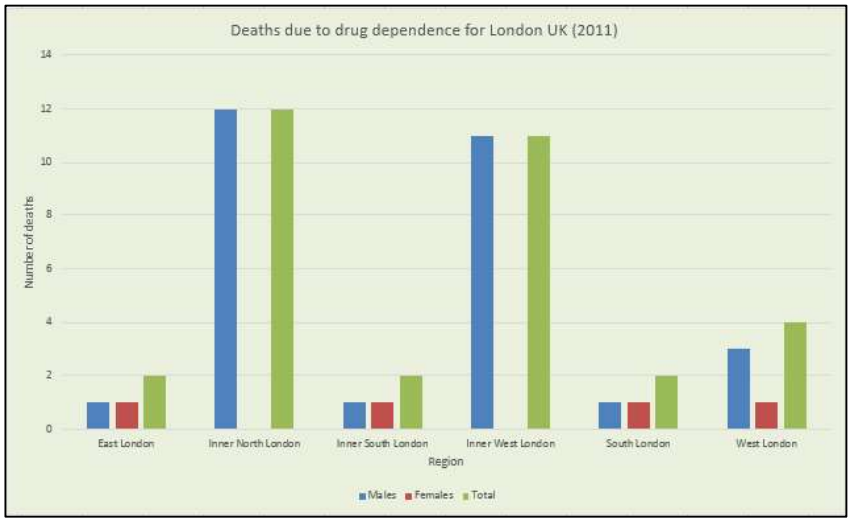
5. Using the Select Data option, omit the two regions with no drug deaths (*i.e.* City of London and North London).

6. Change the background of the chart to light green.

   HINT: Right click in the top right corner of your chart and select Format Chart Area, then select the solid fill and change the colour to light green.

7. Remove your data labels.

Your graph should look like this:



8. Save your practice file**.**

Exercise Two: Pie Charts

1. Using the data on the Exercise 2 sheet create a Pie Chart representing the deaths in Inner South London for all age groups.

	Age of deceased at death					
	0-1 years	1-14 years	15-24 years	25-44 years	45-64 years	over 65 years
City of London	0	0	1	2	6	1
East London	12	12	22	73	81	129
Inner North London	13	14	17	124	112	104
Inner South London	20	6	27	121	127	155
Inner West London	10	12	26	111	129	173
North London	12	17	26	113	100	124
South London	3	4	14	82	101	102
West London	13	7	33	147	164	154

2. Click and drag the section of the pie representing the 25-44 year age group slightly outside the pie.

3. Change the chart layout to include the percentages inside the pie and the legend on the right (HINT: Use the Quick Layout tab in the Design tab to find this layout)

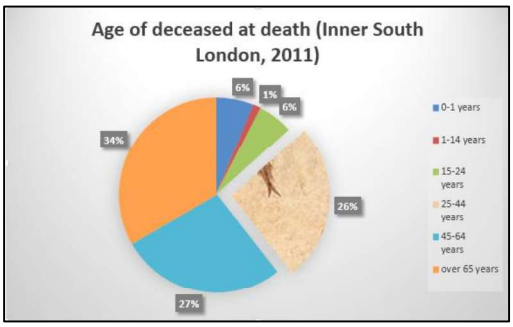
4. Change the title of the chart to 'Age of Deceased at Death (Inner South London, 2011)'.

5. Click ONCE on one of the data labels (HINT: those are the percentage values), right click and select Format Data Labels. Change the label position to the Outside End.

6. Change the fill colour of the data labels to grey.

7. Click TWICE on the piece of the pie that you have dragged to the side, right click and select Format Data Point. Change the fill to Picture or texture fill and change the texture to fish fossil.

Your chart should look like this:



8. Save your practice file.

Exercise Three: Clustered Bar Charts

1. Using the data on the Exercise 3 sheet create a 3D Clustered Bar Chart representing all of the information in the Influenza immunization table.

2. Switch the rows and columns (HINT: on the Design tab click Switch Row/Column in order to switch the data so that the bars represent age categories rather than influenza immunization status).

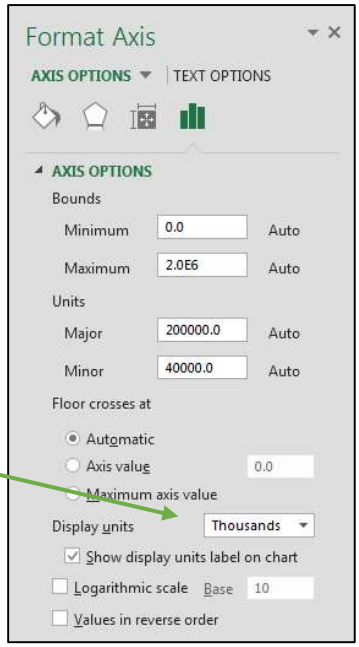
3. Add the title of the table to the chart.

4. Add Primary Major Horizontal Gridlines.

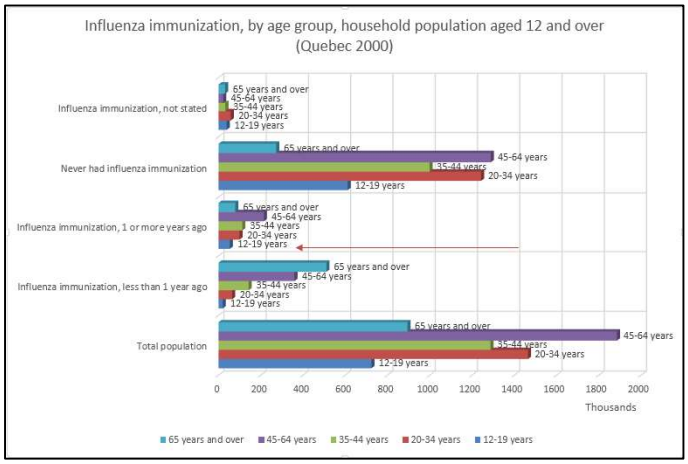
5. Add data labels displaying the Series Name (HINT: under Data Labels select More Options. Under Label Options select Series Name, then make sure all other Label Options are unticked). Do this for all of your bars.

6. When displaying a table in a document you may wish to draw attention to certain data. Insert a red arrow in your chart that points to the 12-19 cylinder in the Influenza immunization, 1 or more years ago section. (HINT: in the Insert tab click Shapes and select an arrow, make sure to make your arrow red!)

7. Change the Horizontal Axis to display the values on the horizontal axis in thousands (HINT: Under Axis Options change the Display Units to thousands).



Your graph should look like this:



8. Save your practice file.

Exercise Four: Scatter Chart with Trendline

1. Using the data on the Exercise 4 sheet create a Scatter graph using only the data for the live births between 35 weeks gestation to 41 weeks gestation (see below).

34	6,702
35	10,036
36	18,481
37	39,562
38	93,976
39	156,390
40	190,968
41	138,512
42 weeks & over	28,314

2. Insert a title for your chart called 'Live Births by Gestational Age (weeks) in England and Wales (2009)'. Change the size of the font in your title to 11 and change the font to Corbel.

3. Change the axis values to Corbel 11 as well.

4. Right-click on one of the data points (i.e. the blue circles) and select Format Data Series. Under Marker Options click Built-in and change the marker to a diamond, size 7.

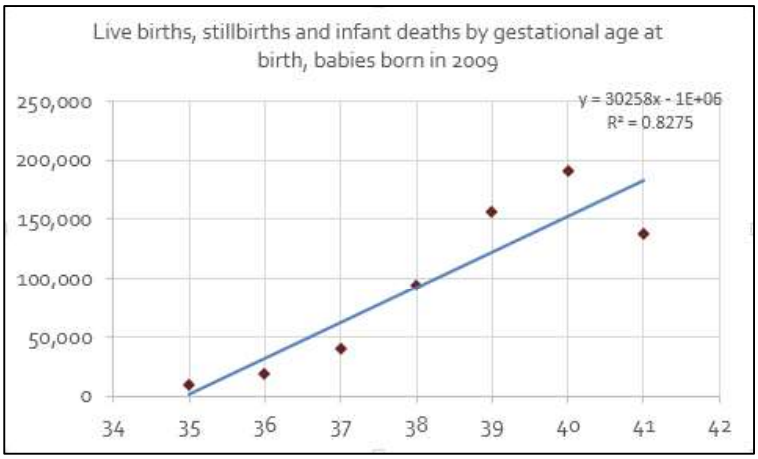
5. Now under Marker Fill and change the fill to a solid dark red colour. In the Border section select NO LINE.

6. Right-click on one of the data points again and select Add Trendline.

7. Right click on your trendline and select Format Trendline and check the boxes to Display Equation on chart and to Display R-squared value on chart. Change the Dash Type to display a solid line.

8. Click and Drag the equations to the top right corner of the chart (they are in the way!). Change the font of the equations to Corbel 9.

Your graph should look like this:



9. Save your practice file.