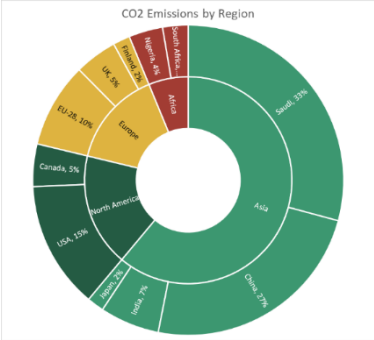
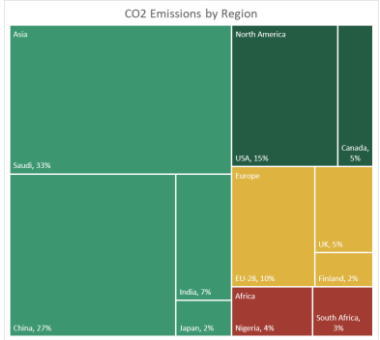
WEEK 3 — SPECIALISED CHARTS

This week we covered some more specialised charts that can display your data in eye-catching ways to help you tell the story of your data.



HIERARCHY CHARTS

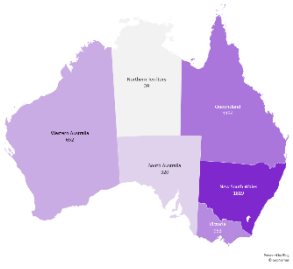
We looked at 2 hierarchy charts: sunburst and treemap. Hierarchy charts are useful when you have higher level categories of data that contain sub-categories. You can visualise how each sub-category contributes to the whole. These were introduced in Excel 2016.



WATERFALL CHARTS

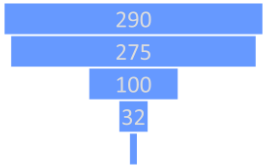
Useful to show a running total and what factors have contributed to that total. Often used to show how income and expenses contribute to a budget, or to show flows between categories. Remember to right-click on the Total columns and **Set as Total**.

MAP CHARTS



Used to show data that has a geographical component. Excel can work with a variety of geographical regions, like countries, states, counties or postal codes. However, sometimes it needs help to differentiate between regions. You can include another column with the parent region, for example if you are working with states, include a Country column, even if they are all in the one country. Using proper column headings is also important.

FUNNEL CHARTS



Shows how values change, typically reduce, through stages of a process. Often used in Sales and Marketing to look at how many people enter the sales pipeline compared with how many complete the sale.

GAUGE CHARTS

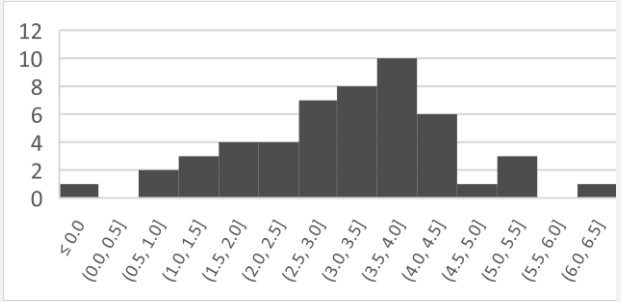
A custom chart that shows how you can combine Excel's built-in charts in a creative way. Great to show a snapshot of a key metric.

- Change angle of first slice to 270°, set to transparent
- Add pie on the second axis, change angle to 270°, everything except the pointer transparent

Data			Gauge
Value to show	78	2	Gauge section 1
Pointer	1	1	Gauge section 2
Gauge max – val+ptr	=100-(78+1)	1	Gauge section 3
Hidden half	100	=2+1+1	Hidden half

BONUS CONTENT — HISTOGRAMS

Bar and column charts are useful to show the number of items in categories, but they do not work with continuous (numeric) data on the x-axis. Histograms are useful here.



The numeric data is grouped into "bins" and then the number of values that fall into each bin is displayed on the chart. The bins can be adjusted in the Format Pane.

Histograms are a standard chart in Excel 2016 and newer. They can be created in older versions using the Analysis ToolPak addin.

MACROS — CODE SNIPPETS

```
Sub ChartAnimate()                    ' start the subroutine
   Dim nCount As Integer              ' create a variable for the year
   For nCount = 1996 To 2019          ' loop over years 1996 to 2019
      DoEvents                        ' pause the macro quickly
                  ' set the dropdown cell to the year of interest
      ActiveWorkbook.Worksheets(6).Range("I3") = nCount
      DoEvents                        ' pause the macro again
   Next                               ' go to the next year
End Sub                               ' end the subroutine
```