

Analysing data with Excel

Excel is a versatile and flexible data analysis tool. As well as basic functions, like calculating averages, *Excel* has features that can help you visualise patterns in your data.

In this task you will try out Pivot Tables, a rapid way to summarise lots of repetitive data and arrange it in different ways to see what stories it might be telling.

You will create a PivotTable on a data set with over 900 rows of results. The same techniques could be used with many kinds of data such as survey results, financial information or student examination scores.

Learn more about this and related topics with IT Learning Centre courses on **Spreadsheets**.

- Use the icon **Pivot Tables** on the Desktop
This opens a spreadsheet called 'Game Strategy Figures'
- Select **any green cell within column D**, then choose **Insert | PivotTable** from the ribbon, and in the **Create PivotTable** dialog click **OK**
- Now you assemble your table from the **PivotTable Fields** panel on the right of the screen (which are the column headings from the original worksheet). Drag the following PivotTable Fields to the named areas, shown below the **PivotTable Field List**:

Drag **Module** into the **ROWS** area

Drag **Result** into the **COLUMNS** area

Drag **CandID** into the Σ **VALUES** area

- You have created a basic summary table for your data that shows Totals and scores for each section
What happens if you **double-click one of the scores**?
- Return to the PivotTable on **Sheet 1**
Rearrange the table by dragging **Result** below **Module** in the **Rows** area
- Examine how the data changes over time by dragging **Game 2 Date** into the **COLUMNS** area.
- The required data is showing, but the layout would be clearer if the **Game 2 Date** field were sorted by months and years:

Select cell **B4** or any other month-name in the row 4 part of the pivot table

Right mouse click and from the menu select **Group...**

In the **Grouping** dialog, make sure **Months** and **Years** but not **Quarters** are selected (highlighted blue) and click **OK**

Now try adding and removing dates and other criteria from the table, to see what you think might be interesting to explore

You have summarised more than 900 test results and can view the data in a number of ways. You have done this in about 10 minutes! You can build more complex pivot tables and use *Excel* to carry out other types of analysis - we can show you how.

