Excel

Excel Options – click the Microsoft Office Button. Go to Excel Options

Templates – click the Microsoft Office Button. Go to New – Installed Templates

Exercise 1: Enter text

1. Open a blank spreadsheet. The **Home** tab at the top of the Ribbon should be highlighted. If it isn't, click it.

2. In cell A1, type **Product Name**, and then press ENTER. The text is too long for the cell; it spills over into cell B1.

3. Click in cell A1.

4. On the **Home** tab, in the **Alignment** group, click the **Wrap Text** button .

   A single click wraps the text.

Exercise 2: Change document view

1. At the lower right of the screen, locate the **View** toolbar .

2. Click the middle button on the toolbar, **Page Layout View**, to change to Page Layout view. Or click the **View** tab on the Ribbon, and then click **Page Layout View** in the **Workbook Views** group.

   Now the column and row headings are above the worksheet grid.

3. Now you'll zoom in and out of the worksheet. To do this, click the minus sign (-) or the plus sign (+) to the right of the toolbar.
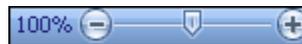
   If you click the minus sign several times, you can see several worksheets at once in Page Layout view. The indicator to the left of the minus sign shows you the percentage of the magnification. Click the plus sign until you get back to 100%.

## Exercise 3: Adjust column width in Page Layout view

1. In cell B1, type text that will be too long to fit into the cell: **Quantity per Unit**. Press ENTER, and then click in cell B1 again.
2. Instead of wrapping the text so that it will fit, you'll make the column wider to fit the text.

3. On the **Home** tab, in the **Cells** group, click the arrow below **Format**, and then under **Cell Size**, click **AutoFit Column Width**.

The column width automatically changes to fit the text in the cell.

You can still use the double-click method to change the column width as well. Point at the right edge of the column heading until you see a cross with a double-headed arrow in it, and then double-click.
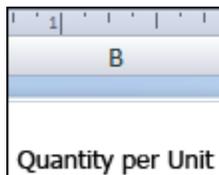
Exercise 4: Show or hide white space in Page Layout view

1. Move the pointer into the space between the top of the page and the column headings (A, B, C, and so on).
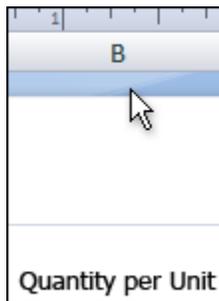
2. When the pointer turns into two arrows, click once.

The white space is hidden.

To show the white space again, point at the same space until you see two arrows pointing away from each other. Click once.

3. Change back to Normal view. On the **View** toolbar, click the **Normal** button on the left.

4. Go the Page Layout tab. Go to Sheet Options. Uncheck View under Gridlines and Headings.

Exercise 5: Add the Excel 97-2003 Workbook command to the Quick Access Toolbar

Until everyone you work with is using Office 2007, you can add the Excel 97-2003 command to make it quick and easy to convert your files.

1. Click on the arrow to the right of the Quick Access Toobar.
2. Go to More Commands.
3. In the drop down box that now says Popular Commands, choose the Office Menu.

4. Choose the Excel 97-2003 Workbook command and add it to the right side and click OK.
5. Click your new button to see how easy it is to convert the file.

Close the file and don't save.

Exercise 6: Insert a column

1. Open the **Excel Practice** file. In the worksheet, click in cell D4 (or any cell under Supplier).

2. Now, on the Ribbon, in the Home tab, go to the **Cells** group, click the arrow to the right (or below depending on your resolution) of **Insert**, and then click **Insert Sheet Columns**.

   A column is inserted to the left of the Supplier column.

3. At the top of the new column, in cell D1, type the column title, **Category**. Now fill in a little data. In cell D2, type **Dairy Products**. In cell D3, type **Grains/Cereals**. With Grains/Cereals still highlighted, click **Format** and click **AutoFit Column Width** in the Cells group.

4. Use the double-click method to fit the Product Name and Supplier columns to the correct width.

5. Change the Orientation to Landscape. Go to Page Layout – Orientation.

Exercise 7: Use Sum

In this exercise you'll enter a formula by using the **Sum** Σ button.

1. Place the cursor in cell C51, so that you can add up the number of products listed in the Quantity column.

2. On the **Home** tab, in the **Editing** group, click the **Sum** Σ button. Then press ENTER.

   Excel adds up the total, using the SUM function, and enters the total, 1177.

Exercise 8: Enter a formula using Formula AutoComplete

1. Click in cell C52. Type an equal sign (=) to start the formula, and then type **S** for the SUM function.

2. A list appears with the functions that you might want to insert. You will have to scroll a bit in the list to see SUM.
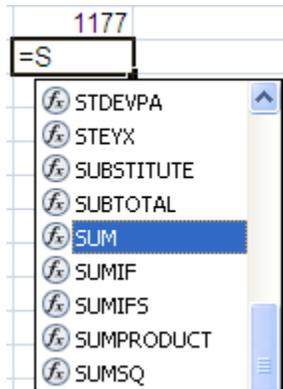
3. Double-click SUM to enter it in the worksheet. (If you press ENTER while SUM is highlighted in the list, instead of double-clicking it, you may see an error in the worksheet.)

   To complete this formula, type **C2:C50)** and then press ENTER.

   Now you have the same formula entered twice; once with the **Sum** button in cell C51, and once by using Formula AutoComplete in cell C52.

Exercise 9: Add a header and footer

In this exercise you'll create a header and footer for the worksheet in Page Layout view.

1. Click **Page Layout View** on the **View** toolbar in the bottom right of the window.

2. Scroll up to the top of page 1, or press CTRL+HOME. Click where it says **Click to add header**. Notice that as soon as you click there, a new tab appears on the far right side of the Ribbon, the **Design** tab, under **Header & Footer Tools**.

   Note   If you are in Page Layout view, but you cannot see the area that says **Click to add header**, it means that white space is hidden. Click once in the space between pages to show the white space.

   Type **June Sales Report**.

3. Scroll to the bottom of the first page. Click where it says **Click to add footer**. Notice the Design Toolbar is now available. In the **Header & Footer** group, click the arrow on **Footer**, and then click **Page 1**. "Page 1" is inserted.

   Note that an auto footer can be inserted only in the center of the worksheet. The same goes for an auto header.

4. Click in the footer area and add one blank space to the right side of the footer area. In the Ribbon, in the **Header & Footer elements** group, click **Sheet Name**. You'll see **&[Tab]** inserted in that part of the footer area. Click outside of the footer (do not click Enter) and you'll see the name of the worksheet, "Contoso Sales Data," in the footer area.

Exercise 10: Add a few finishing touches

You can stay in Page Layout view for now.

1. Scroll up to the top of page 1, or press CTRL+HOME. Place the cursor in the first row. On the **Home** tab, in the **Cells** group, click the arrow next to **Insert**, and then click **Insert Sheet Rows**. Click **Insert Sheet Rows** again to insert a second row.

2. In cell A1, type **Contoso Sales Data**.

3. Select cells A1 through E1. On the **Home** tab, in the **Styles** group, click the arrow next to **Cell Styles**, and then select any style you like for the sheet title. Mouse over the different choices to see a preview before selecting.

4. Merge the cells across the top, and then center the title. Select cells A1 through E1, and in the **Alignment** group, click the **Merge and Center** button 🔲.

5. Select the column titles in row 3. In the **Font** group, click the **Bold** **B** button to show all the titles in bold type.

6. Click on Print Preview on the Quick Access Toolbar or to go Microsoft Button – Print – Print Preview.

7. Click on Page Setup – Center on Page Horizontally. Close Print Preview.

Exercise 11: Print options

1. Your worksheet should still be in Page Layout view, with some space in between the pages.

2. At the top of the Ribbon, click the **Page Layout** tab.

3. If you want to print column and row headings, in the **Sheet Options** group, under **Headings**, select the **Print** check box. Note that the option to print gridlines is just next door; under **Gridlines**, there's a check box for **Print**.

4. Check your Print Preview once again. Close Print Preview without printing.

5. Close and do not save changes.

Exercise 12: Format date as a serial number

1. Open the **Work with Dates** file. Click on cell A2, which contains the value 8/22/2010.

2. On the **Home** tab of, find the **Number** group.

3. Click the arrow in the **Number Format** box.

4. Change the selection from **Date** to **General**.

5. Select cell A2 which now contains the value 40412.

6. Click the **Number Format** drop down box again.

7. Click on **Short Date,** which displays the date in number format (as opposed to Long Date, which spells out the month).

Exercise 13: Select different date formats

1. Select cell D2, which contains information in date format.

2. Click the arrow in the **Number Format** box.

3. Scroll to the bottom and select **More Number Formats**. This will open the **Format Cells** dialog box.

4. Make sure you are on the Number tab. Click **Date** in the **Category** list, and then click a format in the **Type** list.

5. Click OK to apply the new format and close the dialog box.

Exercise 14: A Couple of Keyboard Shortcuts

1. Select any empty cell.

2. Press **CTRL+**; (semicolon) and press **Enter**. You have the current date

3. Press CTRL+: (colon) and press Enter. You have the current time.

4. Type in 12.45 in any empty cell. Press CTRL+$ to format it to currency. Press CTRL+& to add a border.

Exercise 15: Find the total number of days between two dates

Enter a formula to find the number of days between 6/9/2011 and 8/21/2011.

1. Type 6/9/2011 in cell A6 and 8/21/2011 in cell A7.

2. Select cell B9

3. Type **=A7-A6**. Ignore Formula AutoComplete.

4. Press ENTER to display the result.

5. There are 73 days between the two dates.

Exercise 16: Find the number of workdays between two dates

This exercise uses the NETWORKDAYS function, so you can find the number of workdays (Monday through Friday) between 6/9/2011 and 8/21/2011.

1. In cell B11, type **=** and then ne**.** Formula Autocomplete will finish the formula for you as you type. Double-click the function to enter it automatically.

2. Finish the formula by completing the arguments: **A6,A7)**

3. Press ENTER. The answer is 52 days.

Exercise 17: Find the date after a number of workdays

This exercise uses the WORKDAY function. Suppose that it's 12/31/2010, and you have 80 days to complete a project. Type a formula to calculate the project end date, accounting for holidays between the two dates.

1. In cell G9, type **=WO** and then mouse down and double click on Workdays.

2. Type **G3,G4,G5:G7)** The commas separate the arguments. The colon indicates the cell range from G5 through G7. The final parenthesis closes the formula.

3. Press ENTER. The answer is 4/22/2011, accounting for holidays between the two dates.

Exercise 18: Create a chart

1. Open the **Chart Work** file. Click in cell A2, and then drag to cell D5 to select the data in those four rows and columns.

2. Click the **Insert** tab. In the **Charts** group, click **Column** and choose the Clustered Column in the **2-D Column** section (the screen tip will show the name).

   A chart is inserted on the worksheet. It compares salespeople to each other, month by month. The names of the salespeople are in the chart legend, and the months are at the bottom of the chart.

Exercise 19: Look at chart data another way

1. Click on the Chart. **Chart Tools** should appear on the Ribbon.

2. On the **Design** tab, in the **Data** group, click **Switch Row/Column**.

   Now the chart legend shows the months of the year, and the salesperson names are at the bottom of the chart.

3. Now put the chart back to the way it was. Click **Switch Row/Column**.

Exercise 20: Update chart data

1. Click in cell D3.

2. Change the data from 300 to 500, and then press ENTER.

   The column for Guissani in March is updated, growing taller. Also, the values on the vertical axis on the left changed, to adjust for the larger value added to the data.

Exercise 21: Add titles.

1. If necessary, click in the chart to display the **Chart Tools**. Click the **Design** tab to display the commands.

2. On the **Design** tab, in the **Chart Layouts** group, click the **More** button ⯆ so that you can see all the layouts in the group.

3. As you rest the pointer over each layout, a ScreenTip is displayed with the name of each layout. When you get to **Layout 9**, click it.
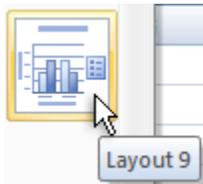
   Placeholders are inserted for Chart Title and for the vertical and horizontal Axis Titles.

4. At the top of the chart, click "Chart Title" and type **Northwind Traders Tea** and press Enter**.**

5. Now type the axis titles. At the bottom of the chart, select the horizontal placeholder "Axis Title." Type **First Quarter Sales** and press Enter.

6. At the left side of the chart, select the vertical "Axis Title". Type **Cases Sold.**

Exercise 22: Change chart layouts

1. Click inside the chart. If necessary, click the **Design** tab.

2. In the **Chart Layouts** group, click the **More** button ⯆ to see all the layouts.

3. Choose Layout **2**, and then click it.

   This layout moves the legend to the top and removes the chart axes. It also removes the gridlines, which are the horizontal lines that extend from the value axis on the left across the chart to help you see the value of each of the columns.

   The layout also adds data labels above each column that show the number of cases of tea sold by each person for each month. With data labels, you don't need gridlines.

4. Go back to **Chart Layouts**, click the **More** button ⯆ again, and locate and click **Layout 5**.

   This layout puts the legend at the bottom and adds a data table, which contains all the data used to create the chart. It also removes the axis title at the bottom of the chart.

5. Go back to **Layout 9**.

Exercise 23: Change the chart type

1. Click in the chart.

2. Click the **Design** tab if it is not already selected. In the **Type** group, click **Change Chart Type**.

3. Under **Column**, click **100% Stacked Column**. Look at some of the other choices.

Exercise 24: Change the look of the chart

1. Click anywhere inside the chart.

2. Click the **Design** tab. In the **Chart Styles** group, click the **More** button ⬇ so that you can see all the styles. Choose any style that you like by clicking it.

   The new colors and style are applied to the chart.

Exercise 25: Try out a color scheme by using a theme

1. Click the **Page Layout** tab.

2. In the **Themes** group, click the arrow on **Colors**.

3. Rest the pointer over any of the colors in the list. The colors are shown in a temporary preview on the chart. If you see one you like, click it. Or you can leave the chart as is.

   Note : Theme colors change the style of other elements in your worksheet, too. For example, if you had previously applied a cell style, that style would now take on the style of the theme color you select for the chart.

Exercise 26: Format the chart title

1. Click in the chart title.

2. Click the **Format** tab. In the **WordArt Styles** group, click the arrow on **Text Fill** [A⬇], and then rest the pointer over any of the colors. You'll see the title change. Choose a color in the theme group.

3. In the **WordArt Styles** group, click the arrow on **Text Fill** again, and note the **Gradient** option and the **Texture** option.

4. Try also **Text Outline** [✎⬇] and **Text Effects** [A⬇], and see the options there. If you find that you add more options than you like, you can always get back to the beginning by right-clicking in the title area and selecting **Reset to Match Style** or pressing CTRL+Z.

Exercise 27: Format a column

1. Click on the first column on the left, the first column for Giussani. You should see round selection handles at the corners of each of the three columns for Giussani.

2. On the **Format** tab, in the **Shape Styles** group, click the arrow on **Shape Effects**, point to **Shadow**, and rest the pointer on the different shadow effects. A ScreenTip describes each effect. Click one that you like.
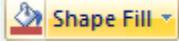
   If you don't like the results, you can get back to the original by right-clicking and selecting **Reset to Match Style**.

Exercise 28: Format other areas of the chart

1. Click in the Plot Area (the area with gridlines). To be sure, on the **Format** tab, look in the **Current Selection** group to see if **Plot Area** is displayed at the top of the group.
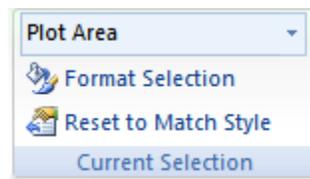
   Looking in the **Current Selection** group is how you can ensure that you have selected the correct area in a chart.

2. On the **Format** tab, in the **Shape Styles** group, click the arrow next to **Shape Fill** . Rest the pointer on any of the **Theme Colors**. You can see the Plot Area change color as you pass the pointer over the different colors. If you see a color that you think improves the look of the chart, click it.

3. Next in the **Shape Styles** group, click **Shape Effects** , and then point to **Shadow**. Under **Outer**, click the first shadow in the list (the ScreenTip says **Offset Diagonal Bottom Right**).

4. Close and do not save.

Exercise 29: Make a pie chart

1. Open the **Chart Work 2** file. Click the **Pie Chart** tab at the bottom of the worksheet.

2. Select cell A2 and drag to cell B6 to select the data in those five rows and two columns (do **not** select the total in cell B7).

3. On the **Insert** tab, in the **Charts** group, click **Pie**, and then click the first chart under **3-D Pie** (the ScreenTip says **Pie in 3-D**).

4. On the **Design** tab, in the **Chart Styles** group, click the **More** button ⬇ to see all the styles, and pick another style for the chart.

5. On the **Design** tab, in the **Chart Layouts** group, click the **More** button ⬇ to see all the layouts. Click **Layout 2**.

   The chart is done. The percentages are shown for each part of the pie.

Exercise 30: Save a chart as a template

Perhaps you need to create the same type of chart every week, every month, or every quarter in a report. You don't have to go back to scratch and customize it all over again. Just save the chart as a **template**. Then when you have new data, just open the template, and you're done.

Note   Colors applied through Themes will not be saved with the template.

1. Click the **Practice** tab at the bottom of the window. Click inside the chart. On the **Design** tab, in the **Type** group, click **Save As Template**.

2. In the **File name** box, type a name for the template; for example, type **My Practice Template**. Then click **Save**.

3. Click the **Insert** tab. In the **Charts** group, click **Column** (it could be any chart type you click). At the bottom of the list, click **All Chart Types**.

4. In the **Change Chart Type** dialog box, at the top of the list on the left, click **Templates**. In the box on the right, under **My Templates**, is the template you just created. If you point at it, you will see the name you gave it.

5. To delete the template you just created, click **Manage Templates** at the bottom of the **Change Chart Type** dialog box that is still open from the previous step. In the **Charts** dialog box, on the right, you should see a chart template icon and **Microsoft Office Chart Template**. Right-click the template and select **Delete**. You will be asked if you are sure if you want to send the template to the Recycle Bin. Click **Yes**.

Exercise 31: Add your chart to a PowerPoint presentation

1. Right-click inside the chart and then click **Copy** on the shortcut menu.

2. Click Start, and open PowerPoint 2007. Open the **Chart Work PowerPoint** file.

3. Click the slide thumbnail for slide 2 on the left to select it. Near where it says "Click to add text," right-click and then click **Paste** to paste the chart into PowerPoint.

   Notice the **Paste Options** 📋 button in the lower-right portion of the window. If you click the button you'll see that the chart will automatically be updated if the data is revised in Excel: The **Chart (linked to Excel data)** option is selected.

4. Now click the Microsoft Excel [Microsoft Excel - ...] icon in the bottom of the window. In cell B3, change the data for Giussani from 280 to 70, and press ENTER. You see the first column in the chart change.

5. Click the PowerPoint [Microsoft PowerPoint ...] icon in the bottom of the window. The first column in the chart for Giussani has changed there as well.

6. In PowerPoint, click inside the chart. Notice that the **Chart Tools** and the **Design**, **Layout**, and **Format** tabs are available. You have the same chart commands available in PowerPoint as in Excel, so you can make additional formatting or other changes in PowerPoint if you need to. The formatting changes you make in PowerPoint are not made to the chart in Excel.

    You can also copy and paste your chart into a Microsoft Office Word 2007 document, and the same Chart Tools are available there as well.

Exercise 32: PivotTable Reports

A PivotTable report turns all that data into small, concise reports that tell you exactly what you need to know. When you create a PivotTable report, each column of your source data becomes a **field** that you can use in the report. Fields summarize multiple rows of information from the source data.

1. Open the **PivotTable Practice** file. Place the cursor anywhere in the data (all data will be included in the report).
2. On the **Insert** tab, in the **Tables** group, click **PivotTable**, and then click **PivotTable** again. The **Create PivotTable** dialog box opens.
3. **Select a table or range** is already selected for you. The **Table/Range** box shows the range of the selected data. **New Worksheet** is also selected for you as the place where the report will be placed (you can click **Existing Worksheet** if you don't want the report placed in a new worksheet). Click OK.
4. The left side is the layout area ready for the PivotTable report, and on the right side is the **PivotTable Field List**. This list shows the column titles from the source data. Each title is a **field**: Country, Salesperson, and so on.
5. How much has each salesperson sold? Select the check box in the **PivotTable Field List** next to the **Salesperson** field. You also need data about how much they have sold, so select the check box next to the **Order Amount** field. Notice that you don't have to use all the fields on the field list to build a report.
6. The data in the **Salesperson** field (the salespeople's names), which does not contain numbers, is automatically displayed as rows on the left side of the report. The data in the **Order Amount** field, which does contain numbers, correctly shows up in an area to the right.
7. The heading over the salesperson data says "Row Labels" above the field. The heading over the order amounts says "Sum of Order Amount"; the "Sum of" part of the heading is because Excel uses the Sum function to add up fields with numbers.
8. What are the sales amounts for each salesperson by country? Right-click the **Country** field in the **PivotTable Field List** and then click **Add to Report Filter**. The new **Country** report filter is added to the top of the report. The arrow by the **Country** field shows **(All)**, and you see the data for both countries. To see just the data for either Canada or the USA, click the arrow and select either country. To see the data for both countries again, click the arrow and then click **(All)**.

9. What are the sales by date for each salesperson? Select the check box next to the **Order Date** field to add the field to the report. Because the **Order Date** field is the second non-numerical field to be added to the report, it is nested within the **Salesperson** field, indented to the right.

10. To group the dates, click a date in the report. Then on the **Options** tab, in the **Group** group, click **Group Field**. In the **Grouping** dialog box, select **Quarters (**deselect **Months)** and then click **OK**. Now you see the sales data grouped into four quarters for each salesperson.

11. If you have a huge worksheet, it takes a little work to read the entire report; you have to scroll down the page to see all the data**.**

12. You can pivot the report to get a different view. When you pivot a report, you transpose the vertical or horizontal view of a field, moving rows to the column area or moving columns to the row area.

13. To pivot this report, right-click one of the "Qtr" rows, point to **Move**, and then click **Move "Order Date" to Columns**. This will move the entire **Order Date** field from the Row Label area to the Column Label area of the report.

14. If you want to pivot the report back to the original view, right-click one of the "Qtr" headings, and then select **Move "Order Date" to Rows**. That will move the **Order Date** field back to the row area of the report.

Consolidate Data from Several Worksheets

To summarize and report results from separate worksheets, you can consolidate data from each separate worksheet into a master worksheet. The worksheets can be in the same workbook as the master worksheet or in other workbooks. When you consolidate data, you are assembling data so that you can more easily update and aggregate it on a regular or ad hoc basis.

For example, if you have a worksheet of expense figures for each of your regional offices, you might use a consolidation to roll up these figures into a corporate expense worksheet. This master worksheet might contain sales totals and averages, current inventory levels, and highest selling products for the entire enterprise.

To consolidate data, use the **Consolidate** command in the **Data Tools** group on the **Data** tab.

If you want to...	Then...
Arrange the data in all worksheets in identical order and location	Consolidate by position
Organize the data differently in the separate worksheets, but use the same row and column labels so that the master worksheet can match the data	Consolidate by category
Use formulas with cell references or 3-D references to other worksheets that you are combining because you do not have a consistent position or category to rely on	Consolidate by formula
Use a PivotTable report instead of a consolidation	Use a PivotTable report to consolidate data

Choosing Between Excel and Access

Access is best for	Excel is best for
Data entry.	Storing numbers.
Reports that users can run at any time.	PivotTable® reports — reports in interactive tables that allow you to rotate the rows and columns to see different summaries of your data.
Connecting to external databases and editing data in those databases.	Charts, conditional formatting, color bars, and other visual data displays.
Allowing multiple users to work on the data simultaneously.	Greater familiarity. More people use Excel than Access.

Do you need to organize your data into a relational data structure or a flat data structure? Keep in mind that Access is designed to work with relational data, while Excel works best with flat data structures.

In contrast to a relational data structure, a flat data structure is a simple list that isn't related to other data. For example, a grocery list is a flat file, and so is a list of your friends and relatives. Flat data structures are easy to create, and they're also easy to maintain, as long as you don't have too much information.

So how can you tell if you need a relational structure? By answering a few more questions:

First, do you have a lot of repeated data? For example, do you constantly enter the names of cities or states? If so, you can put that repeated data into another table and create a relational structure. Doing so can save you time and effort because you don't have to reenter the same information each time you create a new record.

Second, do you want to track actions or events? For example, do you want to track sales or customer complaints? Any time you want to track an action, a relational data structure usually works best.

Third, do you need to store and manage your data, or do you need to analyze that data? If storage is your primary goal, then use Access, but for analysis, use Excel.

Fourth, do you have a lot of data? For example, is your Excel worksheet so large that it's hard to use? If so, even if you have flat data, Access can make your information easier to find.

Is your data mostly text, or is it numeric? Access can store a large amount of text — up to two gigabytes in a single database — while Excel is designed to store numbers and perform sophisticated calculations on them.

Office Live Workspace

Free online storage of documents

Can have up to 5 GB of data

Free web hosting

Google – Office Live Workspace and open an account