Intro to:
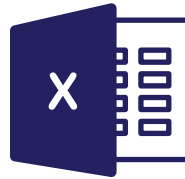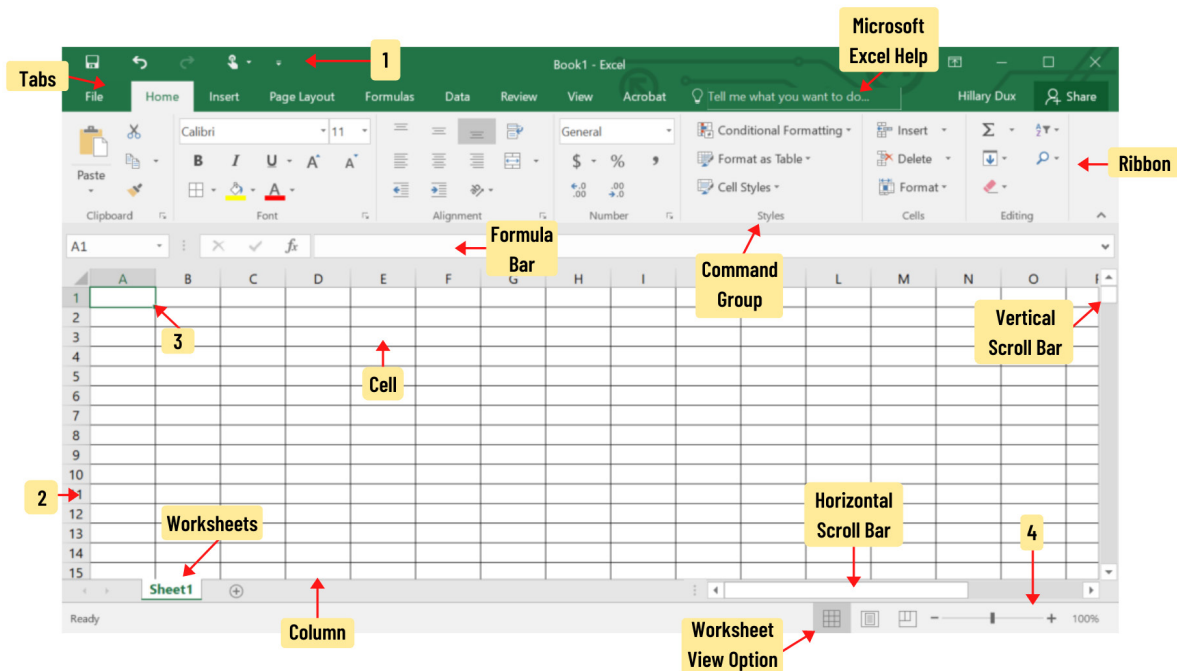# Excel

what is Excel?

Microsoft (MS) Excel is a software program that allows you to create spreadsheets to track data.

MS Excel Command Center

Take some time to explore and experiment with all the different **Commands, Tabs**, and **Groups** above. As you hover over buttons you will notice that a small dialog box appears with an explanation of each feature.

At the very top left is the **Quick Access Toolbar**. Common commands but you can add more to suite your needs. Click the drop down arrow and select any of the commands from the menu that you would like to add.


1   Fill in the Blanks – Use the diagram above to help you identify numbers 1 - 4

1.   _____

2.   _____

3.   _____

4.   _____

File Menu

The **File Menu**, also sometimes called Backstage, lists a number of important functions that you will need as you use MS Excel.

- **Info** – View information about the current workbook and adjust protection controls

- **New** – Open a new blank worksheet or choose a template

- **Open** – Open an existing workbook saved on your computer or OneDrive

- **Save and Save As** – Save your workbook

- **Print** – Adjust printer settings and print your workbook

- **Share** – Invite others to view your workbook or send as an email attachment

- **Export** – Export your workbook to another format

- **Close** – Close the current workbook

- **Account** – Access your MS account info

- **Options** – Access Quick Analysis preferences, Auto Recover settings, or Language preferences
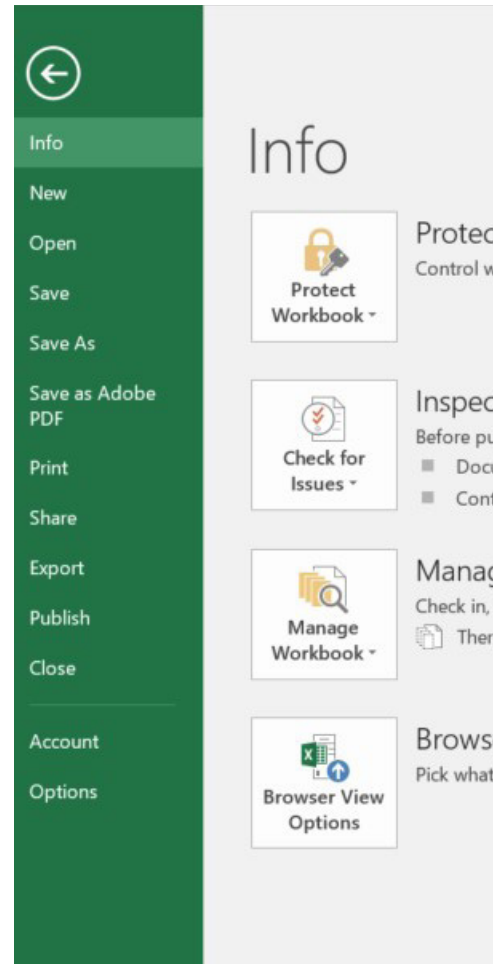
Workbooks vs. Worksheets

Excel files are called **Workbooks**. In your Workbook you can create one or more **Worksheets** to organize your data. Worksheet can also be called **Spreadsheets** or just a **Sheet.**

When you open a new Workbook, it will have one Worksheet called **Sheet1.** Rename it by right-clicking on the **Sheet tab** and choosing **Rename** on the menu.

Using this menu you can also move, copy, add, or delete Sheets.
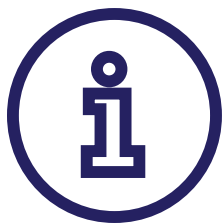
Tip: Deleting Sheets

Once you delete a Sheet it will be permanently removed. You cannot undo this command.

Cell Basics

Each Excel Worksheet is made up of thousands of small rectangles, called **Cells**. Cells are the intersection of a column and a row. Columns run vertically and are labeled by letters (A, B, C...) and Rows run horizontally and are labeled by numbers (1, 2, 3...). Each cell has a name based on its column and row.

2. What is the name of the selected cell in this image?

_____

You can select multiple cells at a time, a group of selected cells is called a **Cell Range**. Instead of a single cell address, the cell range only uses the names of the first and last cell. For example, a cell range that included A1, A2, A3, A4, and A5 would be written as A1:A5.

3. Name these cell ranges:

a.   _____

b.   _____

a.
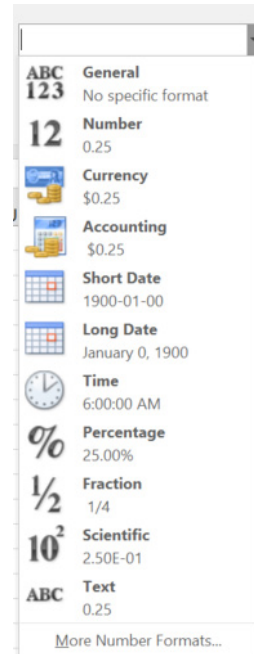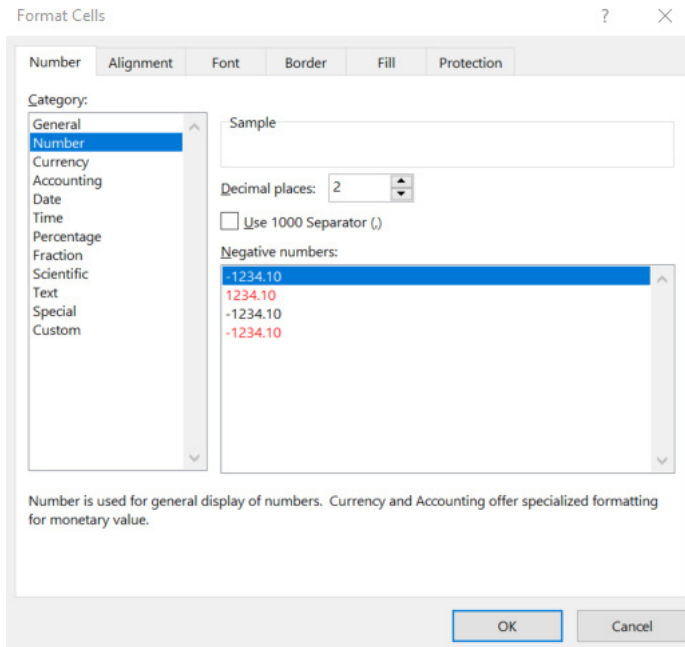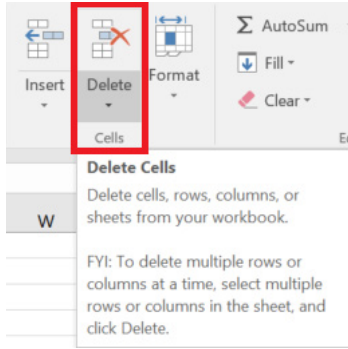

b.

Formatting

Cells can contain **formatting** that changes the way the letters or numbers are displayed. For example, Percentages appear as 0.25 or 25%. To change the format, right click in a cell and choose **Format** from the menu or choose form the **Number group** on the **Home tab**.


4 Which format are the following?
Circle one answer for each

1. 2021-01-02

   a.   Long Date

   b.   Text

   c.   Short date

2. 4.42E+04

   a.   Time

   b.   Currency

   c.   Scientific

3. $44,198.00

   a.   Accounting

   b.   Percentage

   c.   Phone Number

4. 44198.00

   a.   Number

   b.   Long Date

   c.   Social Insurance Number

Deleting Cells

There is a difference between deleting the content from a cell and deleting the cell itself. To delete the data in a cell, select the cell you wish to clear and press **Delete or Backspace** on your keyboard. If you delete the entire cell, the cells below it will move up to fill the space. To do this, select the cell you wish to delete and then choose the Delete button on the Home tab of the Ribbon.
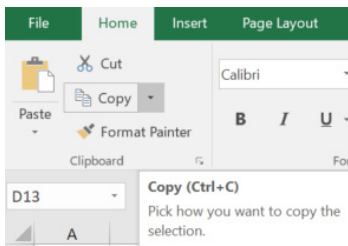
Copy and Paste

Copy data from a cell or multiple cells and paste into another cell. Select the cell or cells you wish to copy and either use the keyboard command [Ctrl][C] or the Copy button on the Home tab.

To paste, select the cell where you want the data to go and use [Ctrl][V] or the Paste button.

Fill Handle

To quickly fill in a series of cell with a sequential order, click and drag the Fill Handle, the small square at the bottom corner of the selected cell or name box.

You will need to manually fill in the first couple of cells for Excel to be able to guess.

Font

Excel allows you to change the font you use in your spreadsheet. When choosing a font, be mindful of choosing one that is easy to read. Change the font by selecting the cell or cells and either right clicking your mouse or choosing from the Font group on the Home tab.
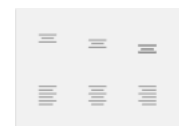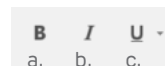
You can also change the size, colour, or bold the text
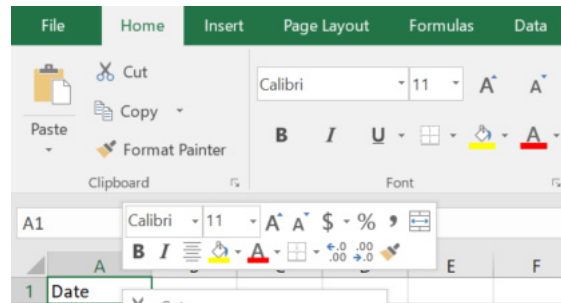
5. **What is the default font for Excel? Circle one**

    a.   Calibri   b.   Times New Roman   c.   Arial

6. **Circle the buttons you would use to align your text in the center of a cell:**

7. **What do these three buttons do?**

    a. _____   b. _____   c. _____

Borders and Colour Fill

Adding cell Borders and Colour Fill creates clear and define boundaries for your data.

In this example, you can clearly identify the headings because they are bolded and have colour fill, and you can easily follow the row with the team name to their points because of the borders.

To add borders, highlight the cells you wish to use it on and click the borders button on the home tab. You can add a border to one or all sides of your cell.

To add colour fill, highlight the cells you wish to add it to and then select the colour fill button on the home tab. The default colour is yellow, but you can opt to use any colour you want.
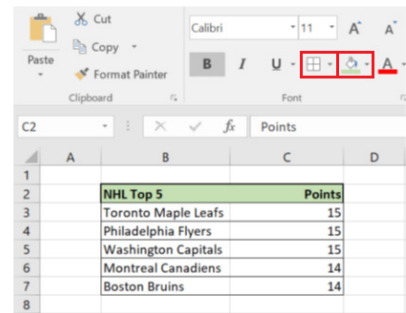
Modify Columns and Rows

Once in a new worksheet, the columns and rows are all a consistent width and height. As you are entering data, you will likely need to adjust to accommodate your text.

In this example, the First Names are cut off by the next column. To adjust, hover your pointer on the border between column A and Column B until it becomes a black line with double arrows. Drag your cursor to the right to make column A bigger.

You can also adjust the height of your rows the same way, hover your cursor on the border between rows and drag to adjust.

A quick way to automatically adjust the height or width is to use **Autofit**. Find the AutoFit menu by clicking the **Format button** in the Cells group of our Home tab.
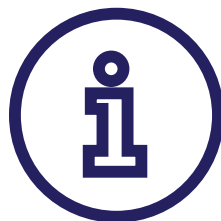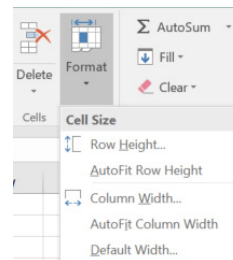
Tip: Pound Signs

If you see a cell full of pound signs like this ######, it means your column is too small and your data does not fit.

To insert a new row, select the heading of the column below where you want it to be, right click, and select **Insert**. To add a new column, right click on the column to the right of where you want the new one to be. You can also use the Insert button in the Cells group on the Home tab.

To **delete** a row or column, select the row you wish to delete and right click. Choose **Delete** from the menu. The row **below** it will move up and fill its place.
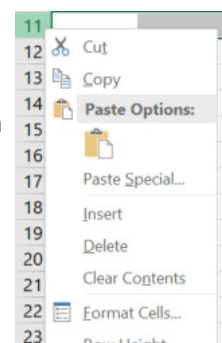
If you wish to only delete the contents and to keep a blank row there, select **Clear Contents** from the right click menu.

To **move** a row or column, select it by clicking its heading and then choose the **Cut button** on the Home tab. Select where you would like to move it and then choose the Insert button and **Insert Cut Cells** from the menu.

Functions and Formulas

Excel can add (+), subtract (-), multiply (*), and divide (/) numbers for you. Importantly, all functions must begin with an equals sign (=)

In this example, cell B8 holds the function =SUM(B2:B6) to add the value of each cell in cell range B2:B6 and displays the total in cell B8 and the function in the formula bar.

8.   What is the function used here in cell B8 to calculate the total for the groceries?

_____

A function must be written in a very specific way
=**SUM**(B2:B6)

- Always begin with an =

- Followed by the function name, eg. SUM

- And in brackets, the arguments (names of the cells you wish you calculate) eg. (B2:B6)

If you wish to calculate multiple arguments, be sure to separate them by a comma.

Tip: Point and Click

When capturing a cell range for a function, instead of typing the cell range names, try typing the beginning of your function, =**SUM**(for example, and then using your cursor to select the cell range.
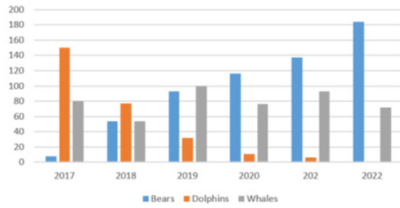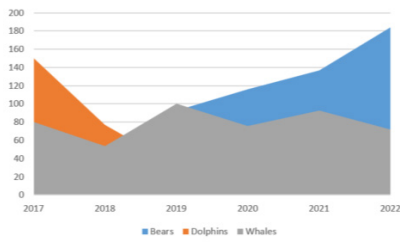
Charts

Excel offers different charts that you can add to your worksheet depending on your needs. Once you have completed your worksheet, highlight the data you wish to chart and choose a chart from the Charts group on the Insert tab. As you can see, Excel will also recommend the best chart to use for you data.

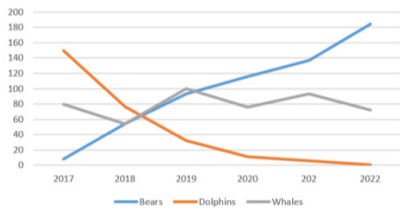## 9.   Draw a line to match up the Type of Chart with its image:
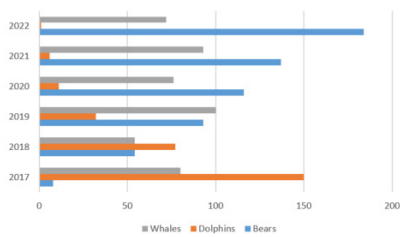

a.   Pie Chart

b.   Column Chart

c.   Line Chart

d.   Area Chart

e.   Bar Chart

Printing Your Worksheet

Click the **File tab** to view the Backstage. Choose **Print** from the menu to view our Print settings.

Here you can decide if you would only like to print the active worksheet you are currently working on, or would you like to print the entire workbook.

Tip: Printing Charts

If you have a chart on your worksheet and you only want to print that and not the rest of the worksheet, select the chart and then go to the print menu. As you will see on the preview, only the chart will print.
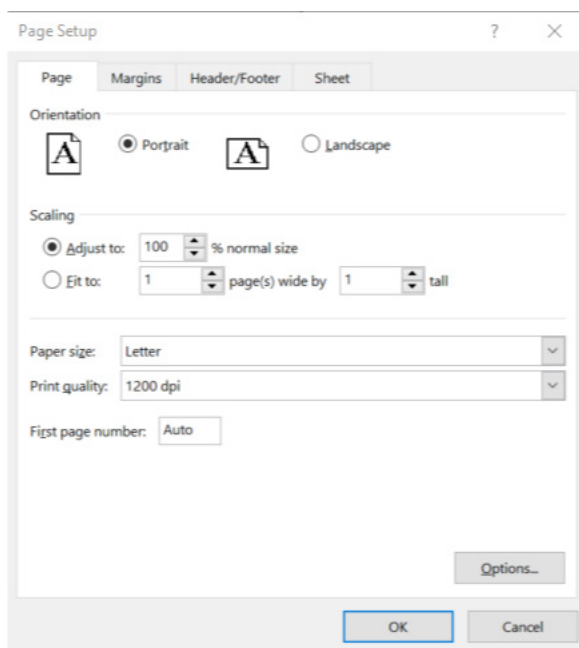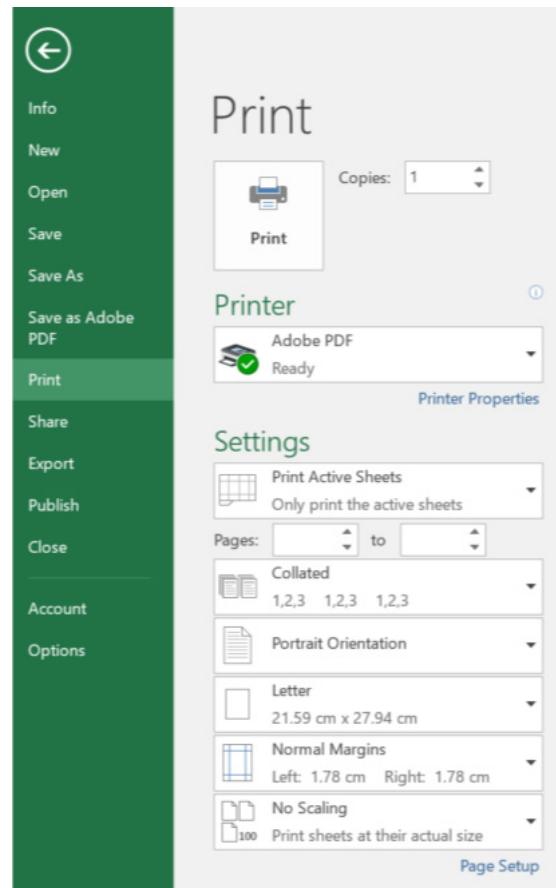
For further settings, click **Page Setup** at the bottom of the Print menu to open the Page Setup dialog box.

Answer Key

1. **Fill in the Blanks – Use the diagram above to help you identify numbers 1 - 4**

    1. Quick Access Toolbar

    2. Row

    3. Name Box

    4. Zoom Control

2. **What is the name of the selected cell in this image?**

    B3

3. **Name these cell ranges**

    a. B3:B9

    b. D4:F6

4. **Which format are the following? Circle one answer for each**

    1. c. Short date

    2. c. Scientific

    3. a. Accounting

    4. a. Number

5. **What is the default font for Excel? Circle one**

    a. Calibri

6. **Circle the buttons you would use to align your text in the center of a cell:**
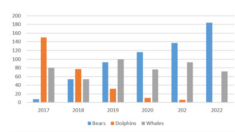

7. **What do these three buttons do?**

    a. Bold

    b. Italic
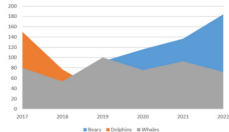
    c. Underlined

8.   What is the function used here in cell B8 to calculate the total for the groceries?

=SUM(B2:B7)

9.   Draw a line to match up the Type of Chart with its image:
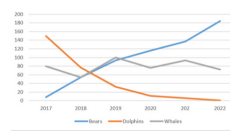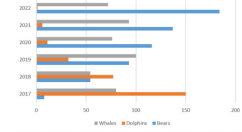

b. Column Chart

d. Area Chart

a. Pie Chart

c. Line Chart

e. Bar Chart

About Tech Manitoba

Tech Manitoba represents the province's growing tech sector. They are an industry-led association that helps companies thrive and grow through collaboration, education and promotion. Tech Manitoba brings people together to share skills, explore ideas and build a strong community. Through programming, events, and building connections at a local, national and international level, they aim to stimulate economic growth in Manitoba, be the trusted voice of Manitoba's tech sector and foster a culture where members thrive and grow.

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