We are going to explore the functionality of Excel by creating a budget for household expenses.

**Creating a Simple Budget Spreadsheet**

**Switch to Excel**

1. **Open** Excel.
2. **Insert** your flash drive. We will save this file at the end of class.

# Merge and Center Cells

We are going to put a title for our worksheet in row 1 and we want it to be centered over three columns.

1. **Click cell** and **take note** of the appearance of the **buttons** on the **Formula Bar**. Two of them

**A1**

dimmed, indicating they are unavailable.



1. **Note** also the cell address in the **Name Box**.



1. **Note** the **dark green border** around cell **A1**. This means the cell is **selected** and ready to accept data.



## Type Monthly Budget.

1. **Note** how all three buttons on the Formula Bar are now available.



|  |  |
| --- | --- |
|  **Cancel** | Returns the cell content to its previous state. |
|  **Enter** | **Commits** the changes that were made to the cell. There are many ways to commit changes to a cell, but this button is **guaranteed** to work all the time, no matter what situation you are in. |
|  **Insert Function** | Inserts a function into the cell. |

1. After typing, **commit** your content by **clicking the check mark on the formula bar**.
2. **Select** cells

to

by **clicking** inside the first cell, **making sure** your mouse

pointer is a white box cross (the selection tool) and **holding** the left mouse button down and **dragging** across to the last cell of the selection area.

**A1**

**C1**

1. On the **Home** tab, in the **Alignment** group, **click** the **Merge & Center** button. (See **Figure 1** on

## Handout 3)

1. **Click** in a clear cell to deselect the cells.

# Enter Data and Navigate Between Cells

We will be typing content into cells and using two methods to move to adjacent cells.

1. **Click** in cell **A2**. **Type Item**, and **tap** the key to move to cell **B2**.

Tab

1. In cell **B2**, **type Amount** and **tap** the

Tab

1. In cell **C2**, **type Comments***.*

key to move to cell **C2**.

1. **Move** to a different cell to **commit** the content in

**C2**

# Format Cells

or, better yet, commit with the check mark.

Formatting can be applied to several cells at one time and can make the cells stand out from the rest of the cells in the worksheet.

**A2**

**C2**

1. **Select** the

through

**cell range** by **clicking** cell **A2**, **making sure** the cursor is the selection tool,

and **dragging** across to cell **C2**. The selected cells should be highlighted - although the first cell will not be so. **Note** the dark black border around the selected cells.

1. On the **Home** tab in the **Font** group**, click** the **Bold** button.
2. **Change** the **font size** to 12.
3. **Find** the **Fill Color** button in the **Font** group and **click** the list arrow. **Select** a light color from the color choices.
4. **Click** in a clear cell to **view** the changes to this range of cells.

# Resize Column

**Note** how the word Comments doesn’t seem to “fit” in the cell. To fix that, we need to widen the column.


### Using the ribbon

1. **Click** on the **C** at the top of the column to **select** the column. This is called the


## column label.

1. On the **Home** tab in the **Cells** group**, click** the **Format** button. Under **Cell Size**, **choose AutoFit Column Width.**

**Note:** If you add an even longer word to one of the cells in that column at a later point, the column must be **resized again**.

1. **Click** in a **clear cell** to deselect the column.
2. **Notice** the word **Comments** now “fits” in the C Column.



### Double-click Method

Another way to resize a column is by **double-clicking** on the **divider line** on the column label.

1. **Click** the **Undo** button on the **Quick Access Toolbar** (see Handout 1, Fig 1) to undo our last operation. **Notice** how clicking the Undo button changes the column width back to the way it was before.
2. **Point** the cursor to the **dividing line** between the **column C label** and the **column D label**.
3. **Notice** how the pointer turns into an **arrow pointing left and right**.

1. Keeping the cursor in that location, **double-click** to resize the column.

# Enter More Data and Resize Columns

**See Handout 3, Fig. 2**

1. Using **Figure 2** on **Handout 3**, **type** in the row headings, Rent,

Utilities, etc. **Use** the key to move to the cell below.

Enter

**Teacher’s note:**

For the spellcheck section:

1. Spell at least one of the row headers wrong.
2. Spell at least one of the all- caps headers wrong.
3. **Attempt** to resize Column A using the point and double-click method. **NOTE**: This method will not

work if you are still in edit mode in cell.

Enter

**A16**

1. **Type** the numbers into the cells in Column B using the move to the next cell.

**key** to commit your changes and

**Teacher’s note:**

Encourage students to use the number pad on their keyboard for number entry.

1. **Click** into
2. **Click** into

## and type June 1st this goes to $825.

and **type Look into new windows.**

**C3**

**C4**

1. **Resize column C** using whichever method you prefer. Make sure you **commit** the content in before you resize the column. You cannot resize a column while a cell is in edit mode.

**C4**

1. We meant to type “**May 1st**" into cell **C3**. Let’s edit the text in that cell.
	1. **Click** on cell to select it.

**C3**

* 1. **Click** in the **formula bar**. **Note that** the formula bar populates with the contents of the selected cell.
	2. **Change** “**June**” to “**May**”.
	3. **Commit** with the check mark.

# Apply Currency Style Formatting

Since we are doing a budget, it would be nice to have the numbers in column B display in currency style rather than just plain numbers. To do this:

1. **Select** column **B** by **clicking** on the letter **B** at the top of the column.

1. On the **Home** tab in the **Number** group**, click** the **Accounting Number Format** button.
2. **Notice** how all of the numbers now have dollar signs and two decimal places.
3. **Click** into cell and **observe** the formula bar. **Notice** how the formula bar still says “800” (it

**B3**

doesn’t have a dollar sign or decimal places). That’s because the formula bar shows what’s **actually** inside of a cell. In our case, this cell contains a plain old number. But we are telling Excel to **display** this number in our spreadsheet as currency.

**Note:** When adding new numbers to a column formatted in this currency style, if the number includes dollars as well as cents, a decimal will have to be typed. For example, typing “**200.5**” yields “**$200.50**”.

# Enter a Simple Formula

Next, we are going to examine several different ways to add the values in cells

through **B10**.

**B3**

1. To let Excel know that you are going to enter a formula, always start your formula with an equal **=**

sign. **Click** into and **type** an **=** sign.

**B11**

**B11**

1. Now, **click** into cell **B3**. **Notice** how the cell name (**B3**) appears in a color border is now around cell **B3**.

as if it was typed in and also

1. Next, **type** a **+** (plus) sign and then **click** in cell **B4**. Continue to **type** the **+** signs and **click** into the cells, *which will add the value that is in that cell*, until you **click** into the last cell, **B10**. Do not type the **+** sign after clicking in **B10**.

1. **Check** your formula for accuracy using **Figure 4 on Handout 1**. The formula should be:

**=B3+B4+B5+B6+B7+B8+B9+B10**

1. **Click** the **check mark** on the formula bar to **see** the **result**, which should be $1340.00.

# Use a Function

We are going to use a different method this time to add up the values in through **B10.** We are going

**B3**

to use a **function**, which in Excel is basically a pre-defined formula. The function name tells Excel what to execute. In this case, we’re going to use a function called **SUM**.

1. **Click** the **Undo button** on the **Quick Access Toolbar**. **Watch** what happens to cell **B11**. The formula has disappeared, so we can start again.
2. **Type** an **=** sign into cell **B11**. This lets Excel know that you are going to use a function, just as when you are typing a formula.
3. Next, **type SUM.** As you type, **note** that a **dropdown** list appears with suggestions for which function you might like to use.

* 1. **Clicking once** will display a description of the function.
	2. **Double-clicking** will add the function to the formula in the cell.
1. **Double-click** the **SUM** entry.
	1. **Note** how an open parenthesis is added to the formula, which marks the beginning of the function.
	2. **Also note** the ScreenTip that shows the function’s **syntax**. This tells you what kind of values the function expects to receive.

1. We are going to pass a **range of cells** into the function.
	1. **Click** into the first cell in the range, which is **B3**.
	2. **Type** a **colon**.
	3. **Click** into the last cell in the range, which is **B10.**
	4. **Commit** the formula by **clicking** the **check mark** in the formula bar.
2. **Check** your formula for accuracy – it should be **=SUM(B3:B10)**.

# Use the Mouse to Express a Range of Cells

1. **Clear** the formula by **clicking** the **Undo** button.
2. **Click** into cell **B11.**
3. **Type** in **=SUM**, and **double-click** on the **SUM** dropdown entry.
4. **Click and drag** from cell to **B10**.

**B3**

1. **Check** your formula for accuracy – it should be **=SUM(B3:B10)**.
2. **Click** the check mark on the formula bar. This will insert the end parenthesis and commit the formula**.**

# AutoSum

AutoSum is a two-part button in the Editing group on the Home tab. It looks like the Greek letter Sigma. It is a shortcut to the **SUM** function and does not require entering an **=** sign in the cell first.

The button has a list arrow with other functions and can be used to perform calculations quickly on a contiguous set of numbers. The AutoSum button will give you all the components of a sum formula except for the range of cells.

**B11**

Delete

1. **Click** in

and **tap** the

key. Pressing this key **clears the contents** of the selected cell.

1. On the **Home** tab in the **Editing** group, **click** the **AutoSum** button (not the list arrow).
2. **Note** the selection of cells denoted by the “marching ants” and the formula that has been entered into **B11**.
3. If the formula is correct, **click** the check mark on the formula bar.

# Add Data to a Formatted Column

1. Now that we know our expenses add up to $1340.00, **type** the **numbers only** into cell **B14**. **Do not type the $ sign or the decimal places.**
2. **Click** the check mark on the formula bar to commit the content.
3. **Note** that the number we typed adopted the same currency formatting as the rest of the column.

# Spell Check

The Spell Check function checks your worksheet for misspelled words and corrects them.

**Note** that, unlike Microsoft Word and PowerPoint, Excel does NOT underline misspelled words in red.

1. **Click** the **Review** tab. In the **Proofing** group, **click Spelling**.
2. A box will appear asking if you want to continue to check spelling from the beginning of the sheet (Excel starts the spell check from the selected cell). **Answer** yes.
3. **Respond** to any prompts you might get about misspelled words. You can either accept spelling suggestions or ignore them.
4. We typed some words in all capital letters. If any of those words were misspelled, spell check would not catch them as by default words in all caps will not be spell-checked.
5. **Note** that this technique ONLY spellchecks the **active** worksheet. To spellcheck **all** worksheets, right-click on a worksheet tab, select “Select All”, and then click the Spelling button in the ribbon.

**Tip:** You can tell Excel to spellcheck words that are in uppercase by

going to the File tab and clicking Options. Then, navigate to the “Proofing” section and deselect the appropriate checkbox.