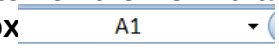
***Supplies**:*

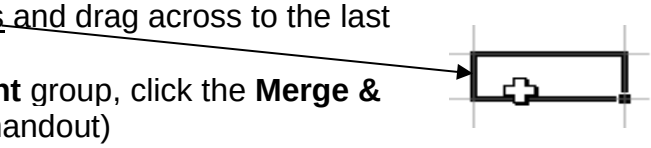
- *You will need a storage location to save your spreadsheet for use in Session 2.*
- *You will need the 2 handouts pertaining to Session 1*

Instructions: Follow the directions below to create a budget spreadsheet.

1) Merge the cells that contain the title and center the title

a) Click into Cell A1 and take note of the appearance of the button on the **Formula Bar**. Note also the cell address in the **Name Box** 

b) Type Monthly Budget. Take note again of the appearance of the button on the Formula Bar. There are now active buttons for **Enter** **, Cancel** as well as **Insert Function.**
*Note: The **Cancel** button will return the cell contents to their previous state.*
c) After typing, **commit** your content and get out of edit mode by clicking the check mark on the formula bar.
d) Select cells A1 to C1. (To select cells, click inside the first cell, make sure your mouse pointer is a white box cross and drag across to the last cell of the selection area)
e) On the **Home** tab, in the **Alignment** group, click the **Merge & Center** button**.** (See **Figure 1** on handout)
f) Click in a clear cell.



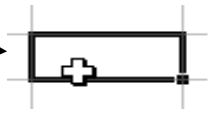
2) Entering column titles

a) Click in cell A2. Type **Item**, and press the **Tab** key to move to cell B2.
b) In cell B2, type **Amount** and press the **right arrow key** to move to cell C2.
c) In cell C2, type **Comments**

.

3) Formatting the cells with the column titles

a) Select the A2:C2 cell range by clicking cell A2, then dragging the mouse pointer to cell C2. The selected cells should be lightly grayed - although the first cell will not be so. Also there is a dark black border around the selected cells. Hint: Make sure your mouse pointer is a white box cross *when you select the cells.*
b) On the **Home** tab in the **Font** group**,** click the **Bold** button.
c) Change the font size to 12.
d) Still on the **Home** tab in the **Font** group, click the **Launcher** button.
e) In the Format Cells dialog box, click the **Fill** tab. Under background color, select a light color from the color choices.
f) Click **OK** and then click in a clear cell.



4) Getting the word "comments" to *fit* in the cell

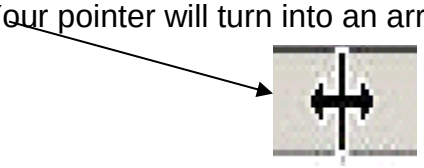
a) To resize this column, click on the **C** at the top of the column to select the column.
b) On the **Home** tab in the **Cells** group**,** click the **Format** button. Under **Cell Size**, choose **AutoFit Column Width.**
c) Click in a clear cell.
d) Notice the word Comments now "fits" in the C Column

5) Using the Undo Button

a) On the **Quick Access Toolbar,** click the **Undo** button (see **Figure 1**); notice how that clicking the Undo button will *undo* your last action.

6) Resize column C

a) To resize the C column by a different method, point the cursor to the dividing line between the C column and the D column. Your pointer will turn into an arrow pointing left and right.
b) **Double-click** to resize the column.



7) Entering data

a) Using **Figure 2**, type in the row headings, Rent, Utilities, etc. Use the **down arrow key** on your keyboard to advance to the next cell.
b) After committing the content in cell A15, resize column A using the **point and double-click method.**
c) Type the numbers into the cells in Column B using your down arrow key to move to the next cell
d) Click into C3 and type **May 1st this goes to $825**
e) Click into C4 and type **Look into new windows**
f) Resize column C using the **Cell** group **format** button **> autofit column width** selection
g) To standardize the B column so that the numbers present a **currency style**:
   i) Select column B by clicking on the letter **B** at the top of the column
   ii) On the **Home** tab in the **Numbers** group**,** click the **Accounting Number Format** button. (see **Figure 1**)

8) Entering formulas

a) We want to total the amounts in cells **B3** through **B10**. To let Excel know that you are typing a formula, always start your formula with an equal **=** sign. Type an **=** sign into cell **B11.**
b) Now, click into cell **B3**. Notice how the cell name appears in B11 as if it was typed in and also a color border is now around cell B3.
c) Next, type a **+** (plus) sign and then click in cell **B4**. Continue to type the **+** signs and click into the cells until you click into the last cell, **B10**.
d) Check your formula for accuracy using handout 1 and then click the check mark on the formula bar to see the result, which should be $1340.00.

9) Using the Undo Button

a) On the **Quick Access Toolbar** click the **Undo** button. (See Figure 1) Watch what happens to cell B11. Clicking the Undo button will undo your last action. Instead of entering "=B3+B4+B5…" let's enter a function.

10) Entering a function

a) We want to total the B column using a function. To let Excel know that we are typing a function, always start the function with an **= sign**, just as when you are typing a formula.
b) In cell **B11**, type **=SUM** and an **open parenthesis**. The open parenthesis indicates we are going to refer to a **range of cells**.
c) Next, click into the first cell in the range, which is **B3**. Then type a colon and click into the last cell in the range, which is B10 and then type an **end parenthesis**
d) Check your formula for accuracy using handout 1 and then click the check mark on the formula bar to see the result
e) ***Now that we know our expenses***, let's **type into cell B14 the result which is displayed in cell B11** and click the check mark on the formula bar. *Note: You do not need to type the $ and decimal places. The data will auto format as soon as you click the check mark on the formula bar.*

11) Spell Check and Saving

a) Check the spelling in your spreadsheet. Click the **Review** tab and click **Spelling**. A box will pop up asking if you want to continue to check spelling from the beginning of the sheet. Answer yes.
b) To save the document, insert your flash drive.
c) Click the **File Tab.** Click on to **Save As.**
d) In the Save As dialogue box, navigate to the flash drive.
e) In the **File Name** box type the words ***My Budget***.
f) Click the **Save** button.

12) More Cell references

a) Click into cell B14 and look in the formula bar to see that the amount was simply typed into that cell, copied essentially from the amount in B11
b) To illustrate why typing-in an amount is not good procedure,
   i) Bump up Leisure in B9 to $200 and click the check mark on the formula bar.
   ii) Notice what happened to the total in B11. It incremented accordingly.
   iii) But what other cell should have incremented also? Ans: B14
   iv) Why did it not increment? Ans: because it contains a number, not a cell reference.
   v) To fix the problem, Click in the cell B14 (no need to delete contents) and type a **cell reference:** Type in " =" and click on cell B11, then click the check mark on the formula bar.
c) Another way to express a range:
   i) click into cell **B11**
   ii) type in " **=**"," **SUM**", and the **open parenthesis**
   iii) click the **B3** cell and using **box cross** (the selecting tool), hold down the left mouse button and drag down from **B3** to **B10**. Release the mouse button

iv) Add the **close parenthesis** and click the check mark on the formula bar**.**

d) Using Autosum to add up a range of numbers with the click of one button:
   i) Click in **B11** and press the delete key**.** On the **Home** tab in the **Editing** group, click Autosum Σ, then click the check mark on the formula bar.

13) Souping Up the Spreadsheet (See Figure 3 on Handout 1)

a) Let's start by **adding some columns.**
   i) Change the label in cell B2 from "Amount" to "Budget"
   ii) Add an "Actual" column between Budget and Comments:
      (1) Select the column to the right of where you want the new column to insert by pointing to the column label (A, B, C, e.g.) and clicking on it.
      (2) On the **Home** tab in the **Cells** group, click the **Insert** button**.**
      (3) Type **Actual** in C2.
   iii) Add a "Difference" column between Actual and Comments
b) Using **Figure 3** on the handout, **type in the numbers** in cells C3 to C10. *The column should auto-format to currency style**.***
c) Click in cell B11**. Copy the formula** from B11 to C11:
   i) Move your mouse to the lower right corner of the cell until the cursor changes to the **Fill Handle** (**black cross)**.
   ii) Left click and drag to C11.
d) **Using cell referencing, write a formula in D3** to show the **difference** between what was budgeted for that item and the actual expense. *If you're not sure what the formula should be, consult handout 1.*
e) **Copy the formula** from **D3** down to **D10** using the **Fill Handle** (black cross).
f) **Copy C11 to D11.**
g) **To display formulas**, click into an empty cell, then, hold down the <CTRL> key, and press and release the ~ key. Repeat to get back to original view.

14) Inserting rows –

Our goal is not just to write down numbers and call it a budget. Rather, we want to make this spreadsheet really work for us. So let's tweak it some more. We just added some columns. Now let's add some rows and make some other adjustments.

a) **Add a row. C**lick on Row 11 to highlight it, and **right**-**click**. Select "Insert." Notice what happened. All the rows dropped down to insert another blank row.
b) In cell A11, type **Insurance**. Type **$50** in B11 and C11, notice the updating that occurs as you type the amounts in
c) Now insert another row right above A12
d) In A12, type **Loans**. Type **$75** in B12 and C12
e) Click on D13 and check what happened to the formula, see that it automatically updated, accounting for the two extra rows.

15) Moving rows and columns -

a) Let's move the Misc row. "Misc" should not be in the middle of the list of expenses. It should be at the end. Let's cut it from it's current location and drop it lower in the list.
b) Click on row 10 to highlight it.

c) Right click and select “Cut”
d) Click Row 13 (TOTAL) to highlight it.
e) Right click and select “Insert Cut Cells”
   i) Notice the green “smart tags” in cells B13 and C13. As you click in each cell an options box appears Click in B13 and look in the formula bar. Note how the formula does not include all the rows. Excel does not automatically assume we want the moved row to be included in the formula, so we have to tell Excel to do so. Do this by clicking in the options box and selecting Update Formula to Include Cells. Do the same in C13.
   ii) **IMPORTANT: Note how cell D13 did not have a smart tag, a flaw in Excel. How would you update the formula to include the additional rows? Drag the formula across again from C13 to D13.**

16) Entering another formula

a) Our expenses amount in cell B16 no longer represents our actual expense, only our budget amount, so we need to change the amount in B16 to reference the “actual” column total in cell C13.
b) Using cell referencing, change the cell reference in cell B16 from B13 to C13. Do this by clicking in cell B16, typing an = sign, then clicking in cell C13. Click the check mark on the formula bar. Remember that clicking the check mark on the formula bar is what “finalizes” the formula so that you can see the result.
c) In cell B17, **using cell referencing,** enter the formula (=B15-B16) which will find the difference between Income and Expenses. Click the check mark on the formula bar to see the result.

17) Copy this worksheet to a new worksheet

a) Right click on Sheet 1 tab.
   i) Select “Move or Copy”
   ii) Select “Create Copy” and OK
b) Point to the **Sheet 1(2)** tab label and right click. Click on **Rename.** Type **January.** Click in a clear cell.
c) Click on sheet 1 and do a <ctrl> ~ to see the formula view. Delete out the **Actual data**, not the formula, just the data. Do <ctrl> ~ again.
d) Rename Sheet 1 **Template 2012**
e) Make a copy of the Template 2012 sheet and rename it February
f) Create a March sheet
g) Click and drag the sheet tabs to put them in order of Template 2012 through March, left to right

18) Save & Close