**Excel Tips & Tricks**

**Formulas**

**Formula Basics**
- Perform calculations on values in cells
- Always begins with an equal sign (=)
- Should reference other cells (i.e. =A1+B1)

**Mathematical Order of Precedence**
- Multiple operators are calculated in the following order: parentheses, exponentiation, multiplication and division, addition and subtraction.
- Be careful! Example: \((8*7)+2 = 58\) but \(8*(7+2) = 72\)

**AutoSum Button**
1. Select cell to enter formula.
2. Click the *AutoSum* button. 
3. Press [Enter].

**Manual Formula Entry**
1. Select a cell.
2. Type the desired formula
3. Press [Enter].

**Paste Function**
1. Select cell.
2. Click the *Paste Function* button.
3. Select category from list box.
4. Select function from function list.
5. Click OK.
6. Click the *Collapse Dialog* button.
7. Select the range to use in the calculation.
8. Click the *Expand Dialog* button.
9. If necessary repeat steps 6-8 for additional values.
10. Click OK.

**Create an Absolute Reference**
Two types of cell references: *relative* and *absolute*. Relative, when copied, adjust to reflect new location. Absolute always refer to same cell.
1. Select cell.
2. Type formula.
3. Position insertion point before cell reference.
5. Press [Enter].

**Operator**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Performs</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ (plus sign)</td>
<td>Addition</td>
</tr>
<tr>
<td>- (minus sign)</td>
<td>Subtraction</td>
</tr>
<tr>
<td>* (asterisk)</td>
<td>Multiplication</td>
</tr>
<tr>
<td>/ (slash)</td>
<td>Division</td>
</tr>
<tr>
<td>() (parentheses)</td>
<td>Controls order of operations. Calculations within parentheses are performed first.</td>
</tr>
<tr>
<td>% (percent)</td>
<td>Converts number into a percentage. Example 10% = .10</td>
</tr>
<tr>
<td>^ (caret)</td>
<td>Exponentiation. Example 2^3 = 2<em>2</em>2</td>
</tr>
</tbody>
</table>

**Function**

<table>
<thead>
<tr>
<th>Function</th>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM</td>
<td>=SUM(A1:A20)</td>
<td>Sums all numbers in a range</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>=AVERAGE(A1:A20)</td>
<td>Returns the average of a range of numbers. Empty cells not included in calculation; zeros are.</td>
</tr>
<tr>
<td>MAX</td>
<td>=MAX(A1:A20)</td>
<td>Returns highest number in range</td>
</tr>
<tr>
<td>MIN</td>
<td>=MIN(A1:A20)</td>
<td>Returns lowest number in range</td>
</tr>
<tr>
<td>COUNT</td>
<td>=COUNT(A1:A20)</td>
<td>Returns number of cells that contain numbers</td>
</tr>
</tbody>
</table>

**Range Finder**
1. Double-click the cell containing the formula to edit. The formula range references and range border appear in the same color.
2. Optional: Drag the range handle to change cells in range.
3. Press [Enter].

**Select Non-Adjacent Ranges**
1. Drag mouse to select first range.
2. Hold [Ctrl] and drag to select non-adjacent range.
Edit Using Keyboard
1. Use arrow keys to select cell.
3. Make desired changes.
   Or press [Esc] to cancel.

Rotate Text in a Cell
1. Select cell containing text.
2. Click the Orientation button in the Alignment group on the Home tab.
3. Select the desired orientation.

Insert Cells
1. Select cell(s) you want to insert.
2. Click the lower half of the Insert button in the Cells group on the Home tab.
3. Select Insert Cells…
4. Select the desired insert option.
5. Click OK.

Wrap Text in a Cell
1. Select cell containing text.
2. Click the Wrap Text button in the Alignment group on the Home tab.

Format Painter
1. Select cell to copy formatting.
2. Click the Format Painter button in the Clipboard group on the Home tab.
3. Select cells to apply the format.

Insert Rows/Columns
1. Select where you want to insert a new row or column.
2. Click the lower half of the Insert button.
3. Select the desired insert option.

Charts & Miscellaneous

Hide Columns or Rows
1. Select column(s) or row(s).
2. Right-click on one of the selected column(s) or row(s).
3. Select Hide.

Unhide Columns or Rows
1. Select columns or rows on both sides of hidden columns or rows.
2. Right-click on one of the selected column(s) or row(s).
3. Select Unhide.

Freeze Panes
1. Select cell directly below column headings and/or immediately to the right of row headings to freeze.
2. Click the Freeze Panes button in the Window group on the View tab.
3. Select Freeze Panes (or another desired option).

Unfreeze Panes
1. Click the Freeze Panes button in the Window group on the View tab.
2. Select Unfreeze Panes (or another desired option).

Create Chart with One Button Push
1. Select data to chart.

Special Pasting
1. Copy desired data.
2. Select cell in which to paste.
3. Click the lower half of the Paste button in the Clipboard group on the Home tab.
4. Select the desired option.
Viewing / Printing

Page Layout View

• Click the Page Layout button in the Workbook Views group on the View tab.

Page Break Preview

1. Click the Page Break Preview button in the Workbook Views group on the View tab.
2. If an instructive dialog appears, click OK.
3. Drag a page break indicator (one of the blue lines surrounding the page) to the desired position and release.
   The printed text size will be adjusted so the data will print within the designated pages.

Set Print Area

1. Select the range.
2. Click the Print Area button in the Page Setup group on the Page Layout tab.
3. Click Set Print Area.

Print Selected Range

1. Select a range.
2. Click the Office button.
3. Choose Print in the left pane.
4. Choose Print Selection from the first Settings drop-down.
5. Click Print.

More Tips

Excel Tip Sites

• http://www.exceltip.com/excel_tips/Excel_Pivot_Tables/32.html