

# Learn to Love Spreadsheets!



@ KPL Central Branch March 21, 2017  
with June Macdonald, Marketing Director at **Hive Waterloo**

## Region

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## Agenda:

### Create an Excel worksheet

1. Open Excel and create a new blank spreadsheet. Name it something you'll remember, like March21
2. Add 3 columns with the headings: Product, Sold, Revenue
3. Add data under each column as follows (don't worry about being exact):

Product	Sold	Revenue
Oranges	23	20.35
Bananas	56	24.84
Mangoes	76	48.33
Pineapples	42	56.10
Apples	34	26.00

4. Format your data:
  - a. Whole Numbers – you can add decimal places by clicking on the image with the decimal sign. Try it. Then return the cells to whole numbers (no decimals). This is handy for when you want to round up or see a full number.
  - b. Currency – select the Revenue cells and apply currency formatting. Either click on the \$ sign or right-click and choose Format.
5. Sort your data:
  - a. By Product Name
  - b. By Revenue
6. Make a Bar chart:
  - a. Select the Product and Sold columns
  - b. Click the Insert menu
  - c. Select a Bar chart
7. Make a Pie chart:
  - a. Select all three columns
  - b. Click the Insert menu
  - c. Select a Pie chart
  - d. We only want to see the Revenue data. To change the data, click on the Pie chart that was created. Then click on Select Data. In the dialogue box you'll see the column headings with a checkbox. Click on "Sold" to deselect it.
8. Format your charts:
  - a. Click on the heading and format it
  - b. Choose other formatting. Right-click and choose to add headings, etc.

9. Save your chart to use in another program:
  - a. Make sure you have selected your chart. Under the Home menu click on Copy and choose Copy as picture. Follow instructions to save it with a name and in a location you will remember.

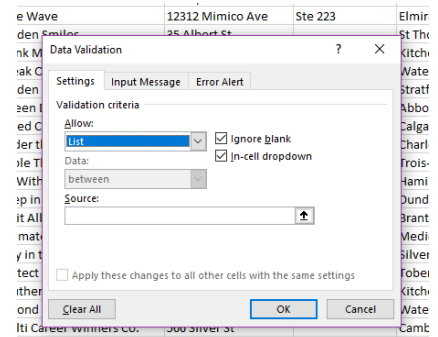
### Make a List for standardized data entry

By creating a list you eliminate errors and provide an easy way to fill data into the fields of your spreadsheet.

1. Download the files we'll use for this and the next sections. Go to your web browser to this page: **hivewr.ca/spreadsheets**

2. Add a drop-down list to cells:

- a. Open the file "List". Make sure you are on the "Customers" worksheet – check the tab at the bottom left.
- b. Select the first empty cell under the Course heading.
- c. Click on the Data menu then Data Validation.
- d. In the window under "Allow" pick "list"
- e. Next make sure your cursor is in the Source field then switch to the workbook "Course" and select the list of courses. It should look like this:



=Course!\$A\$1:\$A\$5. Click OK. You will be taken back to the Customer worksheet.

3. Check the list is ok by putting your cursor in the field to see your options. Do NOT select an option as we want to first apply the list to the data column. Select that cell and all the rows below it in that column. Type Ctrl-D to apply the list for all the subsequent rows.

**TIP: any time you want to apply a formula or action to more than one field, you can use the Ctrl-D (or Command-D for Macintosh) key combination for cells you have selected. The D stands for Down. If you want to apply a formula to a group of cells that go from left to right, use Ctrl-R.**

4. Now pick from the Course list to fill a value in the first field. Go down the list and pick a value for the next 4 entries. Once you've picked all the course names once, see that you can just type the first letter of the course name (or the first few letters if you have words starting with the same letters) and Excel will autofill the course name in the field. Or you can select several fields and copy them by typing Ctrl-C. Then click in the first empty cell and type Ctrl-V. Repeat until you've filled the rows. Any extra entries delete them.

### If Statements

For the next section on Mail Merge we need to add a value for "Suggestion" to our List. Our company wants to sell the Influence People course, but obviously doesn't want to promote it to someone who just took the course. Instead of doing this manually, we can auto-fill the Suggestion course with a formula.

1. Click in the first blank field under the "Suggestion" column.
2. Click on Insert Formula symbol. You will be presented with a list of formulas to choose from but it may not be the list we want. Enter Logical for the type of formula. Select IF as the formula.

3. IF statements are formatted like this: If cell A = 1, then enter “yes”, otherwise enter “no”. For our statement we want to say that if cell I2 has the course “Influencing Others" then enter “Without a Net” otherwise enter “Influencing Others”. See if you can figure this out using the help Excel provides to validate your formula.
4. Apply the formula to the whole list by using the Ctrl-D option.
5. Save and then close this file.

### Mail Merge a Letter

1. Open the Word file, “Letter”.
2. Under the Mailings menu, click on Start Mail Merge and select Letter.
3. Then click on Select Recipients and then Use an Existing List. A dialogue box will open. Find your Excel file, “List” and click Open.
4. Choose the table Customers.
5. Select the first instance of “FIRSTNAME” then click on Insert Merge Field and choose FirstName from the list. Do the same for all the other instances in the letter where a merge field needs to be put in place. Look the words in ALL CAPS:

FIRSTNAME	LASTNAME	COMPANY	ADDRESS1	ADDRESS2
CITY	PROVINCE	POSTALCODE	COURSE	SUGGESTION

6. Add formatting like spaces and commas between your merge fields as appropriate. For example a comma after City.
7. Once you’re done, click on Preview Results. Use the arrows to look at each merged document. If it merged correctly, click on Finish Merge. Choose how you want the file to merge, as one document, to print or email.

### Mail Merge Labels

Labels can be made similarly to a letter, but you need to know the type of label it is. Just look on the box for the manufacturer and part number. Then insert your fields same as you did for the letter above. Make sure you put the fields in the very first label section. Click on “Update Label” to see the fields applied to all the labels. Now you can press Preview to see your data as labels. Finish the mail merge and print.

### Create a Pivot Table

Pivot Tables are useful for analysing your data and looking at it in different ways.

1. Open the file “PivotData”. This data file is from one of the files provided in one of the Lynda.com Excel courses on Pivot Tables.
2. Make the data a Table by selecting all the data, click on Insert and click on Table. Click Ok.
3. Then go back to the Insert menu and click on Pivot Table. The dialogue box will provide options. The default is to use all the data in the table and to create the pivot table in a new worksheet.
4. Choose all the fields. Depending on which version of Excel you are using you may see that summaries are automatically created. You can swap out fields in different sections to get different views of your data. Try moving the data around to see how your view changes.
  - a. Filters: will give you a summary based on one of your data points. You can then use the down arrow in the chart to pick which subsets to look at.
  - b. Values: what subtotals you want to see

- c. Rows: which rows you want to view and if they are broken out

### Sales Reports

As you've seen above, Pivot Tables provide a way to summarize your data. Excel provides several templates for Sales reports. Depending on the complexity of your data you may want to set it up to include several different views. But make sure you have one source table for your data. Don't copy and paste or you won't know which data is the real thing. Take advantage of calculations to show percentages. Add Sparkline charts for trending views and charts to make your data visual.

### **Want to learn more?**

You can access Lynda.com tutorials with your library card! Go to [kpl.org/db/learning](http://kpl.org/db/learning) to get started.

### **About Hive Waterloo Region**

**Hive** is all about helping our youth — and adults, too — learn how to use technology to achieve the digital literacy needed to be successful in the 21st century. For us to be creators and not just consumers of technology.

Hive Waterloo Region is part of a network of Hive Learning Communities promoting digital literacy, open access to the web and diversity in tech around the world. We are creating a local network with organizations in our community with the same goals. Together we can help more people, faster.

**Membership** is open now for local organizations, companies and individuals to join the Hive Waterloo Region network. Join us at [hivewr.ca/membership](http://hivewr.ca/membership).

**Want to get involved?** Be a volunteer, a sponsor or network member! Contact us at [hello@hivewr.ca](mailto:hello@hivewr.ca) or [hivewr.ca](http://hivewr.ca).

The Hive WR team is also **available for hire** for school Math or Science nights, teacher or parent learning sessions and corporate HR team building learn to code sessions. Contact us [hello@hivewr.ca](mailto:hello@hivewr.ca) for details.

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