

Lesson 5

Monday Feb 23 due by March 2

We begin today's lesson with a number of miscellaneous Excel tricks that I have not yet shared with you but would like to become part of your repertoire. I ask that you try each one using the instructions below, then write a comment on each one on our collaborative doc at <http://TINYURL.COM/JAN15EXCEL>. I have attached a spreadsheet called **Lesson5WorksheetToDo.xlsx** that you should use for each tip. I believe the writing is thorough so no video!



Let us say you have info about people in columns A-I looking like this, where job applicants have written a short essay that appears in column H.

| | A | B | C | D | E | F | G | H | I |
|---|---------|------------|-----------------------|----------|---------------|-------|-------|--|----------------|
| 1 | FIRST | LAST | ADDRESS1 | ADDRESS2 | CITY | STATE | ZIP | PARAGRAPH ABOUT WHY I WANT THIS JOB | College Degree |
| 2 | Alice | Adams | 17 Main Street | | Washington | DC | 20500 | Why do I think this is a good match for me as a jo | BA |
| 3 | Tom | Buren | 23 Main Street | | Washington | DC | 20500 | Why do I think this is a good match for me as a jo | MA |
| 4 | Susan | Bush | 42 Orchard Street | Apt 33D | Spring Valley | NY | 10985 | Why do I think this is a good match for me as a jo | PhD |
| 5 | Alex | Eisenhower | 1600 Pennsylvania Ave | | Washington | DC | 20500 | Why do I think this is a good match for me as a jo | BA |
| 6 | Mary | Garfield | 1600 Pennsylvania Ave | | Washington | DC | 20500 | Why do I think this is a good match for me as a jo | MA |
| 7 | Bill | Grant | 262 Marrett Road | Apt 4C | Lexington | MA | 02410 | Why do I think this is a good match for me as a jo | BA |
| 8 | Yolanda | Harding | 37 Orchard Street | | Spring Valley | NY | 10980 | Why do I think this is a good match for me as a jo | MA |

You have used column H to contain paragraphs by each applicant and you would like to have ONE SCREEN for each person that you can print out and give to some colleagues. You wished the data in row 2 about Alice Adams could be in a column. In fact, you really wish you can SWITCH the data changing all the rows to columns and visa versa.

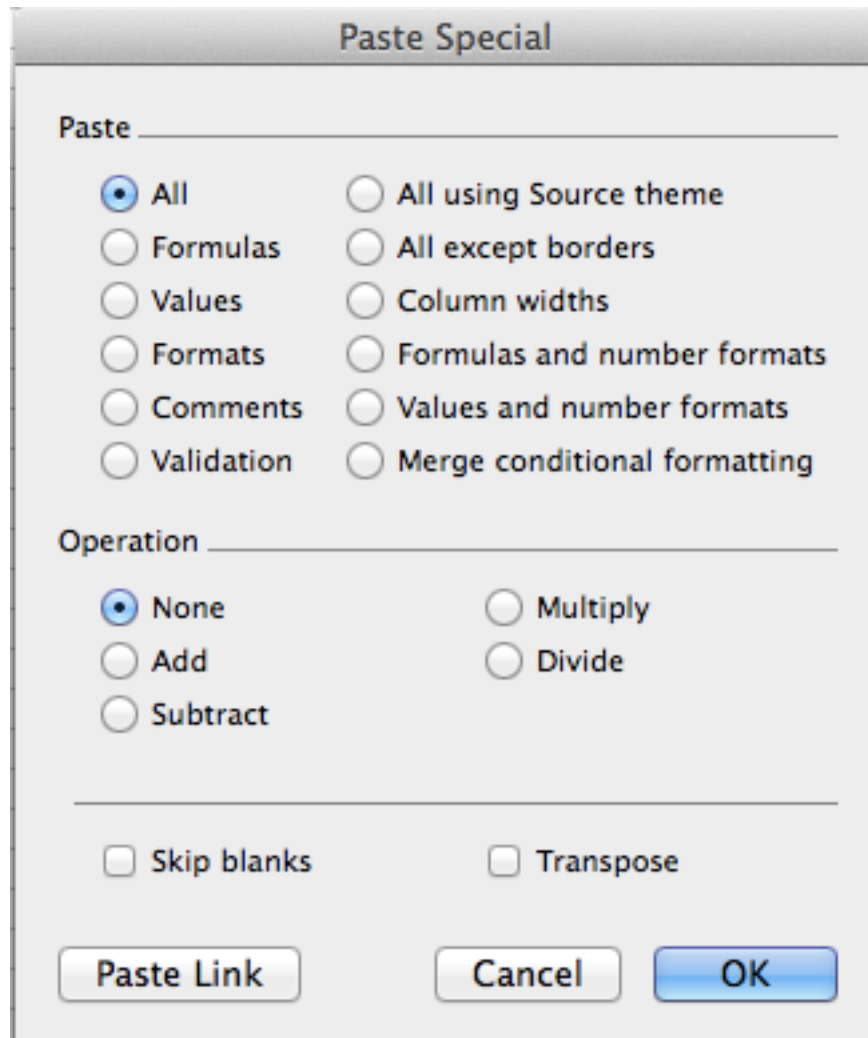
Step 1: Highlight from A1 to I8, possibly using the SHIFT-CLICK trick.

Step 2: Then choose COPY.

Step 3: Now go to a new spreadsheet or new worksheet TAB on this one and click in A1. Instead of choosing PASTE, you use the fancier feature called PASTE SPECIAL which brings us this box.

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Click the box that says TRANSPOSE and you have it! All you need to do is change some of the row widths and column widths, the angle tilt and wrap text and you have accomplished what you wanted. You take a screen snapshot of the data from A1 to B9 and can then print out all the info on Alice Adams as you see on the top of the next page.

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| | |
|--|--|
| FIRST | Alice |
| LAST | Adams |
| ADDRESS1 | 17 Main Street |
| ADDRESS2 | |
| CITY | Washington |
| STATE | DC |
| ZIP | 20500 |
| PARAGRAPH ABOUT WHY I WANT THIS JOB | Why do I think this is a good match for me as a job applicant? Well first of all, let me say that asdf jkfjaklfj alksjflkasj fklasj fclsaj fclsajflksa jfdlkjasflkj sklf sk jksf jklsf jkf jlsjflklas jfklasj fkla fkla fkla jfklaj sfklas jfkl jsdfkl sfkl jsdkl jsdfkl jasklfd alskf jklasj fdklas jfkls jfklas fksa jfkly asklj lksa klasdfj klasdf jlksa fdjklasj fdksljfd klsfjklasjfd klasf klsdfjlksadj flkf jklf dkl klfsaj klasdfj klfd jllkasf kla dflka flkas fjdkla fdsllkjf klasj flsafj lfks j |
| College Degree | BA |

Now you right mouse click on Column B (Mac users CTRL click) and you can HIDE Column B, taking another screenshot and printing out the info on Tom Buren. Hiding a row or column is a very powerful trick that I think you have already!

| | A | C |
|---|--|--|
| 1 | FIRST | Tom |
| 2 | LAST | Buren |
| 3 | ADDRESS1 | 23 Main Street |
| 4 | ADDRESS2 | |
| 5 | CITY | Washington |
| 6 | STATE | DC |
| 7 | ZIP | 20500 |
| 8 | PARAGRAPH ABOUT WHY I WANT THIS JOB | Why do I think this is a good match for me as a job applicant? Well first of all, let me say that asdf jkfjaklfj alksjflkasj fklasj fclsaj fclsajflksa jfdlkjasflkj sklf sk jksf jklsf jkf jlsjflklas jfklasj fkla fkla fkla jfklaj sfklas jfkl jsdfkl sfkl jsdkl jsdfkl jasklfd alskf jklasj fdklas jfkls jfklas fksa jfkly asklj lksa klasdfj klasdf jlksa fdjklasj fdksljfd klsfjklasjfd klasf klsdfjlksadj flkf jklf dkl klfsaj klasdfj klfd jllkasf kla dflka flkas fjdkla fdsllkjf klasj flsafj lfks j |
| 9 | College Degree | MA |

Homework 5A -- using the attached Lesson5Worksheet spreadsheet to see if you can get screen snapshots like me for Alice Adams and Tom Buren.



#5B

Use PASTE SPECIAL to get data without the formulas

This uses the same PASTE SPECIAL feature that you saw with Tip #5A. Many times I say that PASTE is like Elmer's Glue while PASTE SPECIAL is like Duco's Cement.

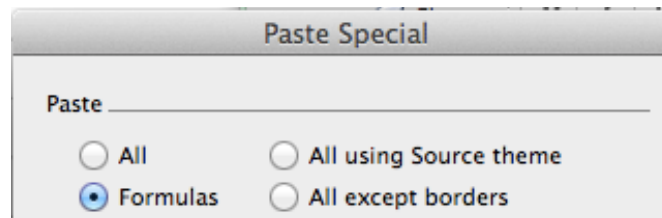
If you have formulas underneath the cells, for example column C below where I am using this formula repeatedly: =B2&", "&A2

| | A | B | C | D |
|---|---------|------------|------------------|------------|
| 1 | FIRST | LAST | FORMULA | NO FORMULA |
| 2 | Alice | Adams | Adams, Alice | |
| 3 | Tom | Buren | Buren, Tom | |
| 4 | Susan | Bush | Bush, Susan | |
| 5 | Alex | Eisenhower | Eisenhower, Alex | |
| 6 | Mary | Garfield | Garfield, Mary | |
| 7 | Bill | Grant | Grant, Bill | |
| 8 | Yolanda | Harding | Harding, Yolanda | |

Perhaps I want to get rid of the formulas in column C so I can edit some of the first names or add middle names. Here is the trick.

Step 1: Highlight C2 through C8 perhaps using the SHIFT-CLICK trick.

Step 2: Click in cell D2 and choose our new friend PASTE SPECIAL. Make sure you click FORMULAS and you are done. You can now delete column C and you have achieved your objective.



HW 5B -- use the TAB on the Lesson5Worksheet and demonstrate how to get the names without the underlying formulas.



#5C

Why dates might appear as numbers

Dates and Times are stored as numbers. Every date, e.g. 2/16/15 is a calculated number based on how many days have passed since the early 1900s. If you type in a few current dates such as

| | A |
|---|---------|
| 1 | 2/16/15 |
| 2 | 2/17/15 |
| 3 | 2/18/15 |
| 4 | 2/19/15 |
| 5 | 2/20/15 |

and then you highlight COLUMN A and choose FORMAT CELLS to change to numbers you will get these 5 digit numbers

| | A |
|---|----------|
| 1 | 42051.00 |
| 2 | 42052.00 |
| 3 | 42053.00 |
| 4 | 42054.00 |
| 5 | 42055.00 |

This is so bizarre that it confuses 90% of Excel users in the world. But not you anymore! These numbers represent the number of days that have passed since 1/1/1900. Serious! 100 years would be 100x365 or 36,500 days.

So if you ever see dates displayed as weird 5 digit numbers, just smile since you know that these giant numbers represent how many days have passed since 1/1/1900. And to fix? Just highlight them, then choose FORMAT CELLS then DATE.

Same thing with times. Look at column B

| | A | B |
|---|-----------|-------------|
| 1 | 2/16/2015 | 9:00:00 AM |
| 2 | 2/17/2015 | 10:00:00 AM |
| 3 | 2/18/2015 | 6:00:00 PM |
| 4 | 2/19/2015 | 7:30:00 PM |
| 5 | 1/1/1900 | 11:00:00 PM |

When I select all then change to NUMBER. I get

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| | A | B |
|---|----------|------|
| 1 | 42051.00 | 0.38 |
| 2 | 42052.00 | 0.42 |
| 3 | 42053.00 | 0.75 |
| 4 | 42054.00 | 0.81 |
| 5 | 1.00 | 0.96 |
| 6 | | |

where the decimals in column B represent the portion of the day from midnight to midnight.

What this means is that if you need to make up a schedule on Excel to reflect the school day, perhaps with 8 periods that start every 45 minutes, you need to calculate # minutes in a day, then you can multiply by 45 and you get each period.

| | D | E | F |
|---|----------|----------|-----------------------|
| 1 | 9:00 AM | | |
| 2 | 9:45 AM | 24.00 | hours in a day |
| 3 | 10:30 AM | 60.00 | minutes in an hour |
| 4 | 11:15 AM | 1440.00 | minutes in a day |
| 5 | 12:00 PM | 0.000694 | so 1 minute is 1/1440 |
| 6 | 12:45 PM | 0.03 | so 45 minutes = 45*E5 |

The formulas used can be seen below where I turned on fomulas.

| | D | E | F |
|---|----------|---------|-----------------------|
| 1 | 0.375 | | |
| 2 | =D1+E\$6 | 24 | hours in a day |
| 3 | =D2+E\$6 | 60 | minutes in an hour |
| 4 | =D3+E\$6 | =E2*E3 | minutes in a day |
| 5 | =D4+E\$6 | =1/1440 | so 1 minute is 1/1440 |
| 6 | =D5+E\$6 | =45*E5 | so 45 minutes = 45*E5 |
| 7 | | | |

The key idea is that there are 1440 minutes in a day, so each minute is 1/1440 in cell in E5. Then you can compute 45 minutes in cell E6.

HW 5C -- use the TAB on the Lesson5Worksheet and do the two exercises.

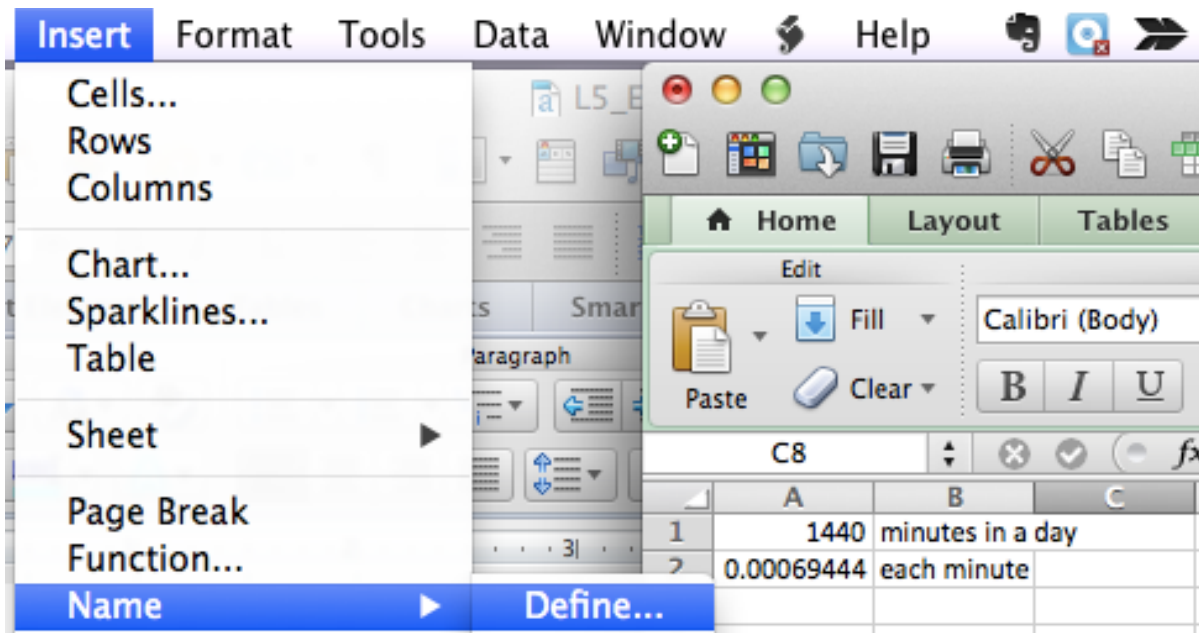


#5D

Name a cell so you can use it in a formula

It is sometimes useful to NAME a CELL so you can use it somewhere else with that name. For example in TIP#3, we saw that there are 1440 minutes in a day (24x60) and so each minute is 1/1440 or the decimal 0.000694444

So using the feature under INSERT called NAME, I can now DEFINE the value as the keyword MIN. I do this by highlighting A2 then going to INSERT then NAME then DEFINE.



This means that the keyword MIN behaves like a variable and refers to 0.000694444 and I can now use a formula in C2 that looks like =C1+45*MIN and it makes it much easier to produce a student schedule with 5 minutes of passing time.

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Look at the times in column C and the schedule in column D.

| | A | B | C | D |
|---|-------------|-------------|----------|-------------|
| 1 | 1440 | minutes | 9:00 AM | French |
| 2 | 0.000694444 | each minute | 9:45 AM | Travel time |
| 3 | | | 9:50 AM | English |
| 4 | | | 10:35 AM | Travel time |
| 5 | | | 10:40 AM | Math |
| 6 | | | 11:25 AM | Travel time |
| 7 | | | 11:30 AM | Music |

The formulas underneath in column C are easier to understand since they are based on MIN that refers to A2 which is yellow for your convenience.

| | A | B | C | D |
|---|---------|------------------|------------|-------------|
| 1 | 1440 | minutes in a day | 0.375 | French |
| 2 | =1/1440 | each minute | =C1+45*MIN | Travel time |
| 3 | | | =C2+5*MIN | English |
| 4 | | | =C3+45*MIN | Travel time |
| 5 | | | =C4+5*MIN | Math |
| 6 | | | =C5+45*MIN | Travel time |
| 7 | | | =C6+5*MIN | Music |

HW 5D -- use the TAB on the Lesson5Worksheet and do the exercises that involve MIN and building a time schedule.



#5E

How to enter a zip code with a leading zero

If you type 02142 into a cell in Excel, it shows up as 2142 since the computer wonders why you put in a leading zero.

One solution? Before you enter the cell, format it (or maybe the entire column) as text. Then it will look fine when you type in the leading zero. It will look even better if you center the column.

Second solution? Begin the entry with the ' symbol. This means that text is coming. Not " but '. Got it? You begin with ' then type the zip code.

HW 5E -- use the TAB on the Lesson5Worksheet and do the exercise that involves zip codes.



How to change text to be UPPERCASE or LOWERCASE

Here are three formulas that deal with UPPERCASE or lowercase or what is called PROPER CASE which means leading caps.

=UPPER()

=LOWER()

=PROPER()

these are very easy to use formulas.

HW 5F -- use the TAB on the Lesson5Worksheet and do the exercises that involve these 3 new formulas.

| | A | B | C |
|----|---|--------------|-------------------------|
| 1 | | | |
| 2 | HW 5F: Use the formula =UPPER() in column B and change the 5 words to uppercase | | |
| 3 | | | |
| 4 | hello | =UPPER(A4) | HELLO |
| 5 | GOODBYE | =UPPER(A5) | GOODBYE |
| 6 | I Love Excel | =UPPER(A6) | I LOVE EXCEL |
| 7 | I also like Google Docs | =UPPER(A7) | I ALSO LIKE GOOGLE DOCS |
| 8 | Steve Bergen | =UPPER(A8) | STEVE BERGEN |
| 9 | | | |
| 10 | Now use the formula =LOWER() in column B and change the 5 words to lowercase | | |
| 11 | hello | =LOWER(A11) | hello |
| 12 | GOODBYE | =LOWER(A12) | goodbye |
| 13 | I Love Excel | =LOWER(A13) | i love excel |
| 14 | I also like Google Docs | =LOWER(A14) | i also like google docs |
| 15 | Steve Bergen | =LOWER(A15) | steve bergen |
| 16 | | | |
| 17 | Now use the formula =PROPER() in column B and change the 5 words to "proper case" which means leading caps | | |
| 18 | hello | =PROPER(A18) | Hello |
| 19 | GOODBYE | =PROPER(A19) | Goodbye |
| 20 | I Love Excel | =PROPER(A20) | I Love Excel |
| 21 | I also like Google Docs | =PROPER(A21) | I Also Like Google Docs |
| 22 | Steve Bergen | =PROPER(A22) | Steve Bergen |
| 23 | | | |
| 24 | Now highlight COLUMN B and choose COPY. | | |
| 25 | Then highlight COLUMN C and choose PASTE SPECIAL and choose VALUES. This will paste the data into column C and you won't have the formulas anymore. | | |
| 26 | | | |



#5G

How to SEARCH and use SELECT ALL

Numerous times in my life, I have tried to search for something on an Excel spreadsheet and messed up because I forgot to choose SELECT ALL first. So I have now programmed my brain to say "always SELECT ALL" before trying to search for a word or phrase.

You can SELECT ALL with CTRL-A (PC) or COMMAND-A (Mac) or you can click the spot at the upper left of the spreadsheet where I have colored it red for you.

| | A | B |
|---|---------|------------|
| 1 | FIRST | LAST |
| 2 | John | Adams |
| 3 | Martin | Buren |
| 4 | George | Bush |
| 5 | Dwight | Eisenhower |
| 6 | James | Garfield |
| 7 | Ulysses | Grant |
| 8 | Monroe | Lincoln |

If you SELECT ALL then choose FIND under EDIT, you will be fine. If you have NOTHING selected and then choose FIND under EDIT, you will be fine.

But if you have a chunk of cells selected and you choose FIND, you are searching just in the selected cells (whether intentional or not) and you won't find it.

HW 5G -- use the TAB on the Lesson5Worksheet and do the exercise that involves searching for words on a spreadsheet.

Main Dish of this Lesson

Doing a Mail Merge from Excel

HW 5H The required 24 minute video at http://youtu.be/_s0MrKVXvUg spells it all out step by step. Once you have watched this video once or twice, you are ready to read the following pages which will guide you for this homework.

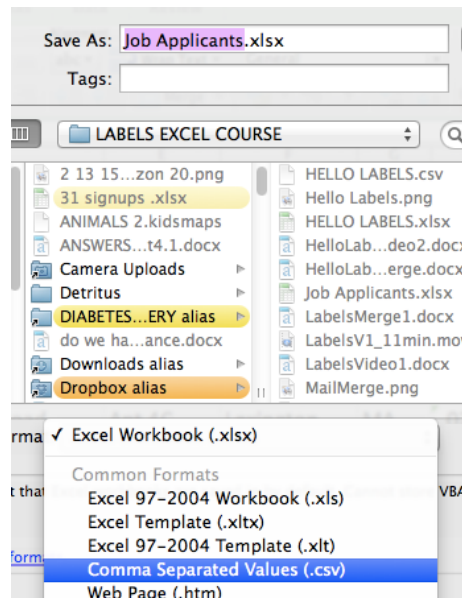
This 24 minute video will show you several examples of how to take data from Excel and merge it into Microsoft Word, perhaps for address labels, hello labels or even form letters. I created the video first and tried to be as thorough as possible. The screenshots and instructions below are intended to provide you with some redundancy and visuals.

| | A | B | C | D | E | F | G | H | |
|---|---------|------------|------------------|-----------------------|----------|---------------|-------|-------|-------------------|
| 1 | FIRST | LAST | FORMULA | ADDRESS1 | ADDRESS2 | CITY | STATE | ZIP | PARAGRAPH AB |
| 2 | Alice | Adams | Adams, Alice | 17 Main Street | | Washington | DC | 20500 | Why do I think th |
| 3 | Tom | Buren | Buren, Tom | 23 Main Street | | Washington | DC | 20500 | Why do I think th |
| 4 | Susan | Bush | Bush, Susan | 42 Orchard Street | Apt 33D | Spring Valley | NY | 10985 | Why do I think th |
| 5 | Alex | Eisenhower | Eisenhower, Alex | 1600 Pennsylvania Ave | | Washington | DC | 20500 | Why do I think th |
| 6 | Mary | Garfield | Garfield, Mary | 1600 Pennsylvania Ave | | Washington | DC | 20500 | Why do I think th |
| 7 | Bill | Grant | Grant, Bill | 262 Marrett Road | Apt 4C | Lexington | MA | 02410 | Why do I think th |
| 8 | Yolanda | Harding | Harding, Yolanda | 37 Orchard Street | | Spring Valley | NY | 10980 | Why do I think th |
| 9 | | | | | | | | | |

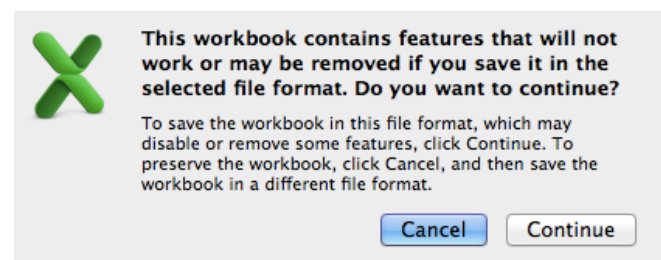
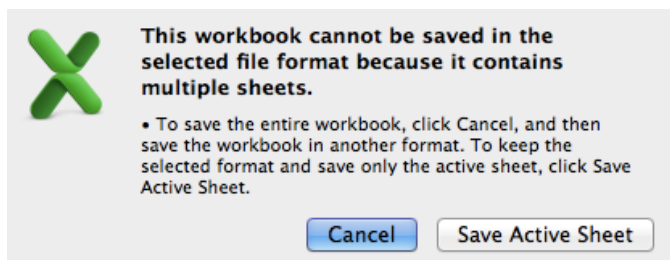
In the video, one skill involves taking the sample data and saving the file as a CSV file which stands for "comma separated values."

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You may get either of these warning messages when you do so. There is nothing at all to worry about.



The message on the left is because I have multiple worksheets. No problem, just SAVE ACTIVE SHEET. The message on the right is the standard message you get with CSV files. Just choose continue.

What's up with CSV files? Nothing that important, just something you should know. A CSV file is like an Excel file but it has fewer features, just data. In the old days, you needed a CSV file when doing a mail-merge and sometimes I still need it. Just knowing that CSV files exists and can be imported or exported from Excel puts you on the varsity!

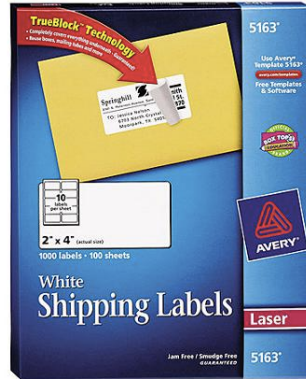
| | | | |
|---|--------------------------|------------------------|-------|
|  | SampleMailingLabels.csv | Feb 14, 2015, 11:07 AM | 2 KB |
|  | SampleMailingLabels.xlsx | Feb 14, 2015, 10:59 AM | 58 KB |

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Do you see how a CSV file is much smaller? Just 2K instead of 58K.

Now I go to Microsoft Word and get a blank document. The first thing I do is check out what size label paper I bought. Here is a typical Avery box with ID of 5163.



When I go to MAIL MERGE in MS Word and choose NEW DOCUMENT then MAIL MERGE MANAGER under TOOLS, I can specify which type of labels.

Label Options

Printer information

☐ Dot matrix
☒ Laser and ink jet

Label products: Avery standard

Product number:

- 5163 - Shipping
- 5164 - Shipping
- 5165 - Full Sheet
- 5167 - Return Address
- 5168 - Address
- 5196 - Diskette
- 5197 - Diskette
- 5198 - Audio Cassette

Label information

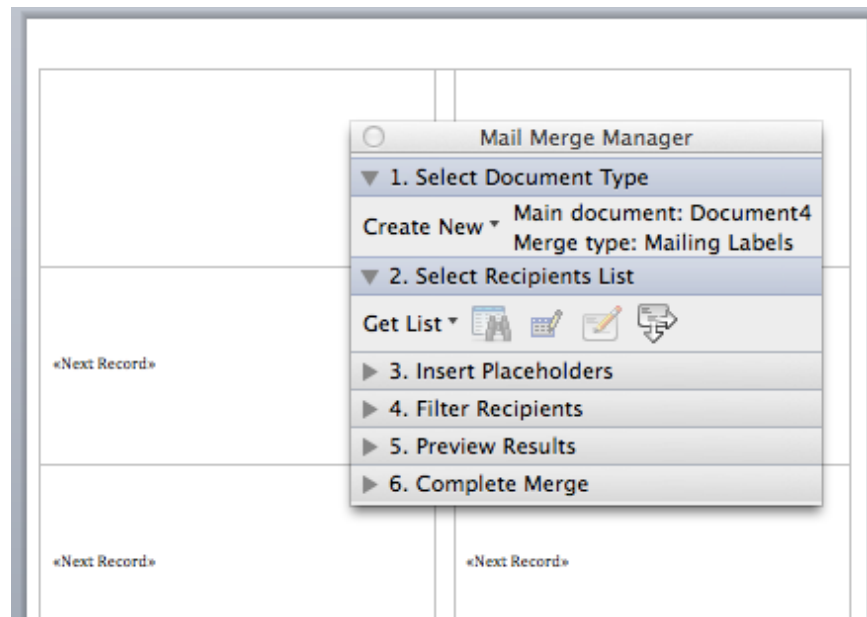
Type: Shipping
Height: 2"
Width: 4"
Page size: Letter (8 1/2 x 11 in)

Details... New Label... Delete Cancel OK

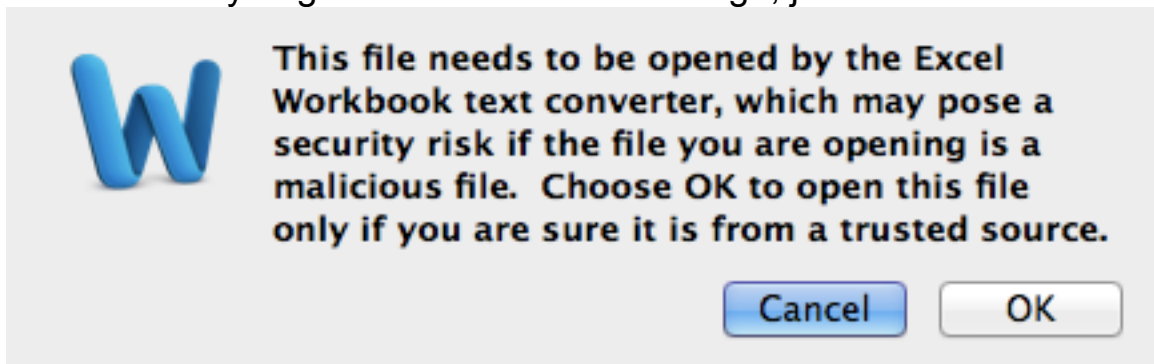
Now when I push OK, I get custom paper made for this type of label.

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Now I go to STEP 2 which says SELECT RECIPIENTS LIST. I choose GET LIST and open the file that has the data. Generally this is an XLSX file but occasionally, I need the CSV file. If you get this WARNING message, just click OK.



It looks scarier than it is!

Next you will be instructed to "build your label" by inserting fields and pushing RETURN or using punctuation such as commas.

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Edit Labels

Choose the Insert Merge Field button to insert merge fields into the sample label. You can edit and format the merge fields and text in the Sample Label box.

Insert Merge Field

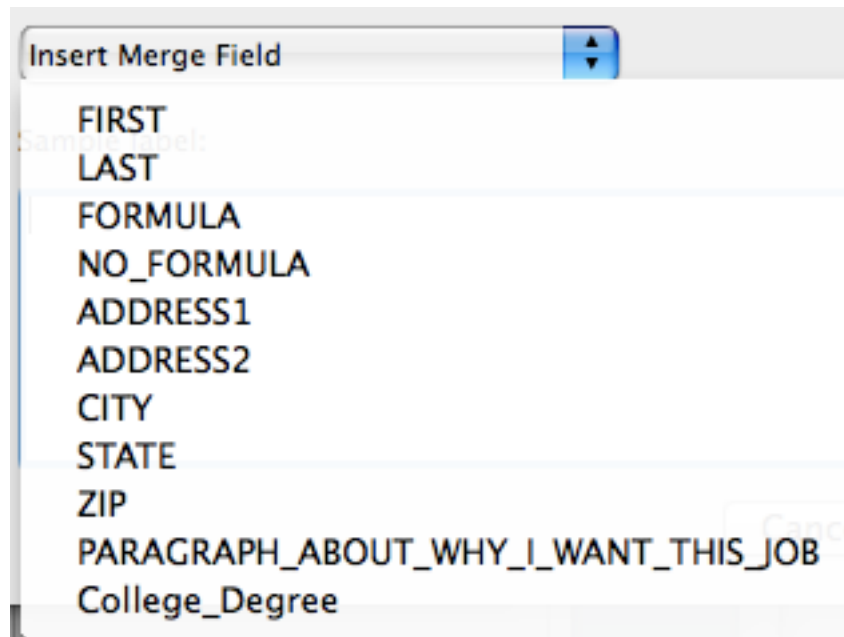
Sample label:

CancelOK

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Once done and you have built it, you get




This shows all the fields you can INSERT to merge. Once done, your labels will look like this

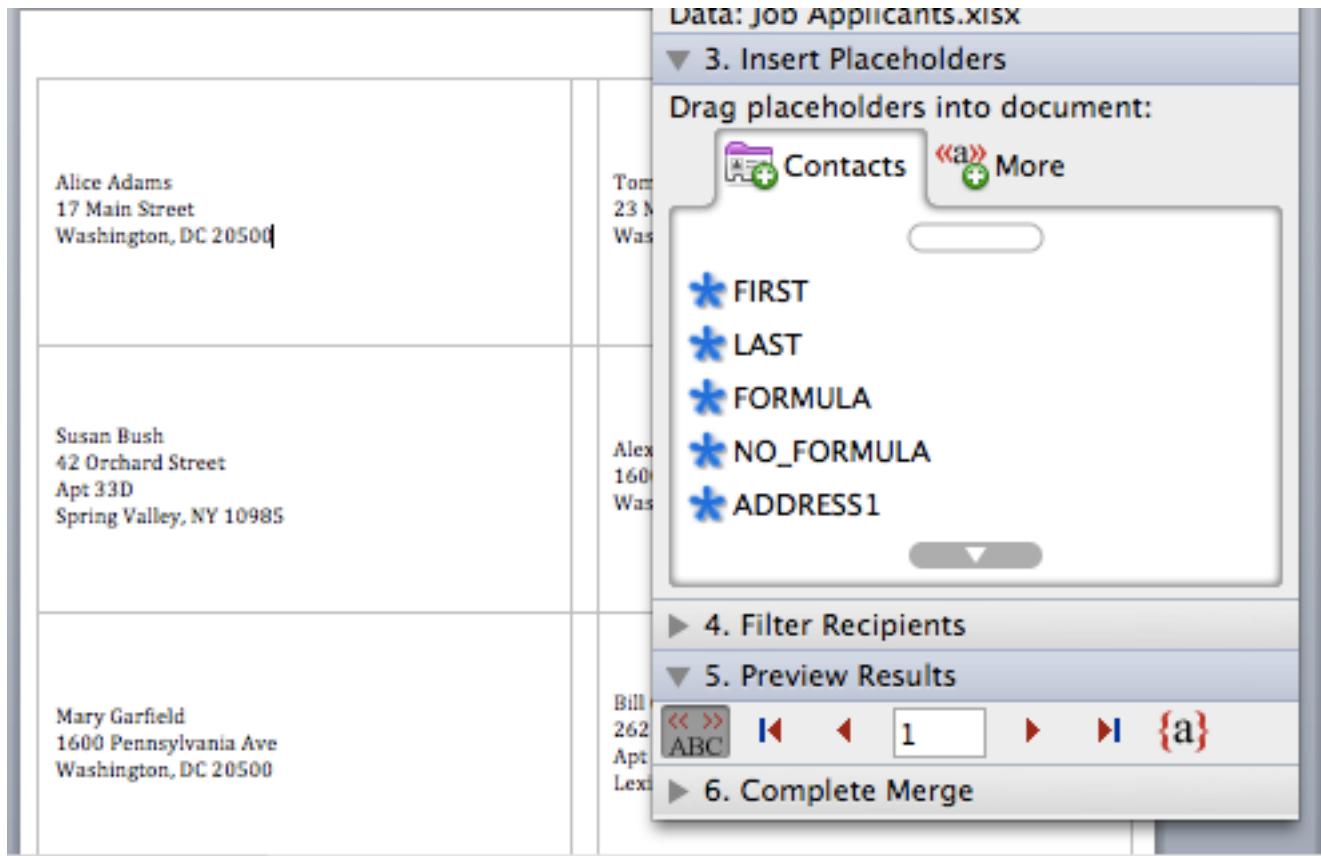
| | |
|--|--|
| «FIRST» «LAST» «ADDRESS1» «ADDRESS2» «CITY», «STATE» «ZIP» | «Next Record»«FIRST» «LAST» «ADDRESS1» «ADDRESS2» «CITY», «STATE» «ZIP» |
| «Next Record»«FIRST» «LAST» «ADDRESS1» «ADDRESS2» «CITY», «STATE» «ZIP» | «Next Record»«FIRST» «LAST» «ADDRESS1» «ADDRESS2» «CITY», «STATE» «ZIP» |

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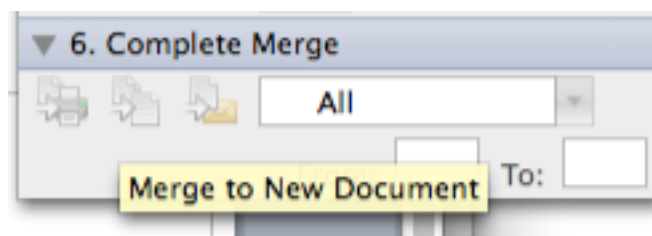
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To see actual data (which I prefer) you pull down to choice 5 where it says

PREVIEW. When you click on the ABC icon  you get to see the real data. To get back to the placeholders, you use the {a} icon.



Once ready to print, I prefer the second icon on the bottom called MERGE TO NEW DOCUMENT which creates a new Microsoft WP document that has your exact labels or merged info. You can then SAVE that document, modify it or of course print it.



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Advanced feature is #4 for FILTER. This lets you SORT the records by any field or SELECT just a subcategory. Here below, I am using FILTER to select just the addresses from MA or NY.

The screenshot shows a mail merge interface. On the left is a table with two columns of addresses. On the right is a 'Filter Records' panel with a rule set to filter by 'STATE' equal to 'MA' or 'NY'.

| | |
|---|---|
| Bill Grant 262 Marrett Road Apt 4C Lexington, MA 02410 | Susan Bush 42 Orchard Street Apt 33D Spring Valley, NY 10985 |
| Yolanda Harding 37 Orchard Street Spring Valley, NY 10980 | |

Filter Records | Sort Records

Field: STATE Comparison: Equal to Compare to: MA

Or STATE Equal to NY

And

The main topic for this lesson involves doing a mail merge using data in Excel and then creating a Microsoft Word companion file.

Create several merged documents and send them to me. If you have your own data, then you can adjust this assignment to YOUR data, but I still want to see

- two types and different sizes of mailing labels
- one mail merge document that looks like personalized letters.

Good luck and stay in touch with questions! Steve

**END OF REGULAR REQUIRED PART
OF LESSON 5**

OPTIONAL pp19-27

Optional Exciting Homework involves creating a survey form using Google Drive. Even though this is an Excel course, the survey form features from Google Drive is so innovative and exciting that I want to make sure you are aware of it. It generates a spreadsheet that can easily be downloaded into an Excel file.

Creating a form or survey using the FORM module of Google Drive

Suggestion: Go to the survey form at <http://tinyurl.com/Lesson2GD> and answer the 5 questions. This is easy to do since you may know my favorite number is 33 and that is the answer to the four questions after your name ;-)

The FORM module of GD is a unique, innovative, exciting component that allows you to build a survey with many types of questions. The responses from each person who completes the survey flow into a GD spreadsheet. Forms can be used professionally to gather info from adults, parents or students. They can also be used to prep for tests or exams. **If you have not started using FORMS yet, you are in for an exciting new adventure and set of skills!**

Here are samples created by two former participants.

<http://tinyurl.com/GDexample1> and <http://tinyurl.com/GDexample2>

Once you create a FORM, you will be entering a series of questions to be in your survey. These can be quiz questions for students or info questions to faculty colleagues, parents or community members. The users answer your questions and the results flow into a spreadsheet on Google Drive called Responses.

Here are the two required videos I have made for you on FORMS.

Google Forms Part I (16 min) <http://youtu.be/eZeSeaTbeSw>

Google Forms Part II (8 min) http://youtu.be/XLisPLZd_Zo

The first thing you decide is the title of your FORM and what colorful template you want to use. Don't forget to choose APPLY after you choose the template.

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Choose title and theme

Title

Theme: Default



OPTIONAL: If it appeals to you, you can modify any template and customize it. You can choose your own picture for the header and can change colors and fonts as you see below.

In this form



Change theme

◀ Back to default themes

Header image

☒ Fit to width

Title

Description

Question

Help text

Options

Form background

Page background

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You can choose from these data types for each question.

| Text | Form Description |
|--------------------|------------------|
| Paragraph text | |
| Multiple choice | |
| Checkboxes | |
| Choose from a list | |
| Scale | |
| Grid | |
| Date | |
| Time | |

| BASIC | ADVANCED | LAYOUT |
|--------------------|----------|----------------|
| ABC Text | Scale | Section header |
| Paragraph text | Grid | Page break |
| Multiple choice | Date | Image |
| Checkboxes | Time | Video |
| Choose from a list | | |

Add item

Text = short text, e.g. name

Paragraph = longer text

Multiple choice and Choose from a List require the user to choose 1 out of many

Checkboxes is unique! It allows the user to more than one out of a list of choices

Scale allows the user to choose a number from 1 to what you specify

Grid gives you a matrix of rows and columns with circles to fill in

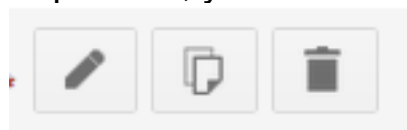
Image and Video allow you to enhance your survey with pictures and videos.

Each time you enter a question, you choose

Add item

and you can add one more.

Each time you add a question, you will see this icon on the right



The left icon (pencil) means EDIT.

The center icon means DUPLICATE so that you can make question 7 resemble question 6 without having to retype everything for example.

The right icon means DELETE this question.

One data type is the paragraph. Anything you put into the HELP TEXT will be italicized when the user sees it.

| | |
|--------------------------------|---|
| Question Title | Please use quality English to describe the difference between a rational and ir |
| Help Text | Please have at least 3 sentences. Please give an example or two. |
| Question Type | Paragraph text ▾ |
| <div>Their longer answer</div> | |

Another data type is TEXT and it refers to short info, perhaps 2 or 3 words.

The * means the operator is required to enter something and cannot leave it blank.

This type of action is called DATA VALIDATION since the user will get a red error message if he/she tries to leave it blank.

OPTIONAL: *If you are a relative beginner, please ignore DATA VALIDATION in this PDF. If you are already experienced with FORMS, I have given you a bonus challenge at the end of this lesson.*

Fraction Survey Quiz

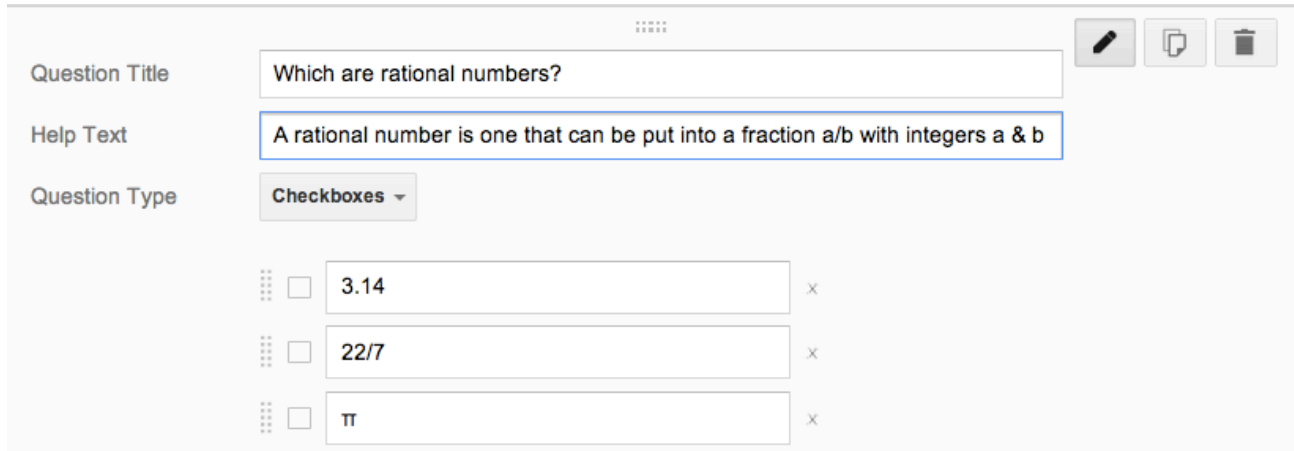
Form Description

What is your first name? *

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This next picture shows the data type called CHECKBOX and it allows the user to specify more than one item. Below I am using it to allow the student to choose 2 of the 3 answers.



Question Title: Which are rational numbers?

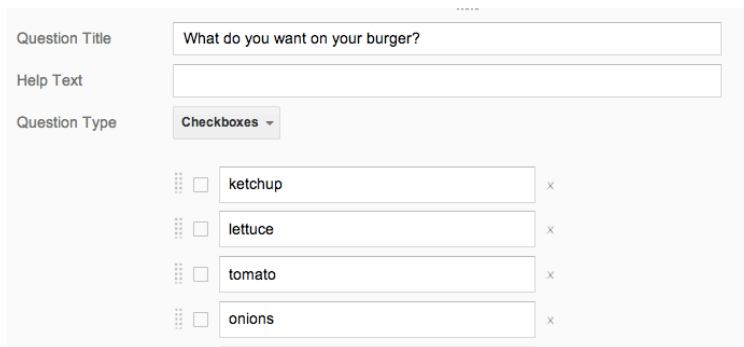
Help Text: A rational number is one that can be put into a fraction a/b with integers a & b

Question Type: Checkboxes

Options:

- ☐ 3.14
- ☐ 22/7
- ☐ π

Here I am using it to allow the user to choice multiple items for a burger. This CHECKBOX option is the only one of the Google data types that allows the user to indicate multiple items.



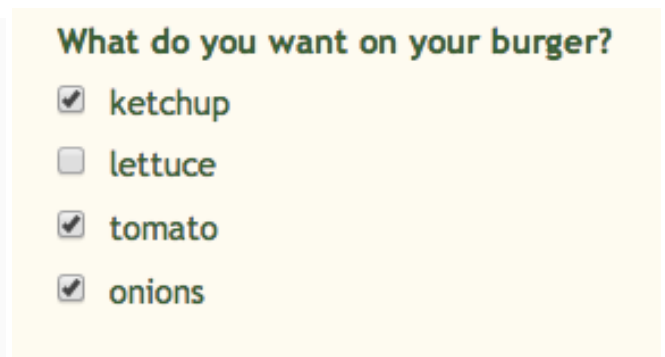
Question Title: What do you want on your burger?

Help Text:

Question Type: Checkboxes

Options:

- ☐ ketchup
- ☐ lettuce
- ☐ tomato
- ☐ onions



What do you want on your burger?

☒ ketchup

☐ lettuce

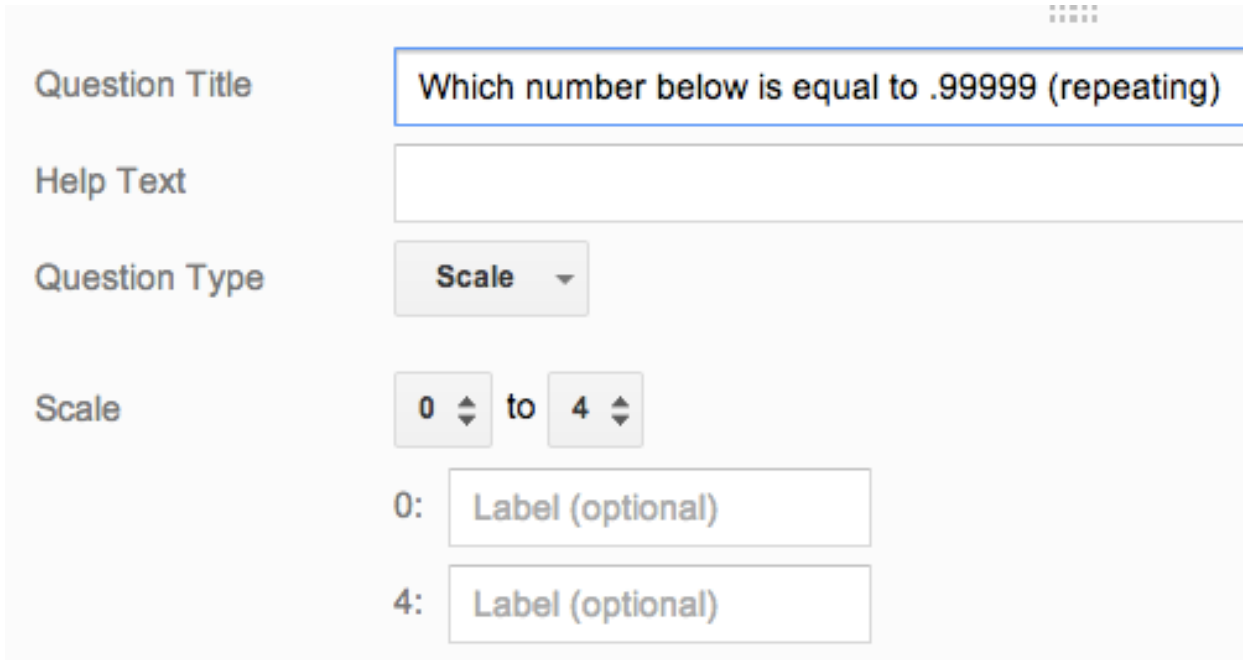
☒ tomato

☒ onions

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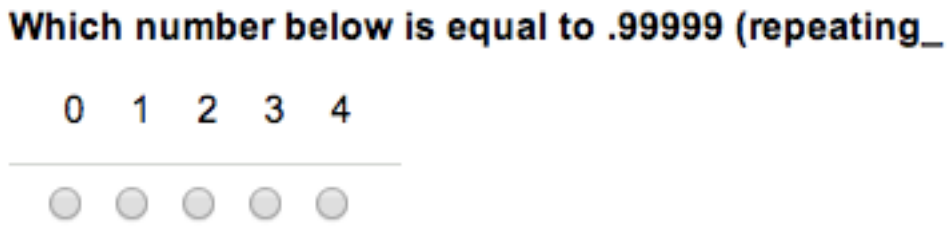
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This next picture is the SCALE type



The screenshot shows the configuration for a SCALE question type. It includes fields for 'Question Title' (containing 'Which number below is equal to .99999 (repeating)'), 'Help Text' (empty), 'Question Type' (set to 'Scale'), and 'Scale' (set from 0 to 4). Below the scale range, there are input boxes for labels at 0 and 4, both containing the text 'Label (optional)'.

and results in



The screenshot shows the results of the SCALE question. The question text is 'Which number below is equal to .99999 (repeating_'. Below the question, the numbers 0, 1, 2, 3, and 4 are listed. Under each number is a radio button, all of which are currently unselected.

The scale can go up to 10 and not 33. How sad. Maybe the Google people will revise it to go up to 33 in their next update ;-)

The GRID type results in a clever rectangle of choices where you control the row and column headings. **Using the GRID is optional for this week's assignment.**

Classify each number as rational or irrational *

| | Rational | Irrational | Not sure |
|-------------------|-----------------------|-----------------------|-----------------------|
| 1/3 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| .232323 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| $\pi / 2$ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| .2323 (repeating) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

OPTIONAL: One of the newest features is called DATA VALIDATION and this means you can give error messages (in red) to the user if the answer does not meet certain criteria.

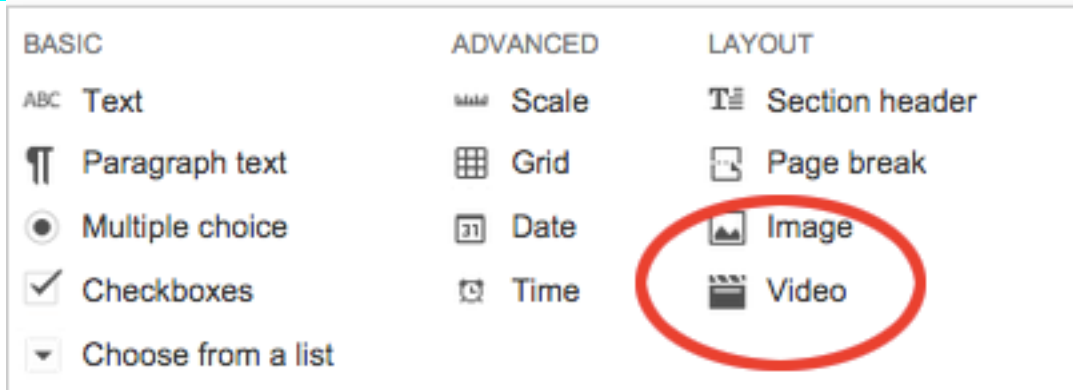
▼ Data validation

☒ Regular expression ▼

Whoops! Please use the word rational

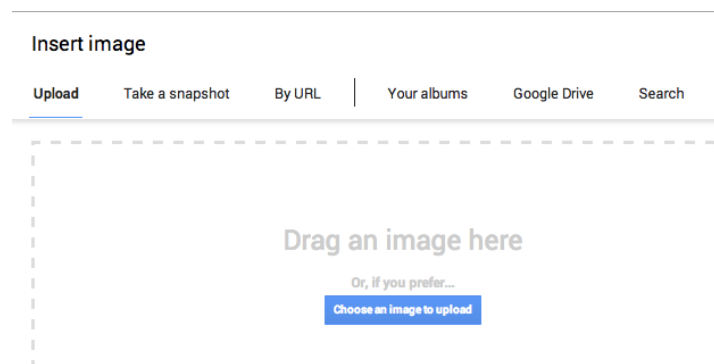
By the way, there are now programs and add-ons that will do automatic grading of answers on a Google spreadsheet. One of them is called FLUBAROO (<http://flubaroo.com>) and one is called DOCTOPUS (many links including <http://ipadsandbox.wikispaces.com/file/view/jlGoogleDoctopus.pdf>). There is also a program called GOOBRIC that adds rubric features to Doctopus. If this topic interests you, I would love to help you individually or later in the course. The grading works by having the teacher submit a form with the correct answers and the computer then compares each student's entries with the correct answers. Obviously, multiple choice and short answer questions work best.

OPTIONAL: You can also add pictures and videos to your survey form!

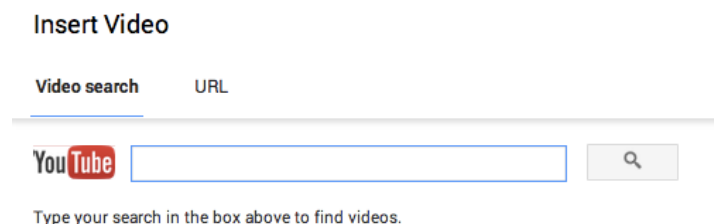


This choice leads to many powerful uses with our students? Why? Because you can show them a picture right there in the survey form and then ask them to reflect on in subsequent questions.

Here are the choices when you add an image. Notice how flexible it is, allowing you to take pictures from your GD account, from any URL if you know it or SEARCH by topic or keyword.



When you insert a video, you get fewer choices but the one called VIDEO SEARCH allows you specify a topic and it find videos of that type.



Where do the results of a survey form go? They go into a spreadsheet where all the info is organized in rows and columns. In other words, as several people take

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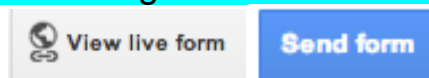
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your survey called perhaps MR PIP QUIZ pg 124-136, a brand new file that has the word (RESPONSES) at the end of it.

| Mr Pip Quiz pg. 124-36 (Responses) ☆ | | | | | | | | |
|--|--------------------|--------------------------|--|---|--|---|--|---|
| File Edit View Insert Format Data Tools Form Help All changes saved in Drive | | | | | | | | |
| fx | | | | | | | | |
| | A | B | C | D | E | F | G | H |
| 1 | Timestamp | Your Name & block number | In this sentence--"We prepared ourselves to listen out for any hard-done-by note to slip into his voice"--what does "hard-done-by" mean? | What is the "word spoken for [her] ears only" that takes Matilda into a "room that no one else knew about"? | According to Matilda, the loss of their houses helped them understand, what? | How will the class retrieve "Great Expectations"? | Identify the number of fragments written down in Mr. Watts' book | Please give the date and time when you finish this quiz |
| 2 | 4/13/2014 16:44:15 | Jane Doe | dsffdsdf | Imagination | Houses keep safe more than possession | By going into their houses | 3 | 4/13/2014 1:00:00 |
| 3 | 4/13/2014 14:54:49 | Steve B | hard done by means that Larry Bird played the game well! | Imagination | the value of privacy | By going into their houses | 3 | 7/13/2014 14:53:00 |
| 4 | 4/19/2014 10:20:44 | Doug 7 | I'm afraid that I did not read the chapter. | Imagination | Houses conceal selves that no one else sees | By finding the lost copy of the book | 3 | 4/19/2014 10:20:00 |
| 5 | | | | | | | | |

OPTIONAL: Create a FORM that has some meaningful personal, educational, classroom or professional potential real usage. Maybe your survey form will be related to the FLIP CARDS you made with Flippity.Net at the start of this Lesson 2 assignment. You can put into the form a text box that says "study these flash cards as tinyurl.com/steve33 and then take this quiz. Keep the bar high and try to create something useful and hopefully educationally significant. It does not have to be related to the FLIPPITY CARDS. That was just an idea!

Send the URL to me so that I can test your form and be one of "your customers." I will post them next week on our Lesson 3 PDF. Be careful with the URL. You are not sending me the URL where you create the form. You are sending me the URL that you see when you choose VIEW LIVE FORM or SEND FORM. This is a common mistake. **Optional: change the URL to a tiny one using tinyurl.com.**



<https://docs.google.com/forms/d/1ZacnbodPi3VqehLMRkhoTHlwWQh62eXUzujf15CMkq8/viewform>

If your school's domain is protected, you might see a checkbox that says "allow others outside of your domain to access this form."

OPTIONAL: If you have had experience with GD forms before this course, try to construct at least one question of each data type including GRID and use data validation options when possible. Also try to include at least 2 pictures and 2 videos.

Note: once you get your responses, you can easily download the file into Excel!

INDEX of HIGHLIGHTS can be found on the last page

☑ HW 5A Transpose (p1)

Homework 5A -- using the attached Lesson5Worksheet spreadsheet to see if you can get screen snapshots like me for Alice Adams and Tom Buren. (p3)

☑ HW 5B Paste Special (p4)

HW 5B -- use the TAB on the Lesson5Worksheet and demonstrate how to get the names without the underlying formulas. (p4)

☑ HW 5C: Dates and Numbers (p5)

HW 5C -- use the TAB on the Lesson5Worksheet and do the two exercises. (p6)

☑ HW 5D: Name cells (p7)

HW 5D -- use the TAB on the Lesson5Worksheet and do the exercises that involves MIN and building a time schedule. (p8)

☑ HW 5E: How to enter zip codes (p8)

HW 5E -- use the TAB on the Lesson5Worksheet and do the exercise that involves zip codes. (p9)

☑ HW 5F: How to change to uppercase or lowercase (p9)

HW 5F -- use the TAB on the Lesson5Worksheet and do the exercises that involves these 3 new formulas. (p9)

☑ HW 5G: How to SEARCH and use SELECT ALL. (p10)

HW 5G -- use the TAB on the Lesson5Worksheet and do the exercise that involves searching for words on a spreadsheet. (p10)

☑ HW 5H MAIN DISH Watch the required video on Mail Merge. (p11)

☑ HW 5I Create several merged documents and send them to me. If you have your own data, then you can adjust this assignment to YOUR data, but I still want to see -- two types and different sizes of mailing labels

-- one mail merge document that looks like personalized letters

☑ OPTIONAL SECTION on Creating a Survey Form with Google Drive. (p19-27)