

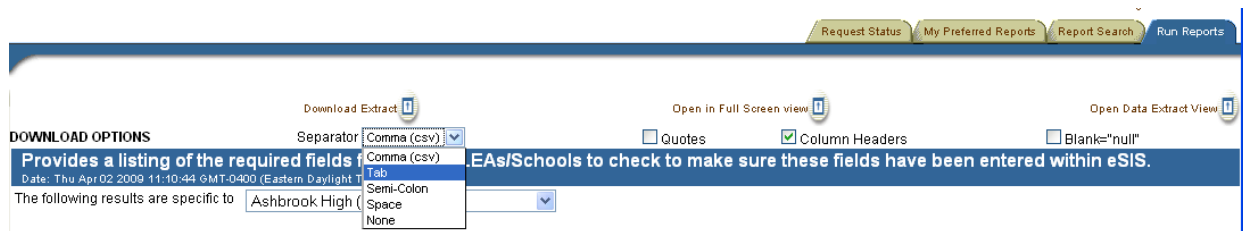
## Excel-Filters and Pivot Tables

Data from NC WISE is often just a mass of names and information. This document will give you specific instructions concerning 2 files you may want to analyze. Consider other files and sources—Graduate Data Verification System from the Reporting Hub, a user specified Discipline extract from Export Ad Hoc File, or copy and paste Dropout data from the report in Webapps. When you learn to use filters and pivot tables you will find many uses for them.

### Marks Analysis Report-Reporting Hub

There are two possible reports to run. One is called **Current Year Marks**. It runs by grade level and includes the course name, but not section numbers. It will be in **NC WISE Reports** on your **Run Reports** page. The other is **Current Year Student Grades without Teacher ID**. It includes course code and section number, but not Course Name. You can decide which one will be more useful.

The report should be downloaded as shown below:



**Separator** should be **Tab**, and **Column Headers** should be checked. It is helpful to keep a “Downloads” folder on your desktop and put all your extracts in it. I like to use names that indicate both the type of file and the date; for example, Student Grades 2NW.txt. (All Reporting Hub reports download as .txt files).

### Opening the Data in Excel

- Close any other windows that may be open.
- Open **Excel** (Start>Programs or All Programs>Microsoft Office>Microsoft Excel)
- Click the **Office button** menu
- Choose **Open**
- From the **Look in** drop-down box at the top, choose the location that you saved your data
- At the bottom, change the **Files of type** drop-down to **All Files**
- Either **double-click** your file name or click your file and then click **Open**
- On the **Text Import Wizard** screen, choose **Delimited** and then click **Next**
- Be sure that **Tab** is checked and click **Next**
- Click **Finish**
- If some of your columns contain #####, double-click the divider separating that column and the next column to resize the column.
- Save the file using **Office button /Save as...** Click on the up arrow beside **Save as file type** and choose **Microsoft Office Excel Workbook**. (*Choose the version you use at school/home.*)

Note that ALL reporting periods are included even though there are no grades in some of them. You can filter and delete those you don't want, or simply use the pivot table to choose the ones you want to display.

### Inserting the Formula for Letter Grades

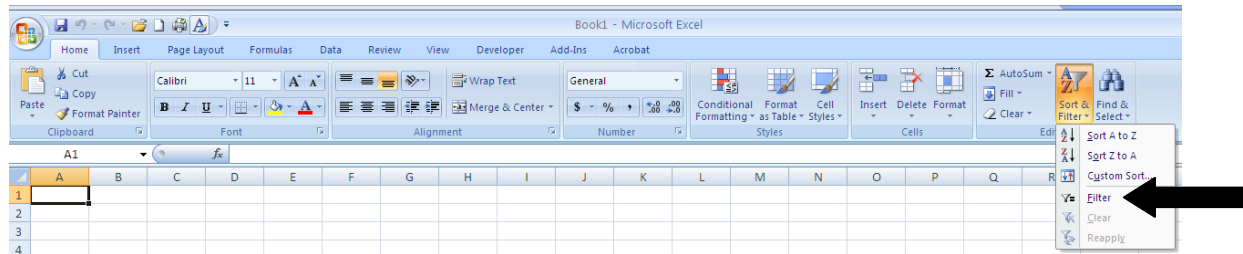
- Insert a column to the right of the numerical grade. Select the column, right mouse click and choose **Insert**. A dialogue box may display. If so, choose Shift cells to right
- Change **I2** in the formula to the correct column name for your spreadsheet.
- Copy and paste the formula into cell 2 of the column.

- Copy it down to all the cells in the column. If you haven't deleted blank reporting periods, remember that the formula will return an "NA" for that cell.

=IF(ISBLANK(I2),"NA",IF(I2="FF","F",IF(I2<70,"F",IF(I2<77,"D",IF(I2<85,"C",IF(I2<93,"B",IF(I2<101,"A"))))))))

## Analyzing the Data

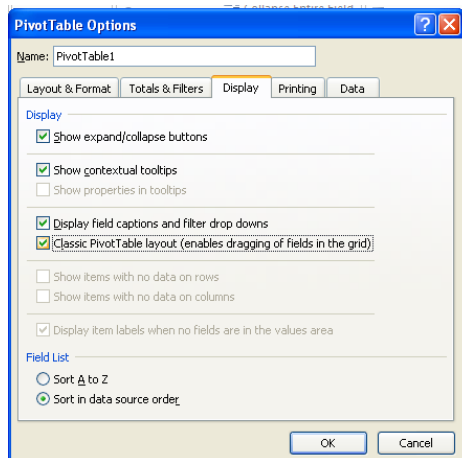
You can add a filter to the first row to look at some very basic information. Click in cell **A1**, then click **Sort & Filter** on the right hand side of the Home menus. Click on **Filter**.



You can now filter for a particular Reporting Period or Course Grade.

- Click the arrow beside the column on which you want to filter and uncheck Select All.
- Check what you want to display.
- If you want to display all students with F's during 2<sup>nd</sup> 9 weeks, you would click the drop-down for Reporting Period and check 2<sup>nd</sup> 9 weeks, then on the drop-down beside Course Grade and check F.
- You can print these lists as needed.
- Filters will give you individual student names and lists. To analyze by count or percentage, you will need to insert a pivot table.

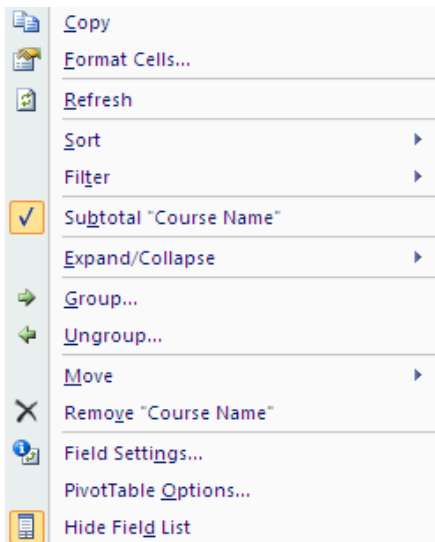
## Pivot Tables



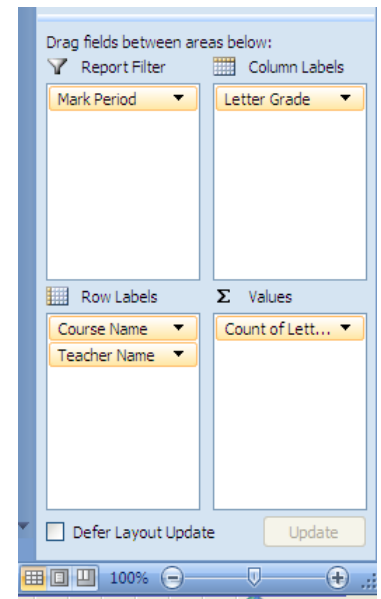
Remember that the pivot table is based on what is on the source data screen and includes data that you may have filtered.

- Make sure that you have a column header for each of your columns and that you don't have any empty rows in your spreadsheet.
- Click in cell **A1** and click **Insert>Pivot Table>OK**.
- It's a good idea to set up your pivot table so you can have multiple items in the Rows. To do this, right mouse click in the pivot table area, choose **Pivot Table Options**, and check **Classic** as shown to the left

## How many A's, B's, C's and D's did each teacher give in each class?



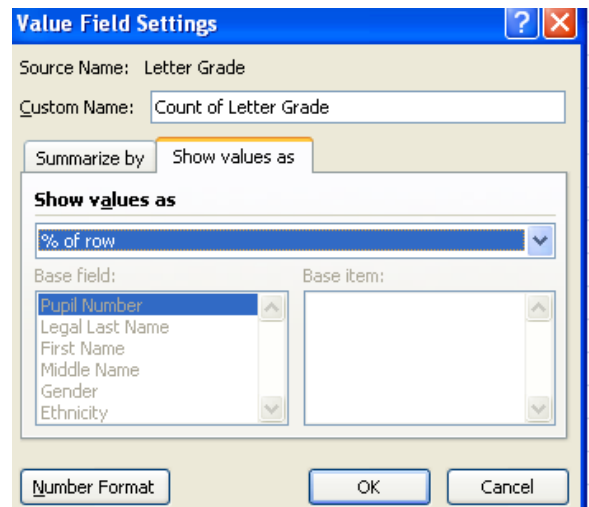
- Pull the items over as indicated to the right.
- For any items that you don't want subtotals, right mouse click on the pivot table over the label, and uncheck **Subtotal**.
- The example to the left takes the subtotal off the "**Course Name**" row label.
  - Make sure you **filter Mark Period** for ONLY the period you want to see.
  - Filter the **Letter Grade** column-uncheck NA (these are courses for which there is no grade entered).
  - Try switching **Course Name** and **Teacher Name** to see how it changes the Pivot Table.



- To see the student names, double click on the number (for example, if there are 4 students in one class who are making an F, double click on the number 4). A new worksheet will be generated with the student names on it.
- When you have printed this sheet, delete it to prevent the file from getting too large: right mouse click on the tab that says Sheet#, and choose Delete. Say yes to the dialogue box and you will be back at your pivot table.

## What percentage of each letter grade did each teacher give in each class?

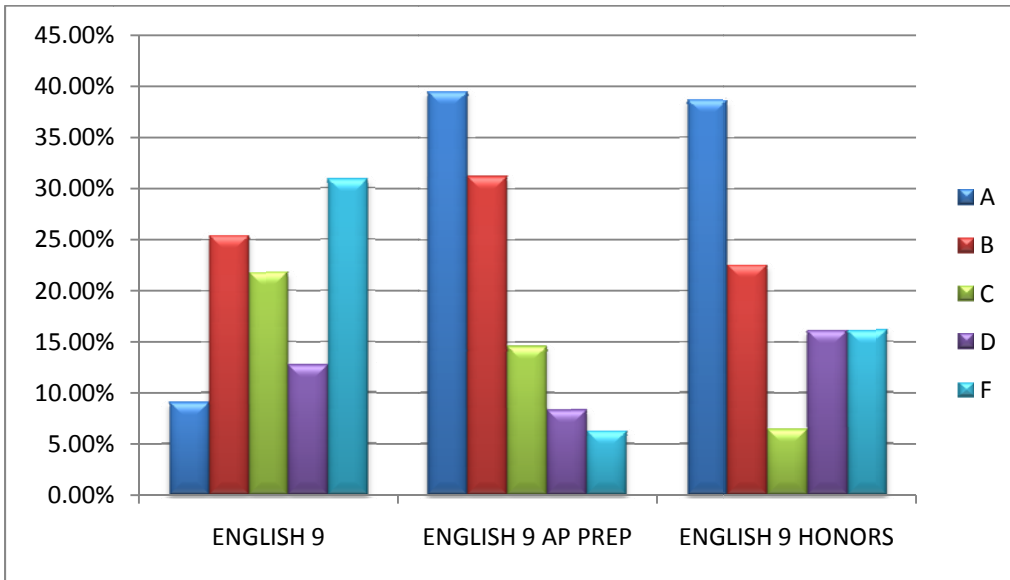
Using the pivot table above, click on **Count of Course Grade** under **Values**. Choose **Value Field Settings** from the drop-down, then click on the tab that says **Show Values As**. You'll see **Normal** highlighted in the drop-down. Change that to **% of row**.



## Insert a Pivot Chart

If you want to display the information in a graph, click **Pivot Table Tools** and choose **Pivot Chart**. Make sure your data is limited to one teacher, course, or grade level so that the chart will be readable. The table and chart below illustrate a good Pivot Chart.

	A	B	C	D	E	F	G
1	Mark Period	1st 6 weeks					
2							
3	Count of Letter Grade	Letter Grade					
4	Course Name	A	B	C	D	F	Grand Total
5	ENGLISH 9	9.09%	25.45%	21.82%	12.73%	30.91%	100.00%
6	ENGLISH 9 AP PREP	39.58%	31.25%	14.58%	8.33%	6.25%	100.00%
7	ENGLISH 9 HONORS	38.71%	22.58%	6.45%	16.13%	16.13%	100.00%
8	Grand Total	26.87%	26.87%	15.67%	11.94%	18.66%	100.00%



You can click on the chart to print it.

## Discipline Extract

- Create an **Export Ad Hoc File** with the following fields. The first field did not display in the print screen, but it is Student Number. Use the Extract to eliminate students without incidents.

**Gaston County Student Information System**

Action Edit Block Field Record Query Lock Help Window

User Export

Other Category: Incidents

Demographic

- Indian Ancestry Code
- Initial
- Intended Career Program
- Internet Access
- Internet Permission Type
- Interpreter Required
- Invalid Address Reason
- LEP Reclassification
- LEP Testing Method
- LEP Testing Type
- Language
- Legal District Of Residence
- Legal Last Name Suffix
- Legal Middle Name
- License Number

Action Location

- Action Referral Date
- Action Referral Type
- Actual Time Served
- Alternate Program Placement
- Demerit Points
- Incident Motivation
- Incident Narrative
- Incident Weapon
- Interview Narrative
- Parent Contact Date
- Parent Contacted By Who
- Parent Contacted How
- Re-entry Date
- Reason For Change

Selected

- First Name
- Legal Name
- Gender
- Ethnicity
- Grade
- Action Type
- Action Length
- Action First Day
- Action Last Day
- Action Assigned By
- Discipline Site
- Incident Date
- Incident Occurred Time
- Incident Reported By
- Incident Reason

Wildcard: \_\_\_\_\_

Query

Begins With
  Ends With
  Contain...

Export Help | Saved Exports | Start Over | Create File

- Click **Goto Extract**
- Click **Clear Extract Criteria**
- Click the **Misc 3** tab. Enter an Incident Date Range. It really doesn't matter what you enter—the extract will pull all students with incidents in any date range, but will not include those without incidents.
- Click the **Schools** tab
- Click your school's name on the left side then click **Add>>**.
- Click **Run Extract**

Build the file and save it as usual. Use a filename with .txt as the extension to avoid error messages.

Open the file with Excel as you did the Marks Analysis file. Save it in Excel.

## Filtering Data for Only a Certain School Year

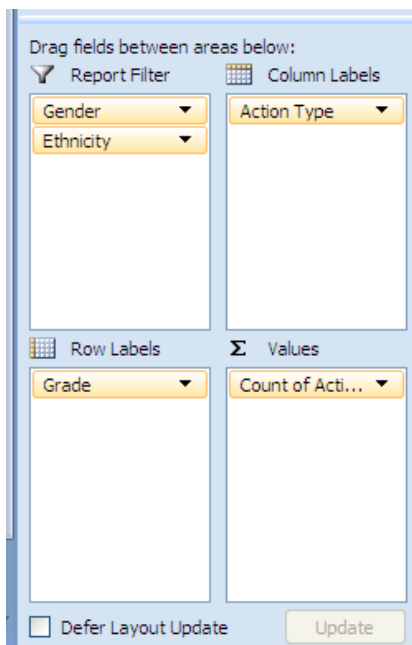
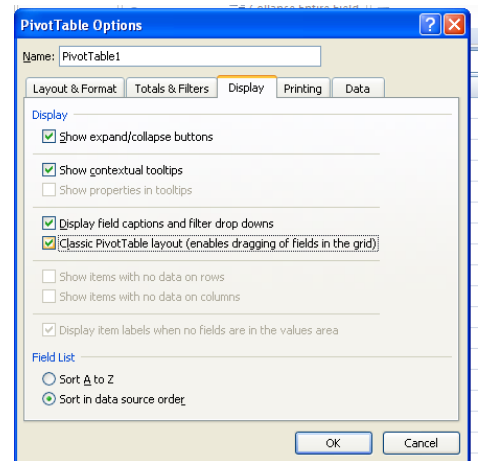
- To filter data for only this school year, click the drop-down box for the **Incident Date** column.
- Click the drop-down for Incident Date and click the + sign beside the year. Check each month that you DO NOT want to include.
- Click the **row number of the first student** after the column headings. This should highlight the entire row.
- Scroll down
- While holding the **Shift** key down on the keyboard, click the **row number of the last student**.
- This should highlight all the students in the list with no Incident Reason. Right mouse click and choose **Delete**.
- Go back to the Incident Date column, click the drop-down, and choose **All**.

Now you can use filters or build a pivot table.

## Pivot Tables-Discipline

Remember that the pivot table is based on what is visible on the source data screen. Make sure that you have a column header for each of your columns and that you don't have any empty rows in your spreadsheet. Make sure you have the date range you want to examine.

- Click in cell **A1** and click **Insert>Pivot Table>OK**.
- Set up your pivot table so you can have multiple items in the Rows. To do this, right mouse click in the pivot table area, choose **Pivot Table Options**, and check **Classic Pivot Table** layout.



Rows. To do this, right mouse click in the pivot table area, choose **Pivot Table Options**, and check **Classic Pivot Table** layout.

**How can I find out how many suspensions and other discipline actions I have for my date range?**

- Make sure your source data has the correct date range.
- When you pull **Action Type** into the Values area, you may find that it says **Sum of Action Type**. If this happens, right mouse click over the pivot table where it says **Sum of Action Type**, choose **Value Field Settings**, and click **Count**.
- Set up your pivot table as indicated on the left.

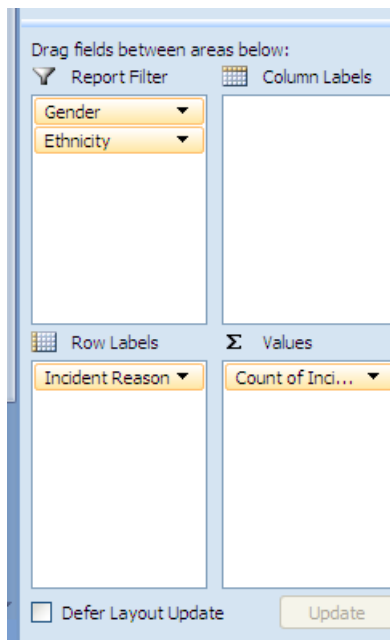
## Codes for Action Types

1	Supervised Activities	23	Conference
2	ISS - In School Suspension	24	Lunch Detention
3	OSS - 10 days or less	25	Student Pays Restitution
4	OSS - 11-365 days	26	Time Out
5	OSS - 365 days	27	Student Written Warning
6	Expulsion	28	Revoke Driving Privileges
7	Corporal Punishment	29	Student Oral Warning
8	LEA Operated Alternative Learning School	30	Administrative Conference with Parent

9	Off-Site Operated Alternative Learning School	31	Administrative Conference with Student
10	Alternative Learning Program	32	Work Detail
12	Report to Law Enforcement	33	Homebound Instruction
13	Youth Development Center	34	Saturday Academy
14	Day Reporting Center	35	OSS 1-10 Pending Student Hearing
15	Bootcamp	63	Other
17	Court-ordered Probation	91	Sent home early
18	Day Treatment Program	100	Unilateral change in placement (EC only)
19	Residential Treatment Home or Center	101	Hearing held, no change in placement (EC Only)
20	Hospital Treatment Program	102	Hear held, change in placement (EC Only)
21	Detention	105	ISS Partial day
22	Bus Suspension	135	OSS Immunizations

### Who is referring students to the office?

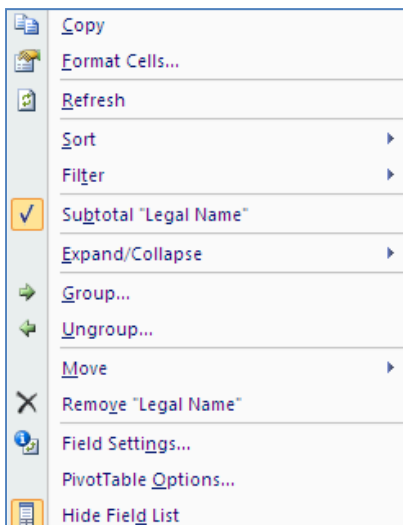
- Instead of **Grade** in the **Row Labels**, pull in **Incident Reported By**.
- Notice that **Gender** and **Ethnicity** are in the **Report Filters**. You can find numbers for either of these by choosing from the drop-downs there. You can also pull ethnicity over to the Row Labels to see if a teacher is referring a disproportionate number of minorities.



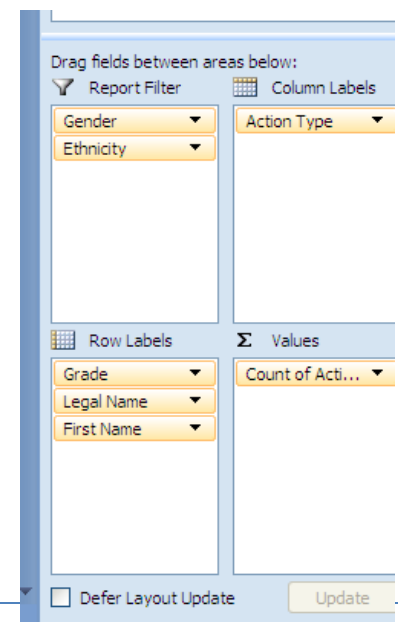
### What infractions are causing students to come to the office?

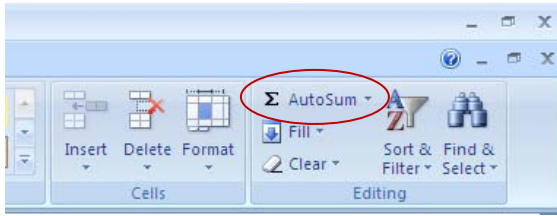
- Pull incident reason over to the **Row Labels** and to the **Values**. Make sure the values say “count” not “sum.” If it says sum, right click on the pivot table over **Sum of Incident Reason**, and choose **Count**.
- If you want to see which incident reasons resulted in which actions, pull **Action Type** over the **Column Labels**.

### Which students have multiple infractions?



- Set up your pivot table as indicated to the right. You will see a mess on your table.
- Right mouse click on the pivot table on **Legal Name**. You will see the choices to the left.
- Uncheck **Subtotal Legal Name** to remove the subtotals and make the table readable.
- Repeat this process with any other fields that have subtotals.





**How can I find the number of days suspended or missed from instruction?**

- You'll have to do this on the source data sheet.
- Click on cell A1. Click on **Data>Filter**.
- On the **Action Type** filter, check the Action Types you want

to count.

- To count the days missed due to **ISS**, deselect **Select All** and check **2**.
- Scroll down to the very bottom of the column which has Action Length as a header, click in the cell below the last entry.
- Click **AutoSum** on the right hand side of the Home ribbon. Verify that the program has chosen the cells in the column you want to count, and click enter. This will give you the total number of days spent in ISS.
- You can change your data filter to count OSS, Behavior Lab, etc.