Excel Tips and Tricks for Analyzing Data

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What can I use spreadsheets for?

▶ Curriculum Mapping

▶ Wonders' Sound-Spelling Card Phrases & Actions

▶ Fluency Graphs for Tracking WCPM Goals

▶ Core Phonics Survey Cover Sheet

▶ Class Record Sheets- blank OR digital for typing in data

▶ DIBELS Next Summary of Goals

▶ And of course, DATA! (CFA, Math Benchmark, DIBELS, etc.)

▶ Basically anything that looks like a table that may or may not have numbers and calculations!

Gradebook Record Sheet Example

Teachers will be able to…

1. <u>Enter Data and Formulas into a Spreadsheet</u>
   - ▶ Enter text and-or numbers (including shortcuts to save time, such as export from online, copy and paste, control-plus-enter, and drag from the corner of a cell)
   - ▶ Use basic formulas such as sum and average
2. <u>Format the Data so it´s Easy to Read.</u>
   - ▶ Format the font size, rows, and columns to fit your data AND the size of the page(s) you would like to print
   - ▶ Hide columns and rows that you don't need to see at a certain time, but don't want to delete
   - ▶ Insert or remove rows and columns based on the needs of your class and team
   - ▶ Edit margins so that the results can be printed in an easy-to-read format
   - ▶ Use conditional formatting to automatically shades cells based on whether they are below, at, or above the goal
3. <u>Sort, Analyze, and Share the Data</u>
   - ▶ Add a filter so that you can sort by any column
   - ▶ Copy or move page tabs at the bottom of the workbook

Basic Terminology

Terms you will be able to use before the end of today:		
Active Cell	Fill Handle	Print Area
Cell	Filter	Print Titles
Column	Formula	Rows
Data	Formula Bar	Sort
Enter key	Freezing Columns / Rows	Workbook
Fill	Gridlines	Worksheet

List adapted from http://w.sunybroome.edu/basic-computer-skills/functions/spreadsheets/2spreadsheets_terminology.html

Mouse Hints

Do you like using your mouse more than your keyboard? Remember these!	
right click	to see options
left click	to select
wheel	scroll up and down
ctrl+wheel	zoom in and out

Keyboard Shortcuts

Is the keyboard your go-to? Try these shortcuts!	
ctrl+c	copy
ctrl+x	cut
ctrl+v	paste
ctrl+z	undo
ctrl+y	redo
ctrl+s	save
ctrl+p	print
ctrl+b	bold
ctrl+i	italicize
ctrl+u	underline
ctrl+f	find

There are easier ways to enter data rather than simply typing it in.

1. Export from online (e.g. Gradebook, MClass, DIBELS.net, GoMath, SAGE, etc.) Look for the file type XLS or CSV.
   - ▶ Class Roster: Gradebook, Reports, Class Rosters, Course-Section, XLS at the bottom, Preview
   - ▶ DIBELS Benchmark Data: (Your School Literacy Coach has access to this digitally if you'd like it!)
2. Highlight and Move
3. Copy and paste
4. Control + Enter
5. Drag from the corner of a cell

Basic Formulas: SUM

Home Tab, AutoSum
- ▶ Click a cell below or to the right of the numbers for which you want to find the sum.
- ▶ On the Home tab, in the Editing group, click AutoSum.

- -

OR…

Formula: **=SUM(A1, B1) or =SUM(A1:A20)**

"The SUM formula does exactly what you would expect. It allows you to add 2 or more numbers together. You can use cell references as well in this formula.

The above shows you different examples. You can have numbers in there separated by commas and it will add them together for you, you can have cell references and as long as there are numbers in those cells it will add them together for you, or you can have a range of cells with a colon in between the 2 cells, and it will add the numbers in all the cells in the range."

(https://blog.udemy.com/excel-formulas/)

Basic Formulas: AVERAGE

Home Tab, AutoSum, Average

Calculate the average of numbers in a contiguous row or column
- ▶ Click a cell below or to the right of the numbers for which you want to find the average.
- ▶ On the Home tab, in the Editing group, click the arrow next to AutoSum, click Average, and then press ENTER.

(https://support.office.com/en-us/article/Calculate-the-average-of-a-group-of-numbers-e158ef61-421c-4839-8290-34d7b1e68283)

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OR…

Returns the average (arithmetic mean) of the arguments. For example, if the range A1:A20 contains numbers, the formula **=AVERAGE(A1:A20)** returns the average of those numbers.

(https://support.office.com/en-us/article/AVERAGE-function-047bac88-d466-426c-a32b-8f33eb960cf6)

Ways to Make Exported Data Fit Onto One Page

1. Adjust the **Row or Column Size**. Highlight (select) the rows or columns that you want to resize, then…
   a) Double-click between rows or columns to auto-fit,
   b) Right-click and choose "row height" or "column height" to hand enter an exact measurement, OR
   c) Click and drag the row or column until it is the size you desire.
2. **Delete** (or **hide**) any rows or columns that you don't need.
3. Adjust width, height, or **Scale to Fit** under the "Page Layout" tab.
4. Change **Orientation** under "Page Layout," either Portrait or Landscape depending on the size of your data.
5. Adjust **Margins** from the "Page Layout" tab.
6. Choose **Wrap Text** from the "Home" tab, if the cell is longer than you want it to be (OR shorten the text like using an abbreviation.)
7. Adjust **Font Size** from "Home" tab.

Other Formatting that Makes the Data Easier to Read & Analyze

- Print Preview, Center page Horizontally and/or Vertically
- Under "Normal" view, dotted lines=page layout
- Format Cells (Ctrl+1):
  - Cell Alignment
  - Rotate Text
  - Alignment, Merge and Unmerge cells
  - Font, Borders
- Conditional Formatting, Color Scales
- Insert a Row (e.g. to add a student)- Right Click
- Insert a Column (e.g. "Next Steps" or "Power Up Teacher")- click & drag
- Data, Text-to-Columns (e.g. to separate first and last names)

Sorting and Filtering Data

If your worksheet contains a lot of content, it can be difficult to find information quickly. **Filters** can be used to **narrow down** the data in your worksheet, allowing you to view only the information you need.

1. In order for filtering to work correctly, your worksheet should include a **header row**, which is used to identify the name of each column.
2. Select the **Data** tab, then click the **Filter** command.
3. A drop-down arrow will appear in the header cell for each column.
4. Click the **drop-down arrow** for the column you want to sort or filter.
5. One option is to **Sort.** And/OR, you can…
6. **Uncheck** the box next to **Select All** to quickly deselect all data.
7. **Check** the boxes next to the data you want to filter, then click **OK**.
8. The data will be **filtered**, temporarily hiding any content that doesn't match the criteria.

https://www.gcflearnfree.org/excel2016/filtering-data/1/

Viewing Headings with "Split Screen & Freeze"

Whenever you're working with a lot of data, it can be difficult to **compare** information in your workbook. Fortunately, Excel includes several tools that make it easier to view content from different parts of your workbook at the same time, including the ability to **freeze panes** and **split** your worksheet.

You may want to see certain rows or columns all the time in your worksheet, especially **header cells**. By **freezing** rows or columns in place, you'll be able to scroll through your content while continuing to view the frozen cells.

1. Select the **row** below the row(s) you want to **freeze**.

2. On the **View** tab, select the **Freeze Panes** command, then choose **Freeze Panes** from the drop-down menu.

3. The rows will be **frozen** in place, as indicated by the **gray line**. You can **scroll down** the worksheet while continuing to view the frozen rows at the top.

Freeze columns instead by using the same 3 steps.

OR Split Screen first and freeze if you'd like to do both rows and columns.

https://www.gcflearnfree.org/excel2016/freezing-panes-and-view-options/1/

Plan "Next Steps" During PLC!

You can use sorted/filtered data to plan for "Next Steps" as a team.

▶ Sort by Various Columns

▶ Filter so you can view only the data you need

▶ Page Layout, Insert Page Break

▶ Highlight, Print Selection

▶ Copy a Worksheet to start fresh or share

Try it out with some mock 6th grade data!

Thank you for coming to this session during the GSD Conference!

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