



Excel 2016 Charts and Graphs

By Martha Nelson

Digital Learning Specialist

mnelson@skokielibrary.info

Extra Help

- Type your question in the “Tell me what you want to do” area.
- <right-click> on an item for help about that item

<https://support.office.com/en-us/excel>

<http://www.gcflearnfree.org/office2016/excel2016>



The Ribbon

Click on each Tab to see sub-menu controls.

The screenshot shows the Microsoft Excel 2016 ribbon interface. The 'Home' tab is highlighted with a yellow box. A yellow circle highlights the 'Quick Access Toolbar' at the top left. A yellow arrow points from the text 'Tabs in the Ribbon' to the 'Power Pivot' tab. Three orange arrows point from the text 'Group commands have even more options' to the 'Font', 'Alignment', and 'Number' groups on the Home tab ribbon.

Quick Access Toolbar

Tabs in the Ribbon

Group commands have even more options

Excel 2016 beginners May 2016 - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot Tell me... Martha Nelson Share

Clipboard Paste **Font** Alignment Number Styles Cells Editing

Calibri 11 A A

B I U

General \$ % , .00 .00

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

\sum A Z

The Home Tab



The Insert Tab

A screenshot of Microsoft Excel showing the 'Insert' tab selected (highlighted with a red oval). The 'Chart Tools' ribbon is also highlighted with a yellow oval. A red arrow points from the text 'Select Data for chart.' to the cell range A1:B8 in the worksheet. The worksheet contains the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2	Red		5													
3	Orange			2												
4	Yellow				6											
5	Blue					4										
6	Green						8									
7	Indigo							1								
8	Violet								7							
9																
10																

- 1) Select Data for chart.
- 2) Click on Recommended Charts to get a quick start.
- 3) Notice the new “Chart Tools” that appear when using charts.



Chart Tools - The Design Tab

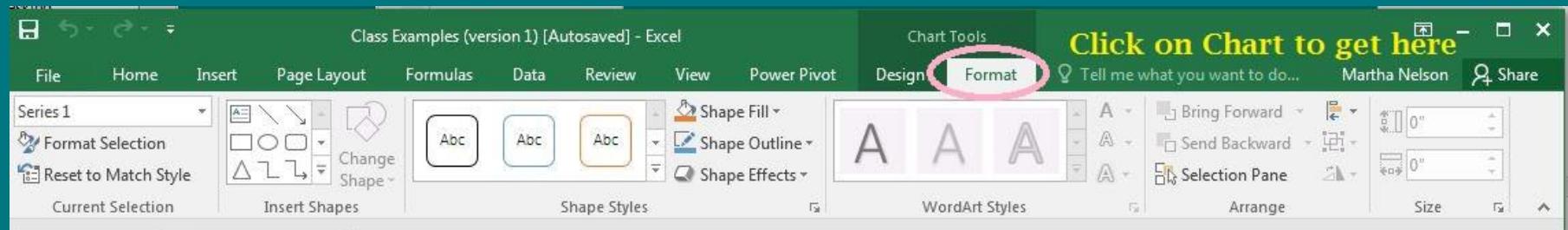


Get here by clicking on a Chart.

Slide mouse over things to try out a new look.



Chart Tools - The Format Tab



Get here by clicking on a Chart.

- Select a chart element (like Title).
- Slide mouse over “Shape Styles” or “WordArt Styles” to try out a new look.



Class Examples (version 1) [Autosaved] - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot Design Format Tell me what you want to do... Martha Nelson Share

PivotTable Recommended PivotTables Tables Illustrations My Add-ins Recommended Charts Charts 3D Tours Sparklines Filters Links Hyperlink Text Symbols

Name Box Insert Function

Column letters

Row numbers

Tab name Add new tab Page Break Preview Zoom Slider

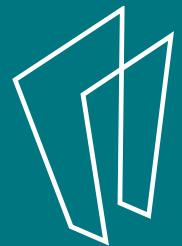
The screenshot shows a Microsoft Excel spreadsheet titled "Class Examples (version 1) [Autosaved]". The "Insert" tab is selected. A red arrow points from the "Name Box" to the cell reference "Chart 1". Another red arrow points from the "Insert Function" button to the formula bar. A blue box highlights the column letters (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O) and row numbers (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28). A blue box also highlights the chart area, which contains a pie chart titled "Chart Title" with a legend below it. The legend items are: Red, Orange, Yellow, Blue, Green, Indigo, and Violet. A red circle highlights the "Fav Color" tab in the bottom navigation bar. A green circle highlights the "Add new tab" button. A red circle highlights the "Zoom Slider" at the bottom right, which is set to 100%. Annotations are present: "Column letters" above the chart area, "Row numbers" to the left of the chart area, "Tab name" above the "Fav Color" tab, "Add new tab" next to the "Add new tab" button, "Page Break Preview" next to the "Page Break Preview" icon, and "Zoom Slider" next to the zoom slider.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2	Red	5													
3	Orange	2													
4	Yellow	6													
5	Blue	4													
6	Green	8													
7	Indigo	1													
8	Violet	7													
9															
10															
11															
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26															
27															
28															

Sales Fav Color Commuting Times Sheet4 Ready Recovered



1) Get data



Open an Excel workbook or create a new workbook

J6	A	B	C	D	E	F	G	H
1	Incredible Widget 2012 Gross Sales							
2		Jan	Feb	Mar	Apr	May	Totals by Region	
3	East	12,000	5,000	14,020	15,972	17,569	64,561	
4	Central	17,000	19,550	22,483	25,855	29,733	114,621	
5	West	8,000	8,400	8,820	9,261	9,724	44,205	
Totals								
6	by month	37,000	32,950	45,323	51,088	57,026	223,387	
7								



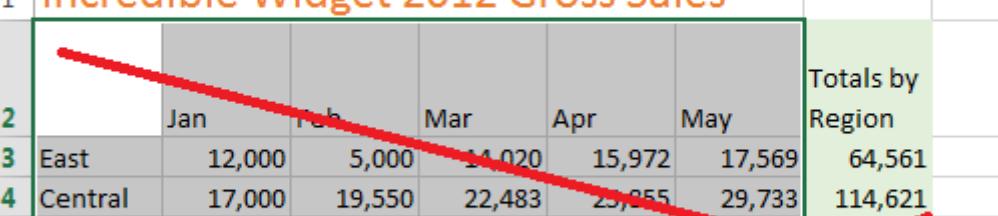
Select a cell in the upper left corner of the data



A2	B	C	D	E	F	G	H
1 Incredible Widget 2012 Gross Sales							
2	Jan	Feb	Mar	Apr	May	Totals by Region	
3	East	12,000	5,000	14,020	15,972	17,569	64,561
4	Central	17,000	19,550	22,483	25,855	29,733	114,621
5	West	8,000	8,400	8,820	9,261	9,724	44,205
Totals							
6	by month	37,000	32,950	45,323	51,088	57,026	223,387
7							
8							



Hold down the SHIFT key.
Click on the lower right corner
of the data. (not the totals!)

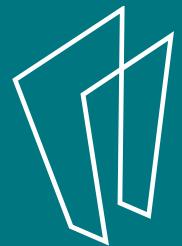


	Jan	Feb	Mar	Apr	May	
1	Incredible Widget 2012 Gross Sales					
2	12,000	5,000	14,020	15,972	17,569	Totals by Region
3	East					64,561
4	Central	17,000	19,550	22,483	23,055	114,621
5	West	8,000	8,400	8,820	9,261	44,205
	Totals by month					
6	37,000	32,950	45,323	51,088	57,026	223,387
7						
8						



3) Create a Chart

Method #1



Click on the Quick Analysis button, then click Charts to see amazing things!

Class Examples - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot

Tables Illustrations Add-ins Recommended Charts Charts PivotChart 3D Map Tours Sparklines Filters

A2 Jan Feb Mar Apr May

Incredible Widget 2012 Gross Sales

	Jan	Feb	Mar	Apr	May
East	12,000	5,000	14,020	15,972	17,569
Central	17,000	19,550	22,483	25,855	29,733
West	8,000	8,400	8,820	9,261	9,724
Totals by Region	64,561	114,621	44,205		
Totals by month	37,000	32,950	45,323	51,088	57,026
	35,387				

Sales Fav Color Co

Average: 156

Formatting Charts Totals Tables Sparklines

Clustered Line Stacked... Stacked... 100% More...

Recommended Charts help you visualize data.

A2 Jan Feb Mar Apr May

Incredible Widget 2012 Gross Sales

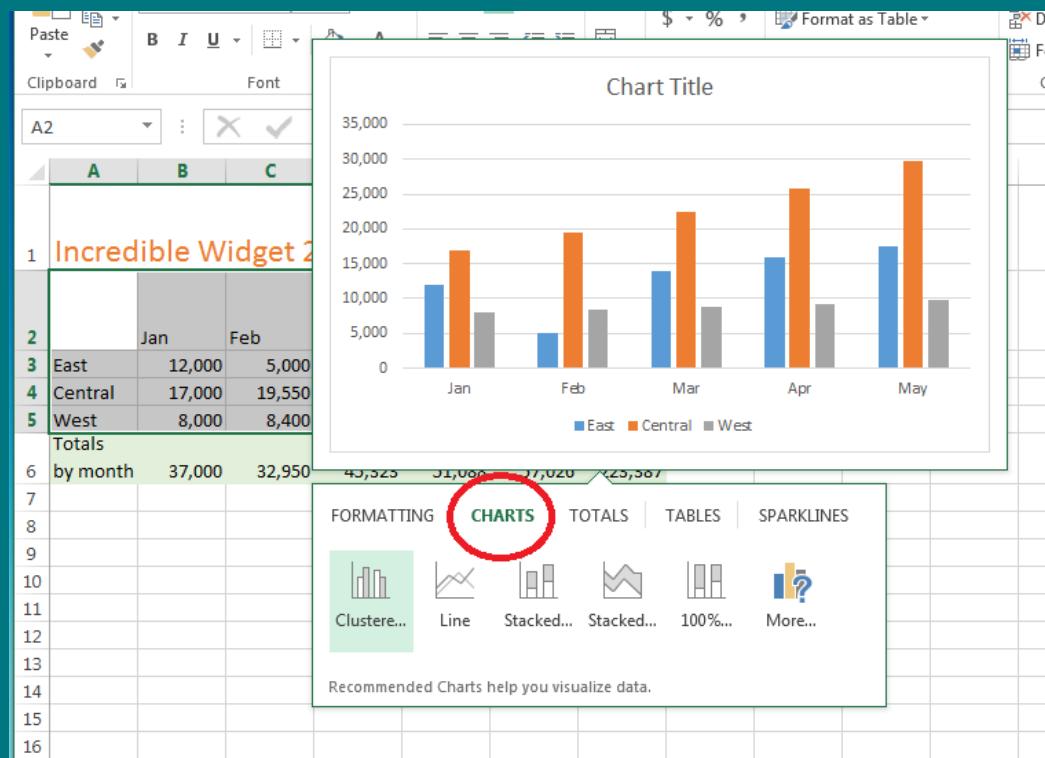
	Jan	Feb	Mar	Apr	May
East	12,000	5,000	14,020	15,972	17,569
Central	17,000	19,550	22,483	25,855	29,733
West	8,000	8,400	8,820	9,261	9,724
Totals by Region	64,561	114,621	44,205		
Totals by month	37,000	32,950	45,323	51,088	57,026
	35,387				

Quick Analysis (Ctrl+Q)

Use the Quick Analysis tool to quickly and easily analyze your data with some of Excel's most useful tools, such as charts, color-coding, and formulas.



Consider this a good starting point for learning about Charts



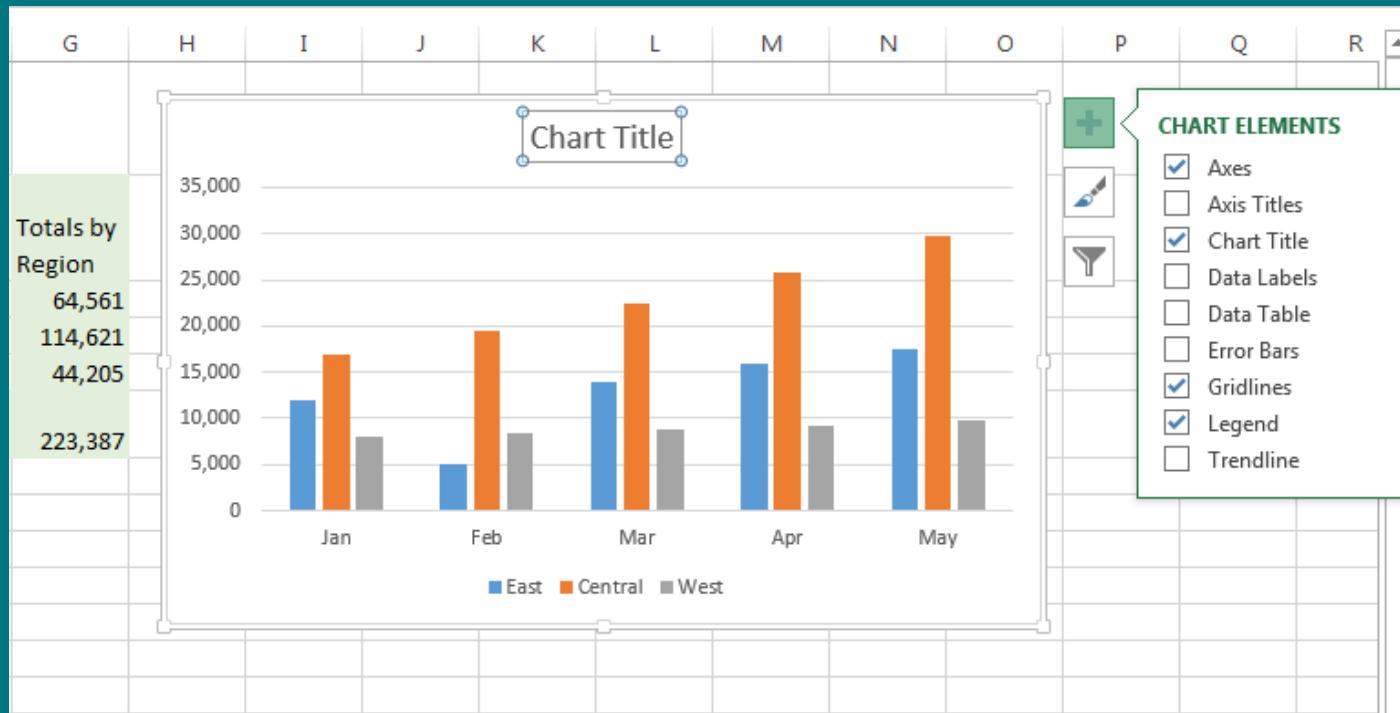
Use the 3 buttons to the right of the Chart to add, modify, or remove fields.

The screenshot shows a Microsoft Excel spreadsheet titled "WidgetSales.xlsx". The spreadsheet contains a table of sales data and a corresponding bar chart. The chart has three series: East (blue bars), Central (orange bars), and West (grey bars). The x-axis represents months from Jan to May, and the y-axis represents sales values ranging from 0 to 35,000. A legend at the bottom of the chart identifies the series. The chart is selected, and the "CHART TOOLS" tab is active in the ribbon, specifically the "DESIGN" tab. To the right of the chart, there is a context menu titled "Shortcut Tools" with three icons: a green plus sign for adding fields, a paintbrush for modifying, and a funnel for removing fields. The formula bar shows the formula for cell A1: =Incredible Widget 2012 Gross Sales. The status bar at the bottom displays statistics: AVERAGE: 14892.46667, COUNT: 23, SUM: 223387.

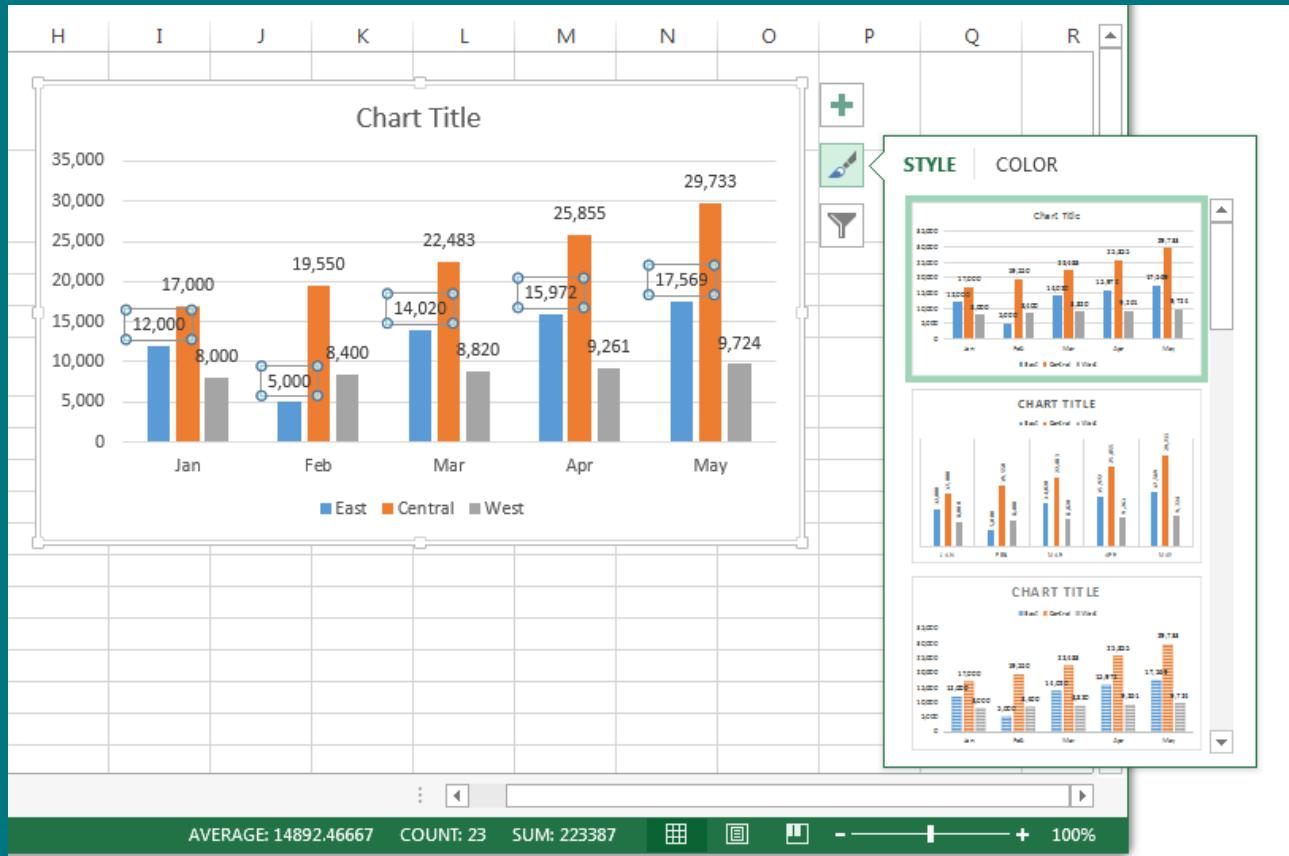
	Jan	Feb	Mar	Apr	May
East	12,000	5,000	14,000	25,000	30,000
Central	17,000	19,550	22,000	24,000	28,000
West	8,000	8,400	8,000	9,000	10,000
Totals by month	37,000	32,950	45,000	58,000	68,000



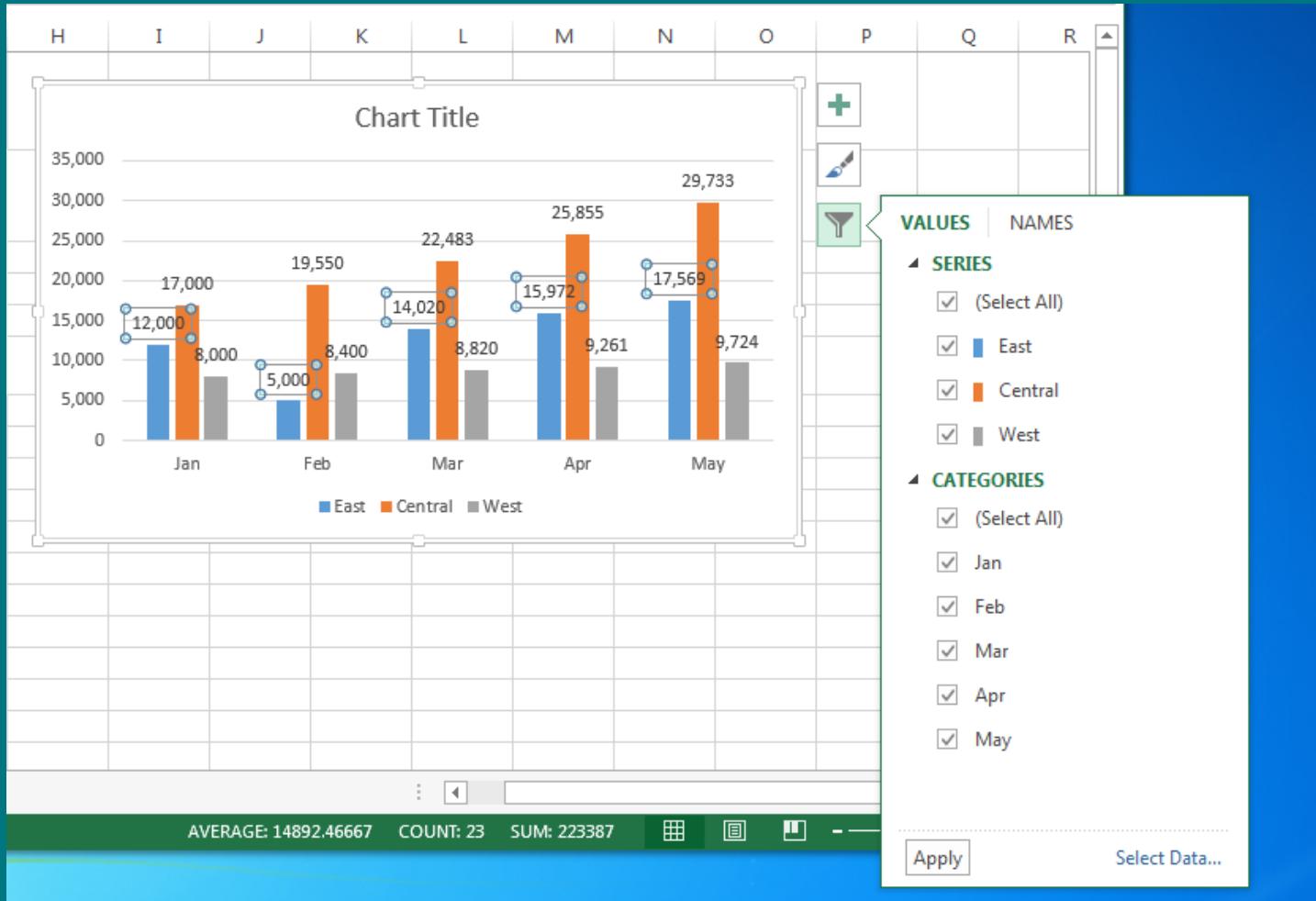
Chart Elements button



Style button



Filter Button



Switch Data Screen

Screenshot of Microsoft Excel showing the "Switch Row/Column" feature being used to change the chart's data source.

The chart displays "Incredible Widget 2012 Gross Sales" with the following data:

	Jan	Feb	Mar	Apr	May
East	12,000	5,000	14,020	15,972	17,569
Central	17,000	19,550	22,483	25,855	29,733
West	8,000	8,400	8,820	9,261	9,724
Totals by month	37,000	32,950	45,323	51,088	57,026
					223,387

The chart has a title "Chart Title" and shows sales values for three regions: East, Central, and West. The legend indicates the months Jan through May.

A red circle highlights the "Switch Row/Column" button in the "CHART TOOLS" ribbon under the "DESIGN" tab.

A "Select Data Source" dialog box is open, showing the current chart data range as "Sheet1!\$A\$2:\$F\$5". It lists the "Legend Entries (Series)" as Jan, Feb, Mar, Apr, and May, and the "Horizontal (Category) Axis Labels" as East, Central, and West.

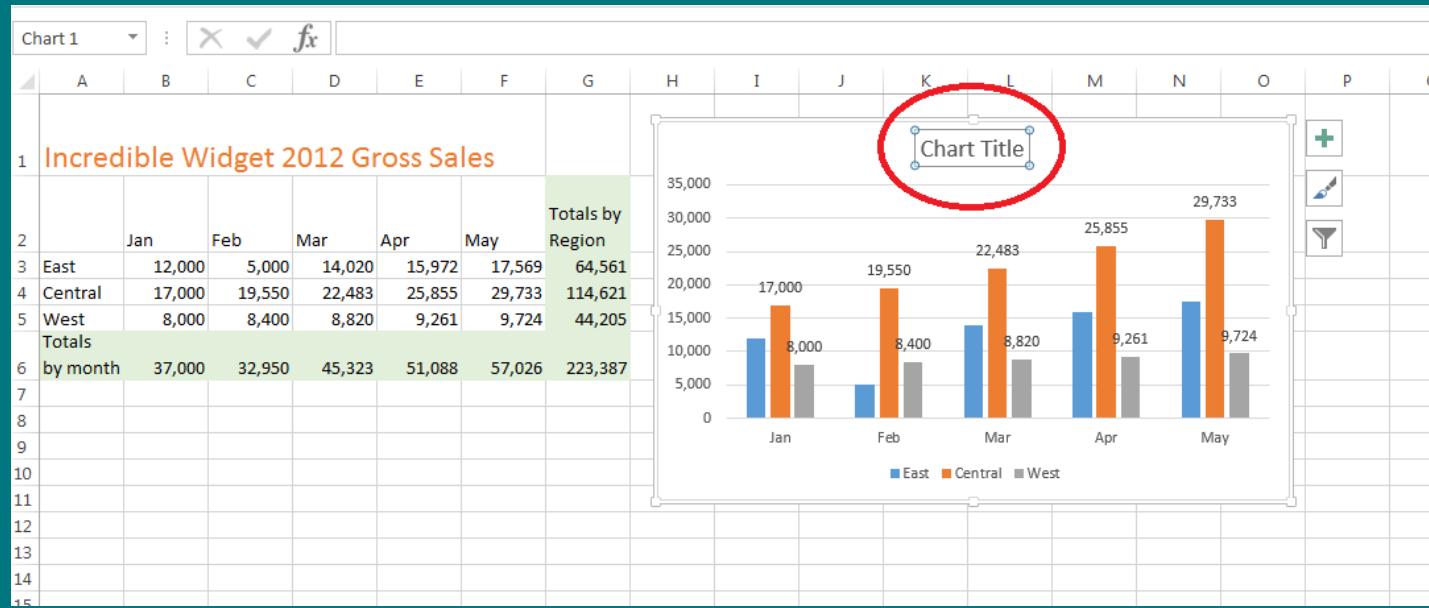
The status bar at the bottom right shows "Lock or End Session".



Update Title

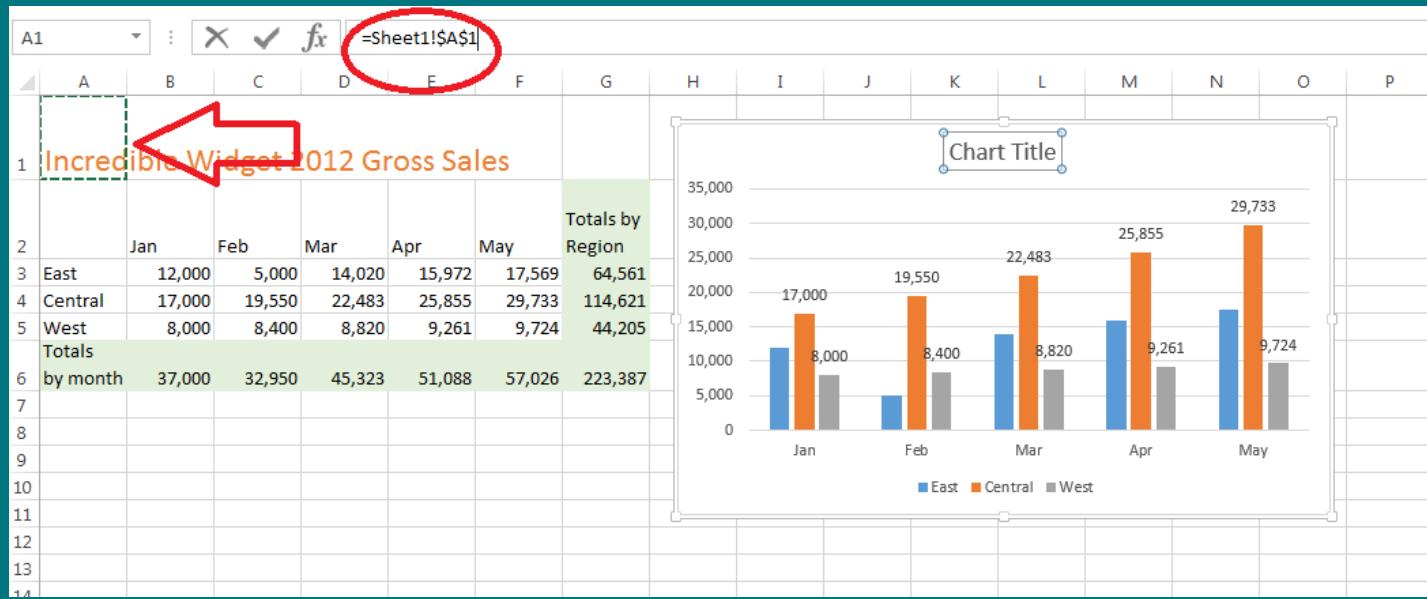
Super Cool method

Click on Chart title



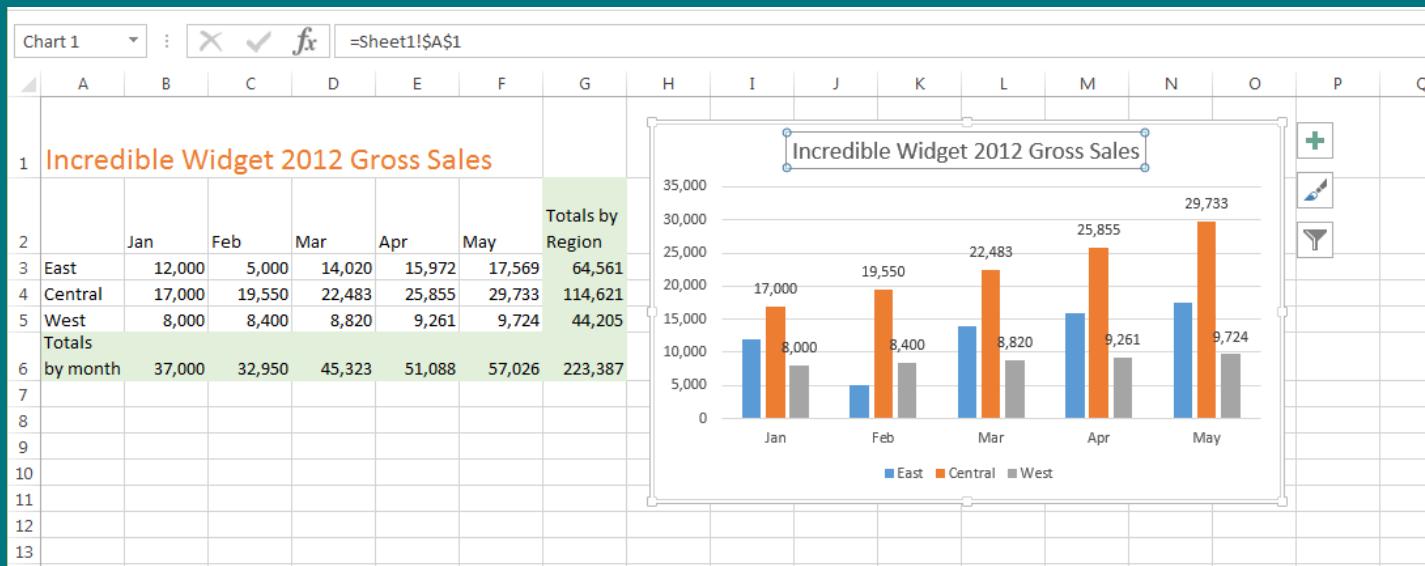
Change title #1

Put an equal sign in the function bar, and click on the field that holds the Title you want to use.



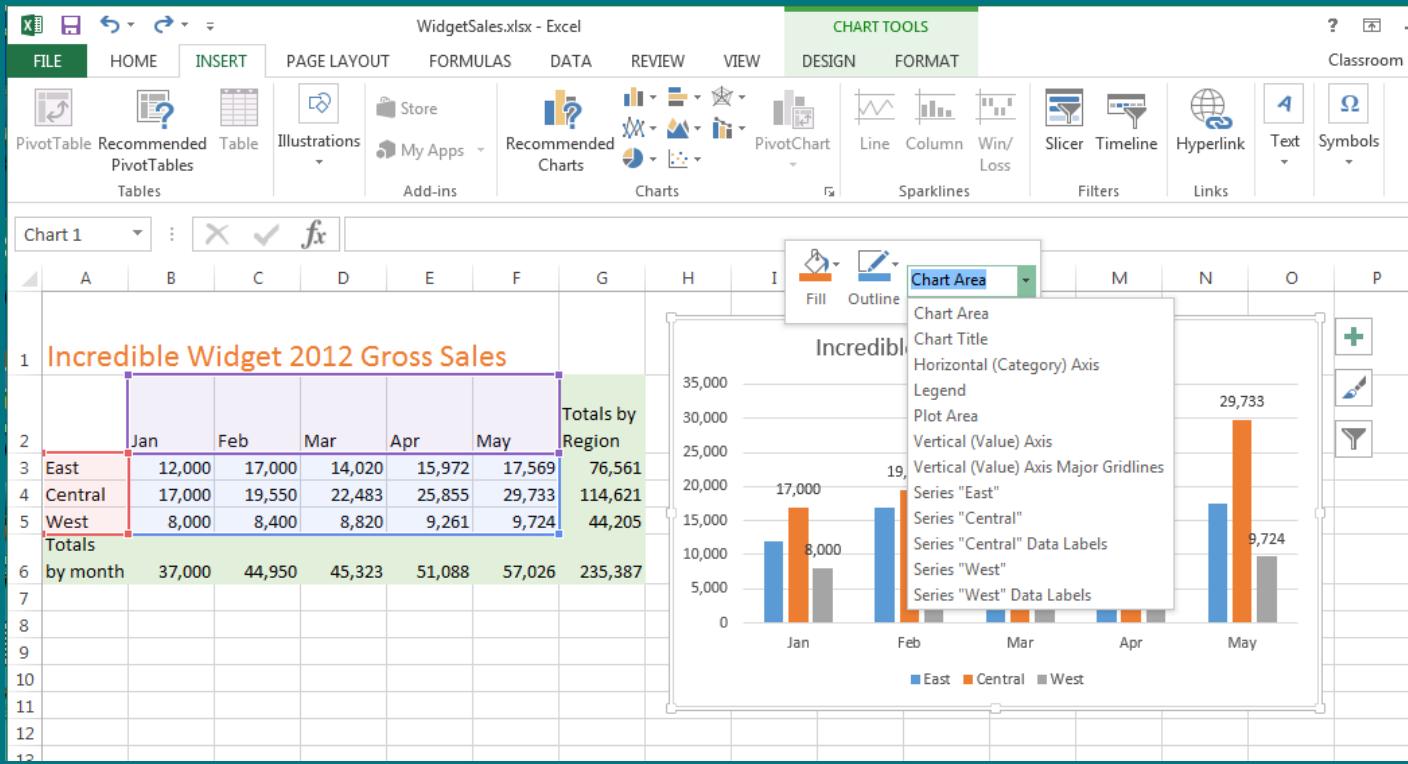
Change title #2

These fields are now linked.

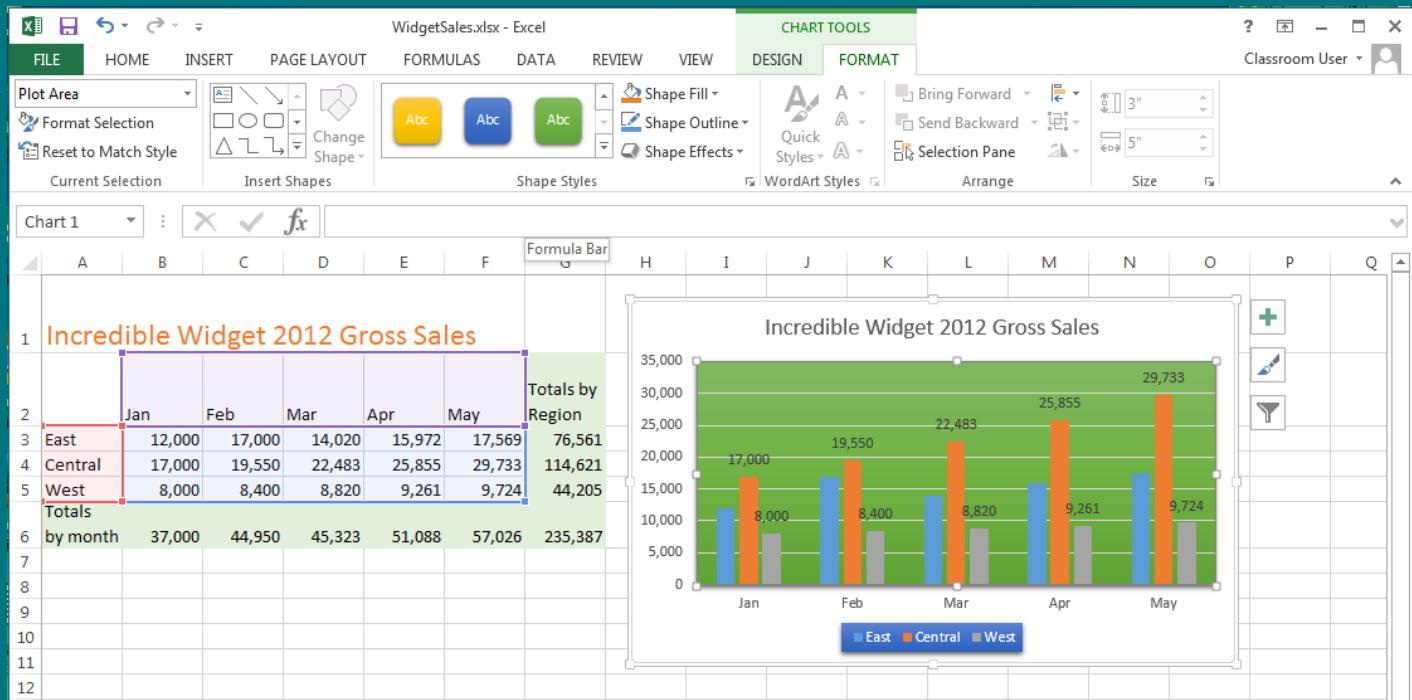


Change title #3

Click somewhere on the Chart, and click Format. Now modify colors, etc.

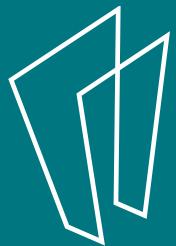


Format offers many choices to personalize your chart.



3) Create a Chart

Method #2



1. Select Data
2. Press F11
3. This puts Chart in a new tab



3) Create a Chart

Method #3

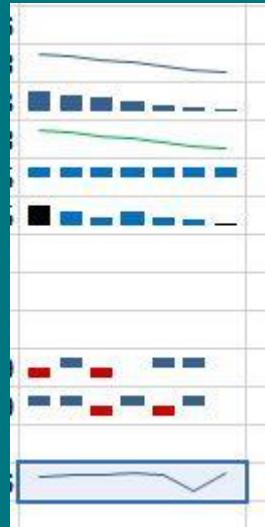


1. Select Data
2. Press <ALT + F1>
3. This puts Chart on the same sheet as the data.
4. Move sheet to desired place by dragging handle.



Sparklines

They are little one-cell charts that give information about the data in a row or column



Sparklines

Select a group of cells, all touching in a row or a column.

Insert > Sparklines > Column

Class Examples - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot Martha Nelson Share

PivotTable Recommended Table Illustrations Add-ins Recommended Charts Charts PivotChart 3D Maps Tours

B5 348

A B C D E F G K L

1

2

3 Biggest Loser

4 Contestant Starting Weight 1 2 3 4 5 6

Roberto	348	343	338	333	328	323	318
Sarah	267	263	259	255	251	247	243
Rob	326	323	320	317	314	311	308
Tonsheia	316	310	312	305	299	301	295
Stephen	309	300	290	300	290	285	275

Sparklines are little charts contained in one cell by your data.



In the dialog box, click on the cell that will hold the Sparkline, or type in the address in the Location Range.

Class Examples - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot Tell me what you want to do... Martha Nelson Share

PivotTable Recommended Table Illustrations Add-ins Recommended Charts Charts PivotChart 3D Map Tours Sparklines Filters Links Symbols

I5 : 348

A B C D E F G H I

1 Sparklines are little charts contained in one cell by you

2 Biggest Loser

3 Contestant Starting Weight 1 2 3 4 5 6

Roberto	348	343	338	333	328	323	318
Sarah	267	263	259	255	251	247	243
Rob	326	323	320	317	314	311	308
Tonsheia	316	310	312	305	299	301	295
Stephen	309	300	290	300	290	285	275

10

11

12 Win/Loss Sparklines just look at positive vs. negative

13 Cubs -1 1 -1

14 Sox 1 1 -1

Click where you want the chart to appear

Or just type the cell address here

Create Sparklines

Choose the data that you want
Data Range: B5:H5

Choose where you want the sparklines to be placed
Location Range: \$I\$5

OK Cancel

Contestant	Starting Weight	1	2	3	4	5	6
Roberto	348	343	338	333	328	323	318
Sarah	267	263	259	255	251	247	243
Rob	326	323	320	317	314	311	308
Tonsheia	316	310	312	305	299	301	295
Stephen	309	300	290	300	290	285	275

Now you get the Sparkline Tools tab. Change type or Style for a different look.

Class Examples - Excel

File Home Insert Page Layout Formulas Data Review View Power Pivot Sparkline Tools Design Tell me... Martha Nelson Share

Sparkline Color Marker Color Axis Group Ungroup Clear Group

Edit Data Line Column Win/Loss

Type

Show

Style

I5 A B C D E F G H I J K L

1 Sparklines are little charts contained in one cell by your data.

2

3 Biggest Loser

4 Contestant Starting Weight 1 2 3 4 5 6

5 Roberto 348 343 338 333 328 323 318

6 Sarah 267 263 259 255 251 247 243

7 Rob 326 323 320 317 314 311 308

8 Tonsheia 316 310 312 305 299 301 295

9 Stephen 309 300 290 300 290 285 275

10

11

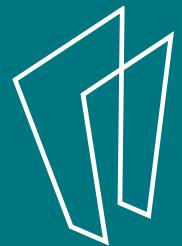


Put Charts in Word

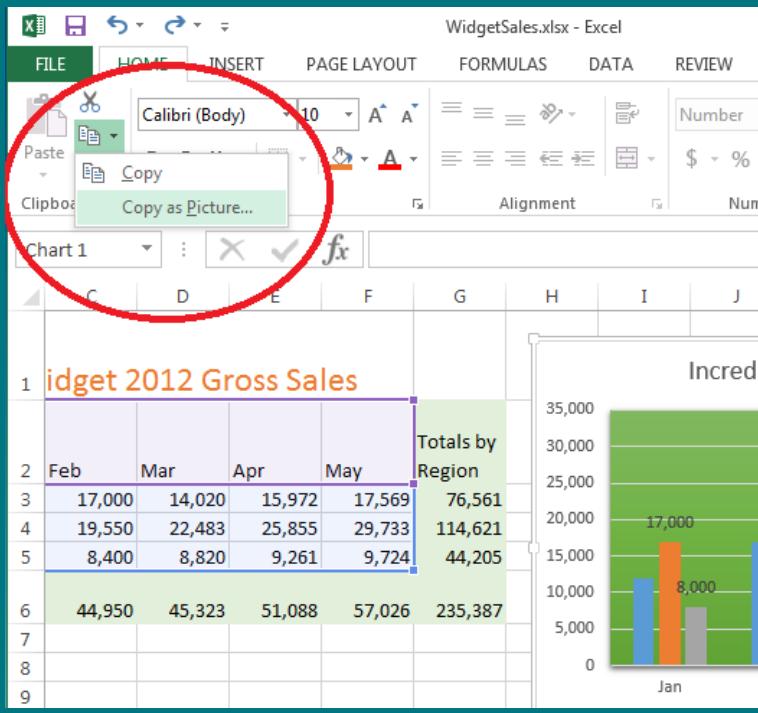
Two main choices:

Can keep the chart “live”, so any change to the data will update the chart.

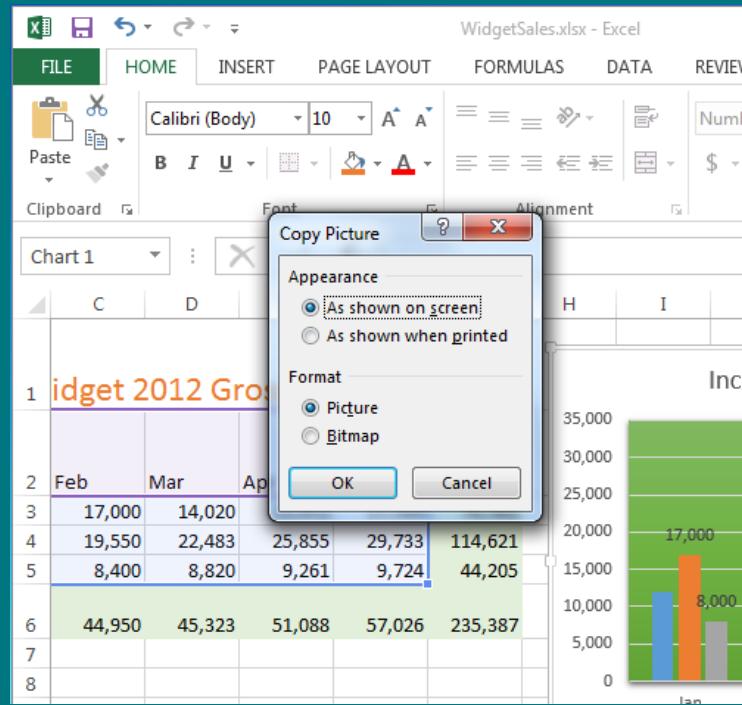
Or, can keep a copy of the chart as a picture, unmodifiable.



Select the chart you want to use.
Click on the Copy button, under the File tab.



Click desired options

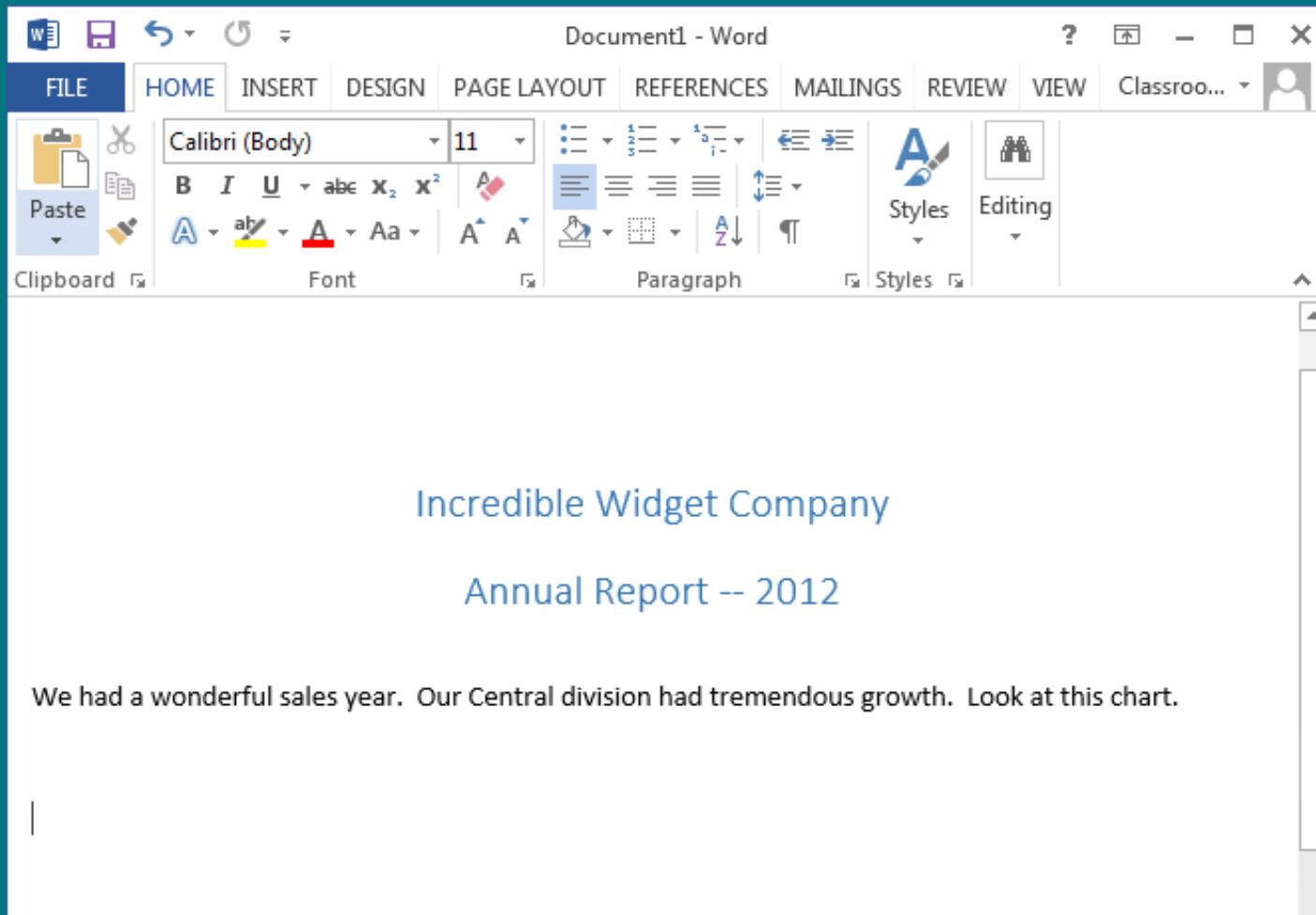


Make ready a Word Doc

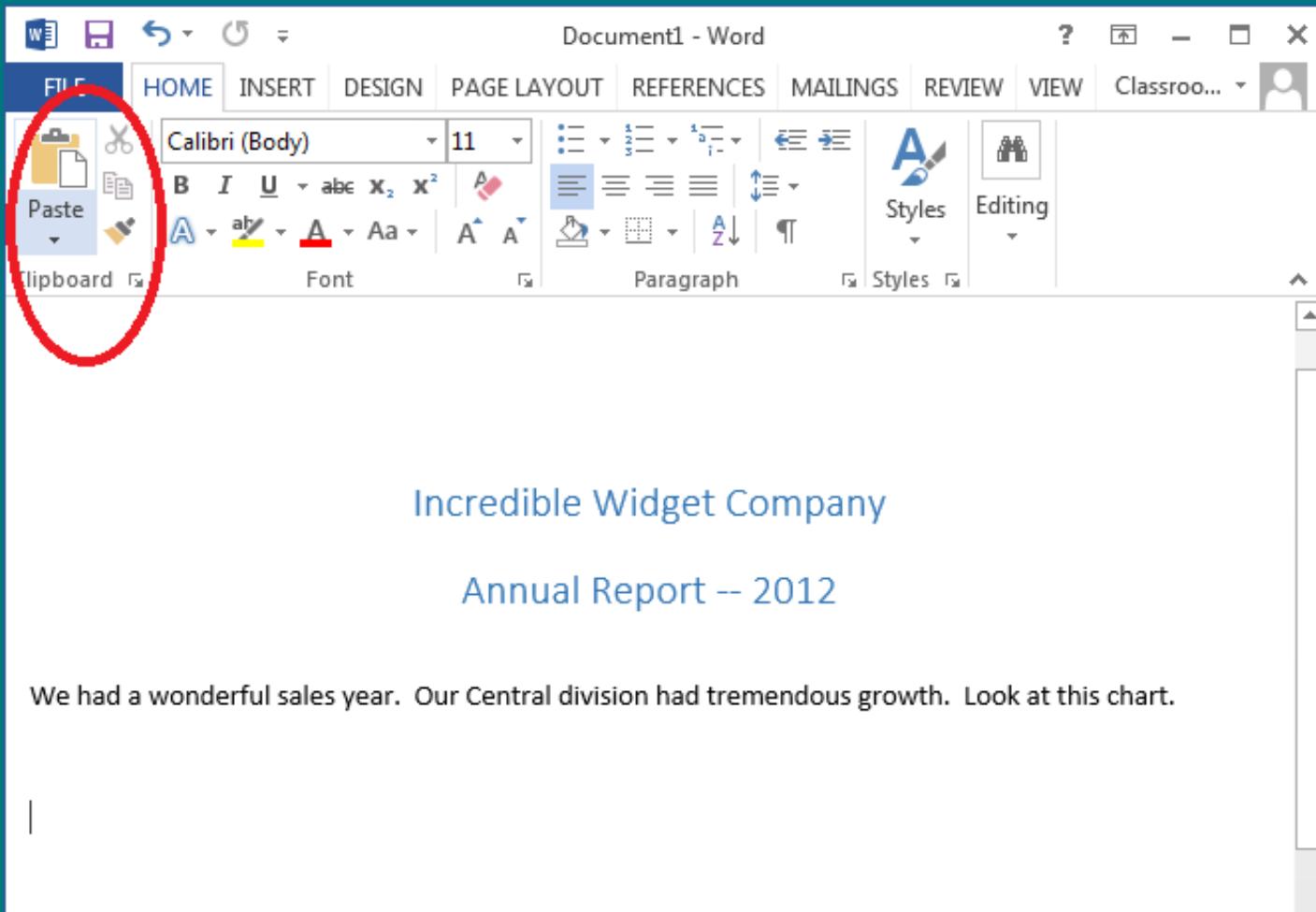
Incredible Widget Company

Annual Report -- 2012

We had a wonderful sales year. Our Central division had tremendous growth. Look at this chart.



In Word, click the little arrow under Paste.



A screenshot of the Microsoft Word ribbon interface. The ribbon tabs shown are FILE, HOME, INSERT, DESIGN, PAGE LAYOUT, REFERENCES, MAILINGS, REVIEW, and VIEW. The HOME tab is selected. Below the ribbon is the toolbar, which includes the 'Clipboard' group containing the Paste button (with a dropdown arrow), Cut, Copy, and Paste icons; the Font group with Calibri (Body) and 11pt selected; and the Paragraph group with various alignment and spacing options. A red circle highlights the Paste button with its dropdown arrow. The main document area displays the text "Incredible Widget Company" and "Annual Report -- 2012". At the bottom left, there is a single vertical line character. On the right side of the document area, there is a decorative graphic of three overlapping white parallelograms. The status bar at the bottom shows "Document1 - Word".

Thank You

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