

Create an Interactive Map with Excel

By Lorrie Jackson

WHY A TECHTORIAL?

What will I learn today?

You will learn how to create an interactive map in Excel.

What hardware and/or software does the techtorial apply to?

The techtorial applies to most newer versions of Microsoft Excel.

Which National Educational Technology Standards for Teachers does the techtorial address?

The techtorial will help teachers accomplish standard V.c. in particular.

The International Society for Technology in Education (ISTE) has developed a set of National Educational Technology Standards for Teachers. Standards or Performance Indicators are included for each techtorial to help teachers and administrators improve technology proficiency. For a complete description of the standards indicated, go to [NETS for Teachers](#).

CREATE AN INTERACTIVE MAP IN EXCEL

How often, when teaching a geography class, have you held up a map to point out a particular city, country, continent, or important topographical feature? How often, in science class, have you displayed a diagram of a cell with the nucleus or mitochondria highlighted? As teachers, we frequently depend on such visual aids as maps, diagrams, charts, and graphs to teach or clarify lessons.

How, though, do we "point to" features on a graphic that we send students electronically?

Simple! We use Microsoft Excel. Let's create an interactive map and find out how.

Note: The following is an intermediate lesson using Excel. For beginners, start with one of the basic Excel techtorials at [Take a Byte From the Apple: EducationWorld Techtorials](#).

STEP ONE: FORMAT THE PAGE

- Open Microsoft Excel.
- Click View > Page Layout (or Print Layout).

- Find the three tabs labeled Sheet 1, Sheet 2, Sheet 3 at the bottom left of the Excel window. Delete Sheet 2 and Sheet 3 by right-clicking each of those tabs and selecting Delete.
- Right-click the Sheet 1 tab, select Rename, and type "Interactive Map" on the tab.
- Find the diamond icon just above the number 1 and to the left of the letter A at the top left of the Excel window.



Click that box (or CTRL A) to highlight the page.

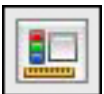
- Go to Format > Column > Width, type 1.5, and click OK.
- Click File > Save. Save the file in My Documents as "Interactive Map Sample."

STEP TWO: INSERT THE MAP

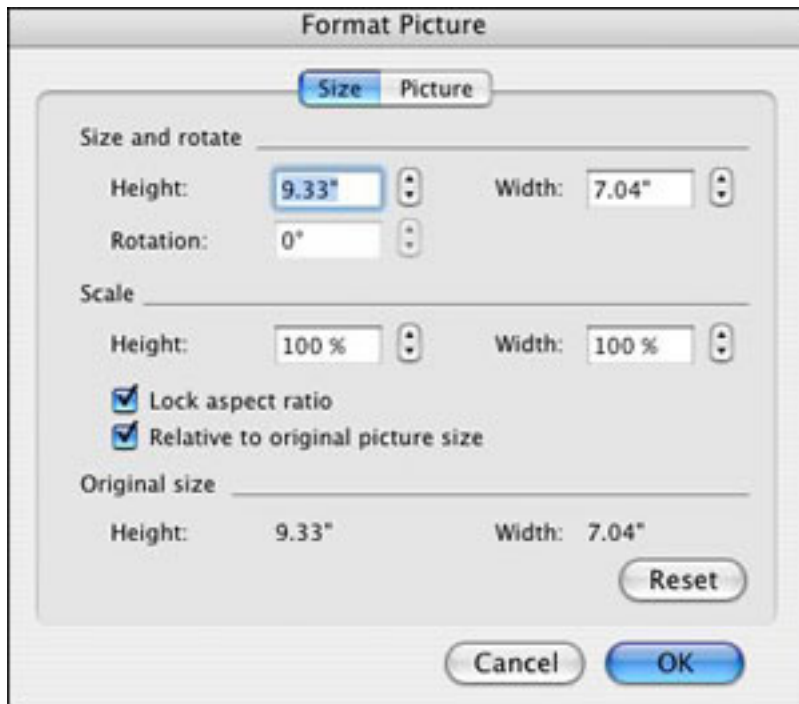
- Go to the CIA World Factbook's [U.S. Reference Map](#).
- Right-click the map and select Save Picture As (or Save Image to the Desktop, Download Image, or another similarly worded phrase). Save the map on your Desktop as United_States.jpg.
- Return to the Excel Interactive Map Sample document.
- Click View > Header and Footer>Customize Header.
- Click in the Center Section, and then click the Insert Picture icon.



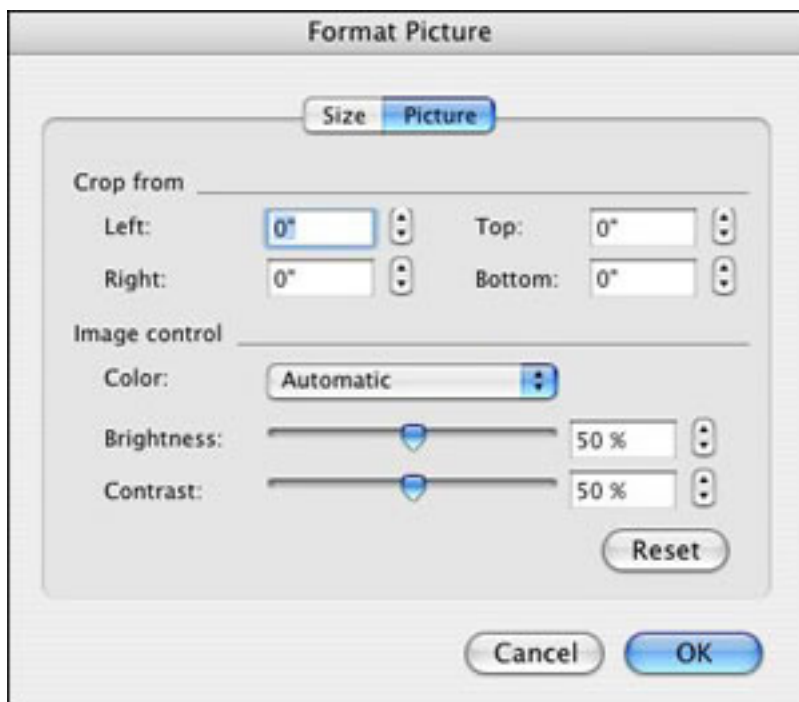
- Browse to your Desktop and select the U.S. Reference Map picture you saved earlier and click Insert.
- Click the Format Picture icon.



- Select Size in the Format Picture window pane that appears.



- Enter the height and width you want the picture to be. For the U.S. Reference map, the original size is fine, however you might want to increase or decrease the size of other pictures you save. Keep the boxes for "Lock Aspect Ratio" and "Relative to original picture size" checked because those will keep your picture from becoming distorted as you change its size!
- Select Picture in the Format Picture window.



- Make sure Automatic is selected for the Image Control setting (meaning the same color as the original picture). If you are going to print the map as a worksheet, you want it to print as black and white, not as grayscale).
- Click OK twice.

- Your page now should look like this:



- Save your work!

STEP THREE: MAKE IT INTERACTIVE!

Now, you can use Excel's Comments feature to insert notes on the map. First, make sure your name will appear on the notes. Click Tools > Option and select the General tab. In the blank to the right of User Name, type your name as you want students to see it (ex. Mrs. Smith), and then click OK.

Now, you are ready to insert your comments:

- Click the map on or near St. Louis, Missouri. Click Insert > Comment and type "Site of the Gateway Arch."
- Click anywhere on the spreadsheet to exit the Comment area.
- Follow the two steps above to insert into the map as many comments as you want.
- Notice that a red triangle indicates where each Comment is inserted. To read a comment, roll your mouse over a triangle (called a "mouse-over"). Don't click on



the comment, however.

That's it! You've made an interactive map.

Below are a few more tips on comments:

Have you just discovered some exciting new information about St. Louis? Did you forget to capitalize "Gateway Arch?" To edit or delete a comment, right-click a Comment triangle and select Edit Comment or Delete Comment. After you've made your changes, click anywhere on the map to accept them.

Is the map with Comment boxes a little boring for your taste? Right-click a Comment triangle, select Show Comment, and then click anywhere on the spreadsheet. Now, your Comment is always visible on the map. To hide the Comment again, click the Comment triangle (not the Comment box) and right-click Hide Comment.

You also can change the fill color, line color, line thickness, and so on of the Comment. Double-click the Comment box and make the changes in the Format Comment window that appears. Then click OK.

TELL ME MORE!

Where can I find more information?

Check out other exciting uses for Excel in Education World's [Techoorial Table of Contents](#).