Lower Columbia
Estuary
Partnership

How to create a schoolyard map and calculate area using Google Earth

Mapping is a fun way for students to learn about their campus and collect data for a variety of scientific studies. Campus maps are also a great way to get students outside. This how-to walks you through the steps of creating a map for your campus. There are many ways to create a map using on-line sources. This explanation is just one simple, low-tech option for classroom use. Having a campus map that students can write on is helpful for activities such as mapping habitat resources and tracing the movement of water on the schoolyard. Attached is an example of a map created using the following steps.

Creating Your Campus Map

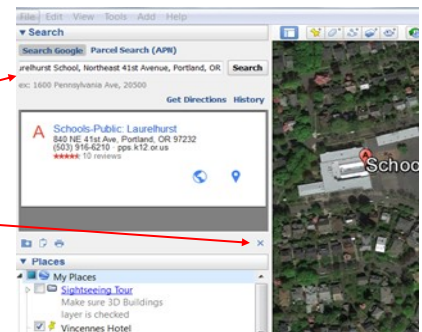1) If you don't already have it, download the free Google Earth Pro software to your computer: https://www.google.com/earth/

2) The first time you open and use Google Earth Pro you may be asked to login and give a license key. Note that the login instructions and key are given on the software download page.

Note: Google Earth Pro requires a license key. If you do not have a key, use your email address and the key **GEPFREE** to sign in.

System requirements:

PC - Windows XP, Windows Vista, or Windows 7

Mac - Mac OS X 10.6.0 or later

3) Launch Google Earth and then use your mouse to zoom in to your school or type your school's address in the search field (upper left corner of the screen).
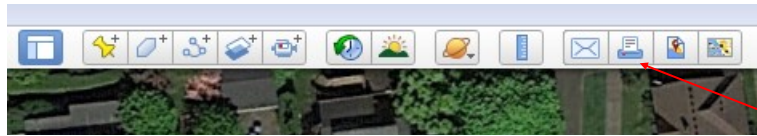
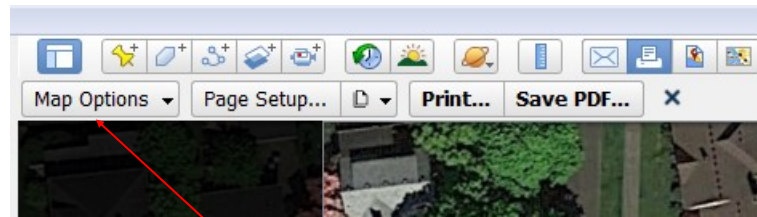4) You can remove the school name label from the map if you would like by closing out the box.

5) You can use your mouse to zoom into your location for a closer view or use the navigation controls to zoom in and out. Navigation controls are in the upper right corner and will appear when you hover over them with your mouse.

6) If you have played with the view and want to reset it, press the "u" key on your keyboard to reset the view to a top-down orientation. You can also reset North to up by pressing the "n" key. Or, to reset to a top-down orientation AND set North to up, press the "r" key.
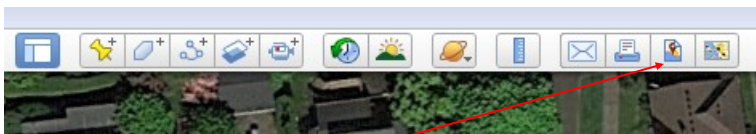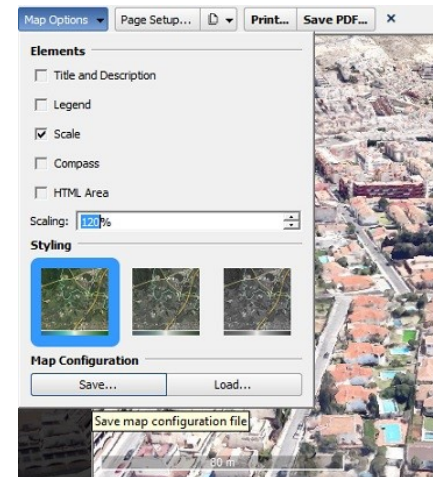
6) You will be able to finalize your map view and add labels by clicking on the Print icon.

7) After hitting print you will see Map Options appear. Select it from the dropdown menu. From here you can select to add elements to your map such as a title, legend, or compass as I did. Other options are also available.

8) Each element you select will be added to your map. You will be able to edit the position and text for the elements once added to the map. Click on your map to close the drop down when finished.

9) Now click on the Save Image icon. You can now save your map as am image. This will allow you to place it in a Word or Publisher document and edit the maps colors and saturation and add other text features as desired.

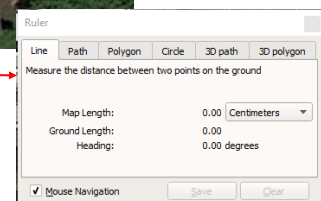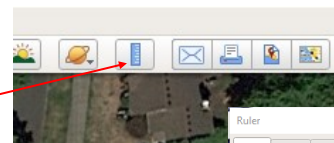You can learn more about how to use Google Earth Pro here: www.google.com/earth/learn
You may enjoy learning how to draw a polygon on your map for quickly calculating area and circumference of campus locations.

Calculating Distances and Area with Ruler Icon

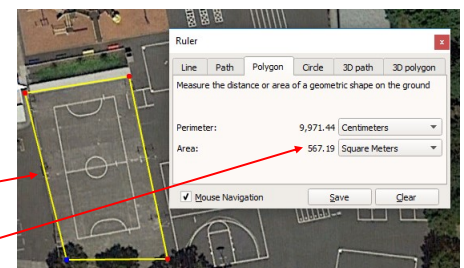1) While in Google Earth Pro, select the ruler icon. The Ruler dialogue box will open.

2) Select the Line tab for distances or Polygon to calculate area. Move your mouse and click on the map to indicate your starting point. A second click at another point indicates either the end point (for line) or the 2nd corner for Polygon. Click 3 or more corners for a Polygon. Distances or area for the map locations designated will be added to the Ruler dialogue box. You can then hit Save or Clear to create a new shape or line.
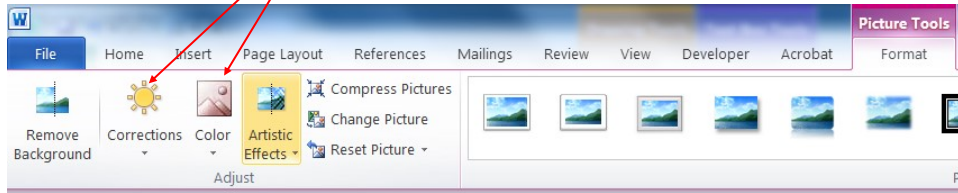

Polygon

Area

Editing Map in Word

1) Open a Word document and add your map image. Resize and locate as desired. Publisher will also work if you prefer it over Word.

2) With the image selected, click on Picture Tools in the task bar. From here you can use the Corrections or Color tools to adjust the look of your image to find a style that works best for allowing students to write on their maps.

3) Once you have finished editing your map, you can place into a worksheet or print it as-is for students to use.

Have fun mapping!

Schoolyard Map

Your Name: _____

School Name: _____

Date and Time_____ Weather_____

KEY: