



# Google Earth *in the Classroom*

Created by CUE and WestEd for Google



Get the tool: <http://earth.google.com>



## What is it?

Google Earth is a free, downloadable application that combines satellite imagery, maps, 3D terrain and 3D buildings to create a highly realistic virtual globe. Teachers and students can create their own virtual tours and share them with others. They can explore content developed by organizations such as NASA, Discovery Education, Jane Goodall and others. In addition, Google Earth now allows students and teachers to turn their gaze upward to explore the night sky in staggering detail.



## Why use it?

Students can use Google Earth to:

- Create tours of their school or community
- Study climate change and the effects of global warming
- Track earthquakes in real-time
- Explore the animal kingdom and endangered species with National Geographic content

Teachers can use Google Earth to:

- Set the scene for geography, history, literature, astronomy and other lessons
- Adapt traditionally abstract lessons to the “real-world” by having students interact with virtual real-time data such as weather, earthquakes, bird migrations, etc.
- Engage students in pro-active engagement in a wide-range of Google Outreach projects at: <http://www.google.com/earth/outreach/showcase.html>

## Expert Tip

For basic text formatting in your place marker pop-ups, format content in Google Docs. Choose Edit HTML from the Edit menu. The coding is done! Just copy and paste into Google Earth's place marker description box!

## Instructional Ideas

**Elementary.** Explore our neighborhood! Have students create a tour of their neighborhood creating annotated place markers indicating the location for their school and points of interest in their town such as the local fire and police stations, the city library, local parks, and museums.

**Middle School.** Calculate the volume of the Great Pyramids. Estimate the land area lost to Amazon deforestation. Check out Thomas Petra's Real World Math site at: <http://realworldmath.org/> for these and several other Google Earth Math lessons plans.

**High School.** Have students explore the dining customs of a variety of countries by building an International Cookbook where users virtually visit the various countries. And, while they're 'in-country' why not stop by and visit a few points of cultural interest? See: [http://web.mac.com/ghsinfo/CAFS/International\\_Cuisine.html](http://web.mac.com/ghsinfo/CAFS/International_Cuisine.html)

## Google Earth in Action

**Project:** Google Lit Trips

**Grade/Subject:** All Grades / Reading and Literature

**URL:** <http://www.GoogleLitTrips.com>

Teachers and students can create Google Lit Trips using Google Earth to track the journeys of characters from great "road trip" literature, such as *The Grapes of Wrath* by John Steinbeck. Students mark locations along the story's route and populate the pop-up windows with a wide variety of content including discussion questions, images, videos, and links to biographies of real persons or background information for locations and historical events.



## Additional Resources

### Google Earth for Educators Resources

Geo Education Home:

<http://www.google.com/educators/geo.html>

Google Earth Outreach:

<http://earth.google.com/outreach/index.html>

Sally Ride Science Content for Google Earth:

[http://www.sallyridescience.com/google\\_earth\\_sky](http://www.sallyridescience.com/google_earth_sky)

### Complimentary Tools

- Google SketchUp
- Picassa Web Albums
- Google Videos or YouTube