



# Google Earth *in the Classroom*

Created by CUE and WestEd for Google



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

## Google earth

### 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, National Geographic, Jane Goodall and others. In addition, Google Earth now allows students and teachers to turn their gaze upward to explore the night sky or go under water to explore the depths of the ocean.



### 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.
- Travel under the surface of the ocean.
- Walk through some of the world's forests, like the Amazon, and explore species-specific 3D trees.
- Not only view the Earth but also the sky, Moon and Mars.
- 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.
- Show historical imagery of an area.
- Adapt traditionally abstract lessons to the “real-world” by having students interact with virtual real-time data such as weather, earthquakes, bird migrations, etc.
- Use Street View with 3D imagery, including trees, to take the students on virtual field trips.

### Expert Tip



You don't have Google Earth installed? Use the Earth View in Google Maps to get some of the great features of Google Earth right in your web browser.  
<http://goo.gl/HoSQy>

## 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://goo.gl/NqBlIn>

## 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

Official Google Earth YouTube Channel  
<http://goo.gl/Wt7KJ>

Geo Education Home:  
<http://goo.gl/2kq6r>

Google Earth Outreach:  
<http://goo.gl/5Swd>

Sally Ride Science Content for Google Earth:  
<http://goo.gl/5xt0y>

### Complimentary Tools

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