



Google Earth *in the Classroom*

Created by WestEd for Google



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



What is it?

Google Earth is a free, downloadable application that works as a browser for all sorts of information on Earth. It uses satellite imagery to grab, spin, pan, tilt and zoom down to any place on Earth. Students can explore every corner of the globe, measure distances, create their own virtual tours, and share their tours with others. You can also create and download layers of information and view them in geographic context.

Why use it?

Students can use Google Earth to:

- study natural and political maps
- learn map reading and navigation
- visually explore historical, news, and census data
- annotate locations and share with others
- create their own 3D models to overlay on maps
- download geographically-referenced information created by others

Instructional Ideas

Elementary. Have students explore verified locations where meteors have hit the Earth (<http://www.gearthblog.com/kmfiles/impacts.kmz>), then create a chart of the number of craters per continent.

Middle School. Have students explore the 19 annotated placemarks mentioned in Jules Verne's "Around the World in 80 Days" (<http://bbs.keyhole.com/ubb/download.php?Number=156427>). Then have them annotate 19 different places they would stop if they were traveling around the world.

High School. Have students pretend they are with Sir Ernest Shackleton during his adventure in Antarctica. Explore the virtual tour in Google Earth (<http://bbs.keyhole.com/ubb/download.php?Number=151193>) and have students write diary entries to personalize the experience. mapping, the iterative design process, and user feedback.



Expert Tip

To help you know what is possible with Google Earth, download and explore lots of virtual tours (KML and KMZ files) before creating your own tours.

Google Earth in Action

Project: San Francisco Seismic Hazards

Grade/Subject: 7th grade

URL: <http://www.juicygeography.co.uk/googleearthsanfran.htm>

How can we minimize the worst effects of earthquakes by designing safer cities? In small groups, students use a variety of spatial data to make decisions about seismic hazards and building locations in San Francisco. Using Google Earth, students locate existing hospitals and consider the requirements for a new hospital building, such as population density, access to roads and transportation, etc. They then create a new placemark for the new hospital somewhere in San Francisco and describe the rationale for their location.



Additional Resources

Find and Share Virtual Tours

Global Earth Community

<http://bbs.keyhole.com/entrance.php>

More Examples

Google Earth Blog

<http://www.gearthblog.com/>

Google Sightseeing

<http://www.googlelightsighting.com/>

Juicy Geography

<http://www.juicygeography.co.uk/googleearth.htm>

Complimentary Tools

Google SketchUp

<http://earth.google.com>

United Streaming

<http://www.unitedstreaming.com/>

GE Graph

<http://www.sgrillo.net/googleearth/>

Earth Plot

<http://www.earthplotsoftware.com/>

Geographic Information Systems

Geospatial21

<http://www.geospatial21.org/>

The History and Application of GIS in Education

<http://spatialnews.geocomm.com/features/historygisedu/>