



Discovery Education *unitedstreaming*

Great Explorers

Relive the exploits of Great Explorers using Discovery Education *unitedstreaming* & Google Earth

Social Studies

Middle School Geography Lesson Plan

Standards:

- Students will describe significant people and events which form the foundation of United States history in the chronological context of the history of the Americas and the world.
- Students will demonstrate knowledge of the Age of Exploration.
- Students will explain how the cultures of the earliest civilizations spread and interacted.

Learning Objectives: The student will be able to,

- use vocabulary related to explorers.
- describe some of the reasons why people explore new lands.
- describe the similarities between early and modern-day explorers.

Technology components:

- Discovery Education *unitedstreaming* account (<http://www.unitedstreaming.com>*)
- Google Earth software (free download from <http://earth.google.com>)
- Computer with LCD projector and Internet connection
- Access to the Internet for teacher and student-based research
- Presentation software such as PowerPoint
- Graphic Organizing software such as Inspiration

Introduction:

- Discuss with the students things they learned through exploration, such as riding a skateboard, learning to play basketball or soccer, or reading about something new. How did they feel and why did they explore the topic?
- Tell the students they will study the great explorers of the world. They will pick one explorer to research in depth, and present their findings in a multimedia presentation to the class.

*Visit unitedstreaming.com to see if your school has an account or to sign up for a 30 day free trial





Prior Knowledge:

- Show the students a map of the world. Ask them if they've ever heard of Lewis & Clark. Have students expand on what they know about Lewis & Clark's adventures and why they are important to history.

Present New Content:

- Show the students the Program Introduction video segment from "The Lewis and Clark Expedition".
- Use Google Earth to present the globe to the students. Load the LewisandClark.kmz file or search for St. Louis, Missouri.
 - Follow the trail of Lewis & Clark along their journey westward, presenting elements of the journey as Pushpins in Google Earth with embedded video segments and articles from *unitedstreaming*.
- As the students watch the various clips and read the articles, have them keep a KWL chart of what they are learning and questions about what they want to know more about the trip, logistics, planning, and danger. These questions will become the guide for their independent learning experience.

Independent Learning Experience:

- Divide students into pairs or small work groups. Each group will research and present a tour of explorations by famous explorers, from the first person point of view, that explain where they went, the people/ culture, what hardships they encountered, and what lessons they learned (importance) of the exploration.
- Student can review Discovery Education *unitedstreaming* video segments on great explorers the teacher downloads to local computers.
 - Suggested *unitedstreaming* video segments:
 - Explorers, The: The Dawning of the Era of Exploration.
 - Early Explorers: The Age of Discovery.
 - French Explorers: The Exploration of the Mississippi River
- Students will choose a short, editable video segment from one of the exploration videos, mute sound, and record their own 1st person narration of exploration. (cool – how do they record sound?)

Additional research websites:

- Students can also complete a Cartes puzzle putting together maps of the World <http://www.civilization.ca/vmnf/cartes/puzzle-e.htm>. Use Google Earth as a reference to guide students.
- Review explorer timelines and biographies at <http://www.mariner.org/educationalad/ageofex>





- Students can also search for primary source information through a Google Search using the following keywords: age, exploration, world history, maps.*

Cross-Curricular Lesson Extension:

- Use TimeLiner 5.0 to create a timeline of great explorations and how they could have been related to or influenced by other explorers.
- Use Google Earth's measure tool to calculate distance traveled for each explorer.
- Have students generate a list of questions to ask the 'explorer,' then pair students up to conduct interviews and write an article about that explorer.

Feedback:

- Teacher circulates around the room providing ongoing feedback to small groups.
- Students should submit a rough draft of their tour with key ideas behind each location half way through the project. Teacher will provide comments and guidance on next steps for each pair or group.

Assessment:

- Use a scoring rubric, provided to the students in advance, to evaluate each travel log and multimedia presentation.

Transfer:

- Have the students become explorers by making a compass and 'charting' their school/neighborhood.
- Students can investigate the newly revised plan to explore the moon and our solar system. Research recent changes in what scientists consider a planet and the debate on Pluto's fate. Students can write a paper on whether or not Pluto is a planet and why.

Citations:

Lewis and Clark Expedition, The. United Learning (1992).

Explorers, The: The Dawning of the Era of Exploration. Discovery Channel School (2006).

New World Explored, The. Rainbow Educational Media (1998).

French Explorers: The Exploration of the Mississippi River: Marquette, Jolliet, and LaSalle (1672-1687). United Learning (2004).

* Review the Google Search tutorial in the Professional Development section of *unitedstreaming*.



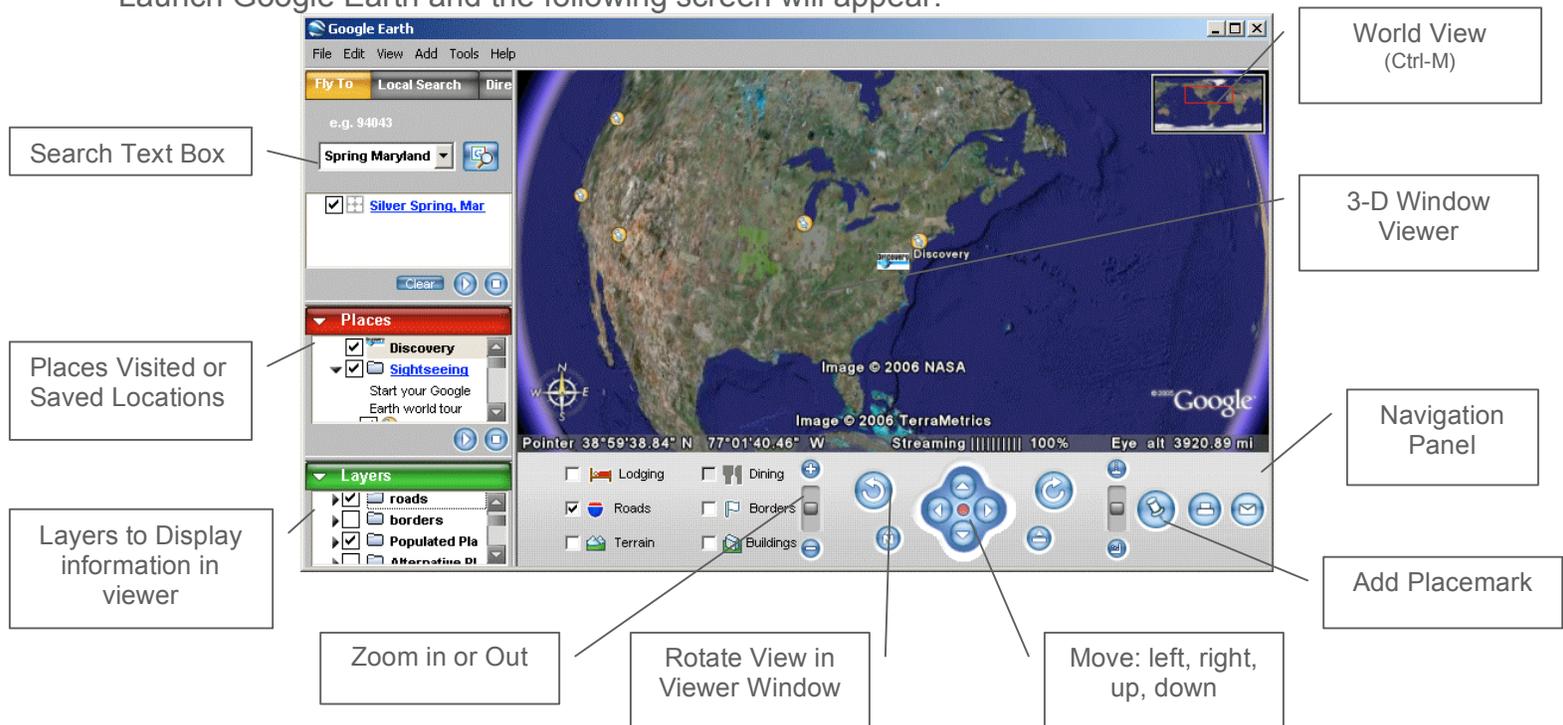


Google Earth

Google Earth allows educators to add elements of satellite photography, world geography, locations, and images to their instructional lessons.

Google Earth Viewer

Launch Google Earth and the following screen will appear:



Fly To a Location

To have Google Earth 'fly-by' a location, type the city, state, or country into the Search Text Box. Google Earth will locate the position and the viewer window will 'fly' to the location.

- Click and hold in the viewer window to move around the location
- Use Google Earth's Zoom, Rotate, and Move tools from the menu bar to navigate and explore the location

World View

Press Ctrl-M to open the world view map in the top right hand corner of the Viewer Window.

- Double-click on any location in the World Viewer to jump to that location
- Use Google Earth's Zoom, Rotate, and Move tools from the menu bar to navigate and explore the location



Making a Placemark:

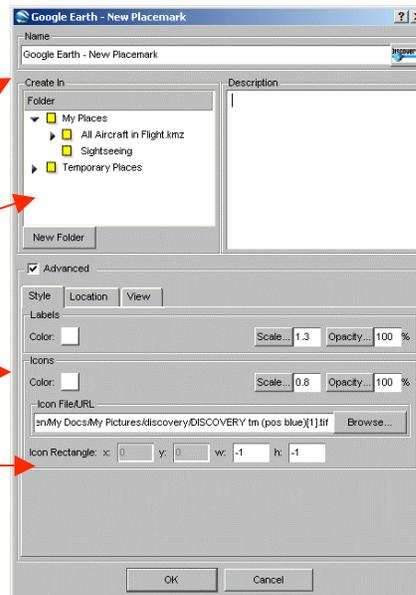
1. Position the viewer in the location where you want to add a Placemark.
2. Click on the 'Add Placemark' pushpin icon  in the navigation panel.
3. The New Placemark dialog appears and a New Placemark icon is centered in the viewer inside a flashing yellow square.

- Position the Placemark by clicking and holding and moving to the exact location you want it.



- In the New Placemark dialogue box, edit the following properties:

- Name for the Placemark
- Destination folder, existing folder or create a new one
- Color of Label or Placemark icon
- Image to represent the Placemark



4. Select a folder to hold the Placemark or create a new one.
5. Click the OK button to apply the information you entered.
6. Once created, editing can be completed by 'right' clicking on the Placemark icon and selecting 'edit...'



Inserting a *unitedstreaming* video segment inside a Placemark:

1. Log into *unitedstreaming* and search or browse the video segment.
2. Right click on the download icon  and select 'copy shortcut'
3. Open up the Placemark by right-clicking on it and click EDIT
4. Paste Shortcut Location inside the Description text box.
Anything that is put inside this box will appear when the Placemark is opened.
5. When visiting the Placemark, double click on the image/icon to open and view images or video segments.

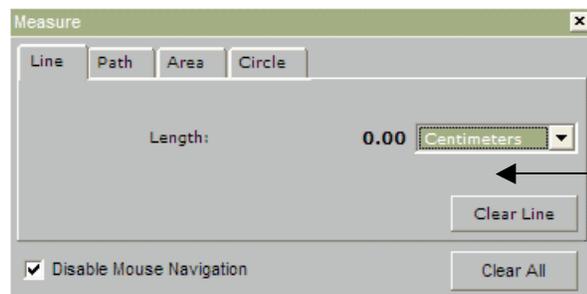
Inserting Funk and Wagnall articles inside a Placemark:

You can copy and paste any of the Funk and Wagnall text found inside *unitedstreaming* that accompanies many of the videos into the Description text box.

Measuring

Use the Measure window in the Tools menu to measure length, area, and circumference as follows:

1. Position the imagery you want to measure within the 3D viewer and make sure you are viewing the earth from top-down (type U) and with terrain turned off for best accuracy.
2. From the Tools menu, select Measure. The Measure dialog box appears.



Consider moving the dialog box to a region of your screen that doesn't obstruct the 3D viewer.

3. Choose the type of shape you want to use to measure:
 - Line allows you to measure from point to point
 - Path allows you to create multiple stops on a journey or trip to measure the total distance



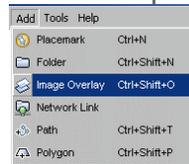
4. Choose the unit of measure for length; perimeter, area, radius, or circumference, as applicable.
5. Click in the 3D viewer to set the beginning point for your shape:
 - For a line: click on the beginning point and the ending point, the distance will appear in the Measure dialogue box.
 - For a Path: click once for the beginning point, indicated by a red dot, click along points of your path and a yellow line connects each point as you move the mouse. Each additional click adds a new line to the path. The total units for the shape are defined in the Measure dialog.
6. Click 'Clear' to reset the measure tool. To close, click on the 'x' on the top right corner of the dialogue box.

Creating an Image Overlay

An image overlay is a picture that you can add over the Google Earth satellite view.

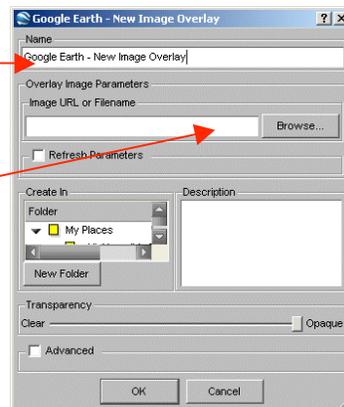
1. Position the viewer in the location where you want to place the overlay image file.

2. Select Image Overlay from the Add menu.



3. The New Image Overlay dialog appears. Edit the following properties:

- Provide a descriptive name in the Name field.
- Browse to locate the icon or image on your computer
- At this point, the image appears in the 3D viewer, with green anchor points. Click and drag these points to position the image.



4. Position the image in the viewer to your preferences and click OK to complete the creation.