

Subject #3: Geography

Project #40: The Wonders of Google Earth. Students create their own tour on Google Earth using locations selected by the classroom teacher or of interest to themselves. They add the locations to Google Earth, add a fact about it and turn it into a tour

Higher-order thinking skills	Technology-specific: Google Earth	Subject Area/ Learning-specific	Standard: NETS-S
<i>Analyze, apply, understand</i>	<i>Select/use applications effectively and productively</i>	<i>Presentation skills, research and information fluency</i>	<i>2.c, 3.b</i>

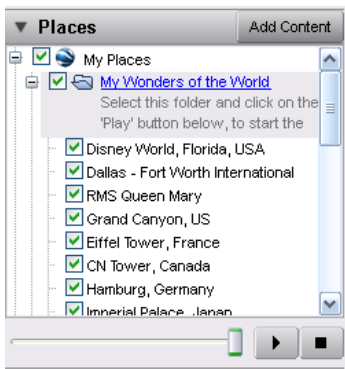
Grade level: 5-8
 Prior knowledge: Project 38 (Intro to Google Earth), Project 39 (Google Earth Board)
 Time required: 45 minutes, 3 sessions
 Software required: Google Earth (free download from www.earth.google.com)
 Vocabulary: fly-to, pin, toolbar, tour, 'my places', right click, temporary places

Lesson Description

- Create an automated tour of the same locations researched and presented for the Google Earth Board (Project 39)

Computer Activity

- Pass out a list you've developed of all facts collected from the Google Earth Board presentations (or get these from classroom teacher for locations they've visited during class)
- Play the Google Earth sample tour that comes with the download called 'Sightseeing'. Notice how GE automatically zooms in on a location and then advances to the next.
- If there is a tour created by last year's students, have current students watch it. Point out locations, image display, tour order.




their tour.

- Create a file folder called 'My Tour' under 'My Places'. Here, students will collect 5-10 locations for

Fly to e.g., Tokyo, Japan

- Use 'Fly To'

- Click 'Pin'  tool on toolbar; add site. In dialogue box, add one to three amazing facts from list you passed out (see next page for sample).
- Before closing, personalize pin. Use the same look for all locations.
- Use Google Earth Community if you can't 'fly to' a location.
- Back up folder to flash drive
- When finished tour, press 'Play Tour'.



Extensions

- Use these tours to support geography units, history research, language arts, a book report or other
- Add a picture of the location using Add-Photo or Add-Image Overlay

Troubleshooting Tips

- *I can't get location to appear in my tour folder (Right click it wherever it shows up—probably 'Temporary Places'. Copy/paste into your tour).*
- *I can't find 'Temporary Places' (Be sure the 'Places' layer is expanded)*
- *My building isn't 3D (Check '3D Buildings' under 'Layers?')*



WONDERS OF GOOGLE EARTH TOUR FACTS

Collected from student reports—you'll collect your own list

LOCATION	INTERESTING FACTS
Ayers Rock	<ul style="list-style-type: none"> ❖ One of the oldest rocks on Earth. ❖ Perimeter is 5 miles ❖ Has a waterfall called Alice Springs ❖ Changes colors depending upon the time of day
Death Valley	<ul style="list-style-type: none"> ❖ Record for highest temperature in the Western hemisphere—134 degrees ❖ Second hottest recorded temperature in the world ❖ Lowest spot in North America at 282 feet below sea level
Egyptian Pyramids	<ul style="list-style-type: none"> ❖ Pyramids are so large they can be seen from the Moon ❖ The oldest structures in existence ❖ They are oriented north-south ❖ There are around 110 Egyptian pyramids
Eiffel Tower	<ul style="list-style-type: none"> ❖ Building started in 1887; completed in 1889 for the World Fair ❖ 324 meters tall, made out of 9441 tons of wrought iron ❖ Repainted every 7 years; requires 50 tons of brown paint in 3 different shades ❖ More than 200,000 people visited it during the World's Fair of 1889
Great African Rift	<ul style="list-style-type: none"> ❖ Named by a 19th century British explorer named John Walter Gregory ❖ 3700 miles long, extending from Jordan to South Africa ❖ Site of the oldest human remains (3.7 million year old Lucy)
Great Wall of China	<ul style="list-style-type: none"> ❖ Isn't a continuous wall. ❖ Stretches 4,000 miles ❖ Guarded by 2-3 million soldiers ❖ Built 2,000 years ago by first emperor of China; rebuilt many times
Hagia Sophia	<ul style="list-style-type: none"> ❖ 'Hagia Sophia' means <i>the church of the old wisdom</i> in Greek ❖ One of several great churches built by Constantine the Great in the 4th Century ❖ Started as a patriarchal basilica, became a mosque and is now a museum
Istanbul	<ul style="list-style-type: none"> ❖ First known as Byzantium and then Constantinople ❖ Third largest city in the world ❖ Use to be the capital of the East Roman Empire and the Ottoman Empire ❖ Located in Turkey, whose main religion is Islam
Leaning Tower of Pisa	<ul style="list-style-type: none"> ❖ Took 177 years to build; started 1173 ❖ 55.86 m tall on one side and 56.7 m tall on the other; weighs about 14,500 tons ❖ Took 70 tons of dirt to stabilize the tower in 2008 ❖ It has 294 steps
Madagascar	<ul style="list-style-type: none"> ❖ Island created when it separated from India 80-100 million years ago ❖ 4th largest island in the world ❖ Despite proximity to Africa, no lions, giraffes, zebras, hippos here ❖ Home to 5% of the world's plants and animals
Mt. Everest	<ul style="list-style-type: none"> ❖ Started growing about 60 million years ago ❖ 4000 people have attempted to climb it, but only 660 have succeeded. ❖ 142 people died attempting to climb Mt. Everest ❖ Rises a few millimeters each year due to geologic forces
Mt. St. Helens	<ul style="list-style-type: none"> ❖ An active volcano in the Cascade range in the state of Washington ❖ It is young for a volcano, only about 40,000 years old ❖ Last erupted May 18, 1980, 8:32 am. ❖ Killed 57 people, destroyed 250 homes, 47 bridges, 185 miles of highway
Ngorongoro	<ul style="list-style-type: none"> ❖ Haven for thousands of East African lions, elephants, wildebeests ❖ The crater of an extinct volcano ❖ The area around the crater was occupied by early man 3 million years ago

Crater	
Panama Canal	<ul style="list-style-type: none"> ❖ Manmade passage across Panama that connects Pacific and Atlantic Oceans ❖ Started by the French and finished by the Americans ❖ One of the largest and most difficult engineering projects ever undertaken
Red Sea	<ul style="list-style-type: none"> ❖ Created from the movement of tectonic plates over 3 million years ago ❖ One of the most saline bodies of water in the world ❖ More than 1100 species of fish live here—10% of them found nowhere else
Ross Ice Shelf	<ul style="list-style-type: none"> ❖ about the size of France with 90% of the ice below water's surface ❖ twice the size of Delaware and largest ice shelf in Antarctica, ❖ James Clark Ross discovered it in 1841 ❖ Ice Shelves are permanent floating ice sheets attached to land, fed by glaciers ❖ It has disintegrated and reappeared many times
San Andreas Fault	<ul style="list-style-type: none"> ❖ land along the fault moves about 2 in. a year, about as fast as fingernails grow ❖ Extends 800 miles along the length of California, from Salton Sea to San Francisco ❖ Renowned as the future 'Big One'—the earthquake that will tear California apart
Siberia	<ul style="list-style-type: none"> ❖ Takes up 77% of Russia's land and only 30% of its population ❖ The vast region covering almost all of northern Asia, now under Russian control ❖ Soviet Union (no longer a nation) operated labor camps here for millions of political refugees, making 'Siberia' synonymous with exile and punishment
Stonehenge	<ul style="list-style-type: none"> ❖ Blocks weighed as much as 4 tons and moved as far as 240 miles ❖ Built around 2500 b.c. ❖ Not actually a henge—based on construction
Straits of Gibraltar	<ul style="list-style-type: none"> ❖ 22 miles wide ❖ Separates Spain from Morocco ❖ Closed by geologic forces about 6 million years ago and reopened a million years later
Suez Canal	<ul style="list-style-type: none"> ❖ Canal is 26 feet deep ❖ Opened in November, 1869 ❖ Owned by an Egyptian company
Taj Mahal	<ul style="list-style-type: none"> ❖ 5th of the Seven Wonders of the World ❖ Built by the Muslim Emperor Shah Jahan in memory of his wife ❖ Took 22 years to build
Tierra del Fuego	<ul style="list-style-type: none"> ❖ Tierra del Fuego is Spanish for "Land of Fire" ❖ Archipelago along southern tip of South America, contiguous to Straits of Magellan ❖ Main island of the archipelago is also called Tierra del Fuego
Victoria Falls	<ul style="list-style-type: none"> ❖ Twice the height of Niagara Falls ❖ Called the "Smoke that Thunders" ❖ Largest curtain of water in the world ❖ 1 mile wide; 360 feet tall

SAMPLE TOUR 'PIN' IN GOOGLE EARTH

Pin Tool

Custom Pin

Fact that will show up on tour

File folder created under 'My Places'

Google Earth - New Placemark

Name: Taj Mahal

Latitude: 27°10'33.51"N

Longitude: 76° 2'34.44"E

Description: In 1983, the Taj Mahal became a UNESCO World Heritage Site

OK Cancel