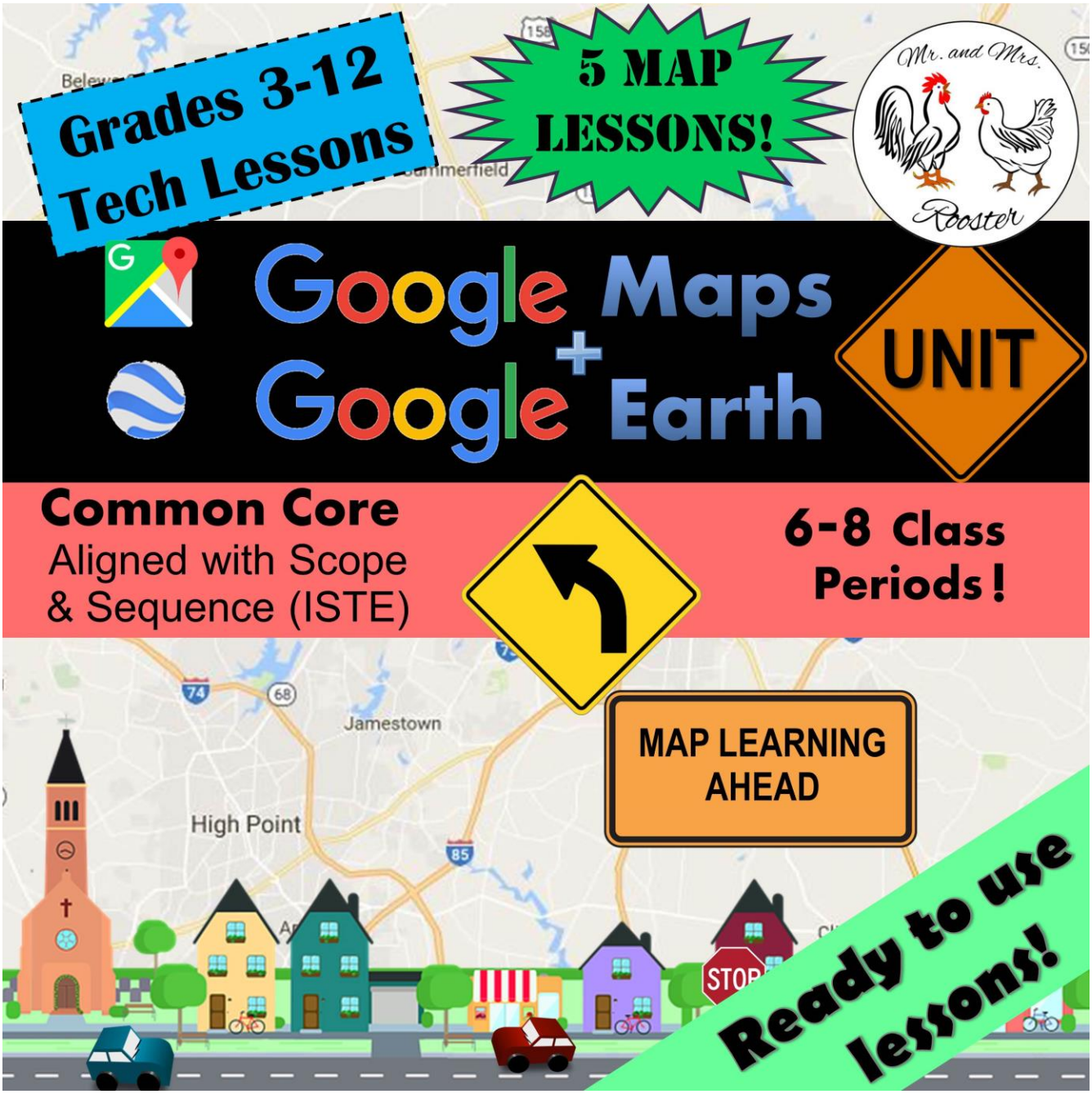


Google Maps & Google Earth Unit

All about Google Maps and Google Earth!

Suggested Grade Level

Day 1: Google Maps Introduction (Freebie) 3 4 5 6 7 8 9 10 11 12

-Google Maps Video
-Basic Search
-Map & Earth View
-Street View
-Time Machine
-Address Hunt
-Geo Guesser
-Google Earth (Light Version)
-Google Street Car
-**Teacher Pages**

Day 2: Google My Maps 5 6 7 8 9 10

-Video Introduction
-Create 5 stops for a personalized trip

Day 3: GPS Buddy (Tech Lesson Included!) 3 4 5 6 7 8 9 10 11 12

-Drive on Google Maps!
-QR-Code Driving Directions & Bitly Links
-Build awareness of school location
-Fun in any Geography lesson

Day 4: Google Earth 4 5 6 7 8 9 10 11 12

-Device Requirements
-RAM Mini-Terminology Lesson
-Google Earth Version Comparison & Review
-Google Earth Desktop Version
-Google Ocean View
-Google Space: Moon, Mars, Sky, Etc.
-Google Earth Historical Timeline
-Google Earth Sunlight

Day 5: Google Maps Free Day! 3 4 5 6 7 8 9 10 11 12

-Students re-explore using Google Maps, Earth,
GPS Buddy Lesson, or Drive on Google Maps
-Google Earth Flight Mode
-Games: MapsTD, Geo Guesser,
Instant Street View

Extension Activity - Pegman 3 4 5 6 7 8 9 10 11 12

-Printable Activity (No Internet Needed)
-Four Question Handout about Pegman
-Drawing Activity: Create your own Pegman outfit!
-Pegman sample outfits

Google Maps (Mini) Assessment 4 5 6 7 8 9 10 11 12

Google Maps & Google Earth Unit

Elementary – High School Computer/Technology Lessons
Length: 6-8 Class Periods: 45 - 50 Minutes Each
Grades: 3-12

I. Standards:

ISTE Standard 1: Creativity and innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

ISTE.1.a. - Apply existing knowledge to generate new ideas, products, or processes.
ISTE.1.b. - Create original works as a means of personal or group expression.
ISTE.1.c. - Use models and simulations to explore complex systems and issues.

ISTE Standard 4: Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

ISTE.4.b. - Plan and manage activities to develop a solution or complete a project.
ISTE.4.c. - Collect and analyze data to identify solutions and/or make informed decisions.

ISTE Standard 6: Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations.

ISTE.6.a. - Understand and use technology systems.
ISTE.6.d. - Transfer current knowledge to learning of new technologies.

COMMON CORE Standards:

CCSS.ELA-LITERACY.RI.6.7 – Integrate information presented in different formats as well as in words to develop a coherent understanding of a topic or issue.

CCSS.ELA-LITERACY.CCRA.SL.5 – Include multimedia components (e.g. graphics, images, music, sound) and visual displays in presentations to clarify information.

CCSS.Math.Content.HSG.GMD.B.4 – Identify the shapes of two dimensional cross-sections of three dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

**Please note: Google Maps –GPS Buddy lesson plan has its own standards which are too many to include on this page. See full lesson for lesson specific standards.*

Day 1: Google Maps
Copy & Paste this directly into your class website or Google Classroom!

Title: Google Maps

Goal: Learn to navigate using Google Maps with features such as a basic search, map and earth view, street view, time machine, Google Earth, and find addresses.

Directions:
1. Click on the tutorial attachment, "Day 1 Google Maps.PDF" to begin your activity.
2. Stay on task and try every component listed. You may be randomly selected to demonstrate your knowledge of the task.
3. You are allowed to test other features listed, but be sure to complete the tutorial by the end of class or as directed by your teacher.

*NOTE: Step #16 will not allow to you copy the addresses listed.
You may copy the addresses from this post instead:
A. Al Haram, Giza Governorate, Egypt
B. 36°11'51"N 112°03'09"W
C. 2700 N. Cedar Crest Blvd, Allentown, PA 18104

DUE: Today's grade is based on your engagement, staying on task, and exploring the many tools found in this application.

Shortcut links and descriptions for Google Classroom Attachments:

(Be sure to attach the appropriate student tutorial according to the day to your Google Classroom Assignment.)

Picture / File Attachments

Day 1: Google Maps.PDF

Street-View

7. To enter street view, you will need to grab the little yellow/orange figure from the mini-map found at the right-bottom of your screen and drag it onto a road that highlights in blue. Alternatively, some streets allow you to zoom in directly into street view mode.

If a road does not appear where you wish, unfortunately Google has not driven down the road with their street-view car, which means the road is unavailable from that perspective.

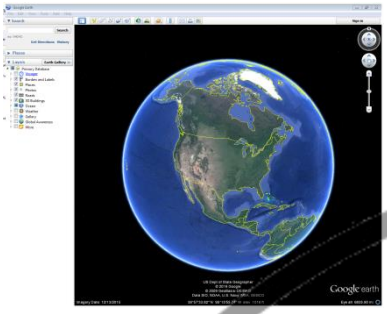
8. Once in Street-View, you will be immersed into a First-Person Perspective from the road you selected. You can "drive" down the road by clicking the arrows in one of the directions found on the center of the road.

The mounted soccer ball-looking object has cameras behind each black lens that snaps pictures really fast while driving down the road.

Look for this car's shadow while exploring street view!

https://www.google.com/streetview/images/understand/device-car.jpg

Day 4: Google Earth (Desktop Version)

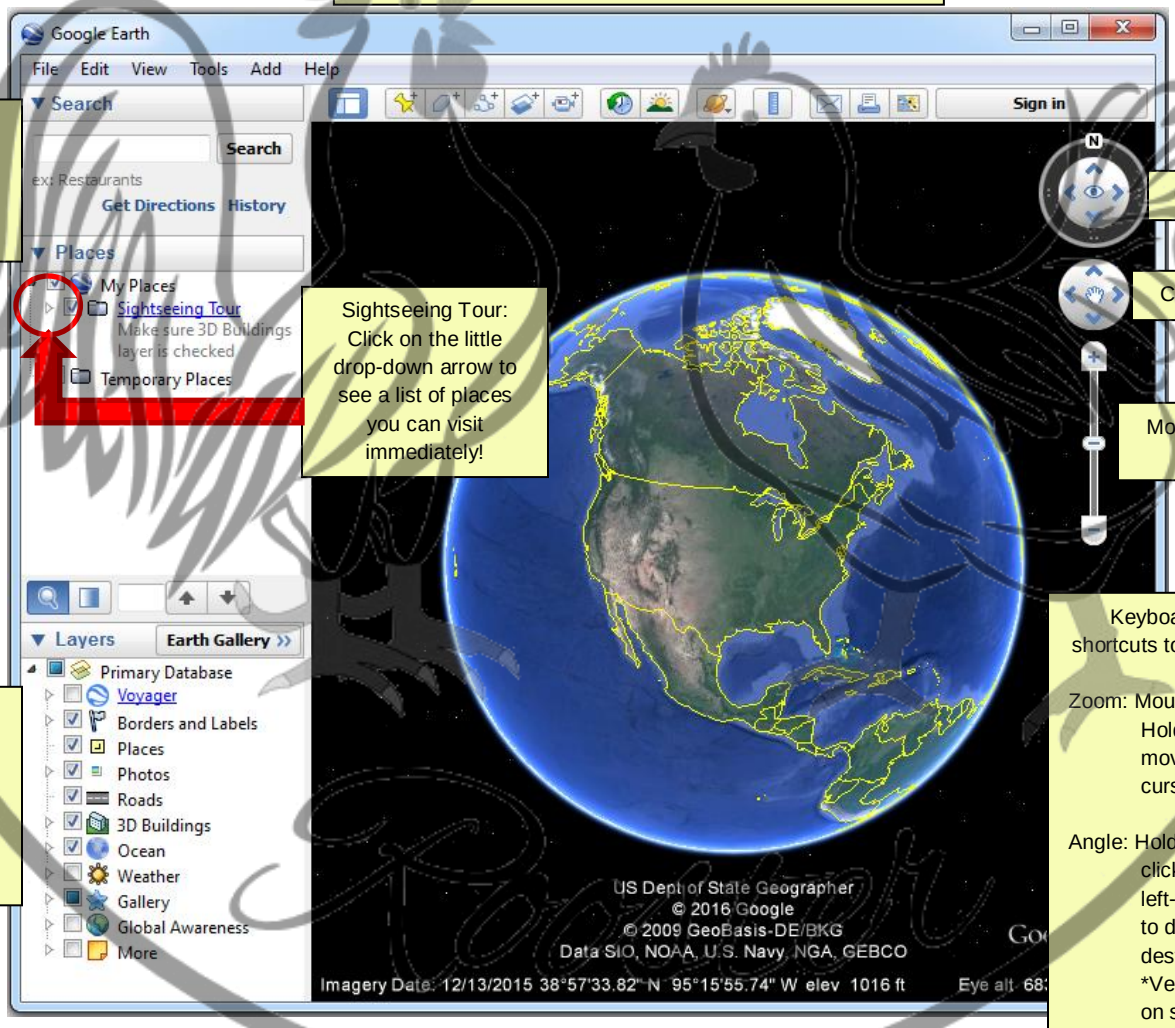


Suggested Grade Levels: 4-12

Google Earth offers a world of possibilities! With fun and easy features, you can explore the world without the cost of an airplane ticket. Take a look below at some of the basic features that will help you start navigating this great world we live in!

As you will notice, Google Earth will look very similar to the Google Maps 'Earth view'. This is because Google began incorporating parts of Google Earth such as the 3D landscapes and buildings into the online version of Google Maps. Google Earth is a downloaded program that should offer a more fluid experience of moving across the landscape because the information has already mostly been downloaded. Take a look below to become familiar with the program interface.

Google Earth Program Layout / Interface



Search:
Type a place of interest either by title, address, or coordinates.

Sightseeing Tour:
Click on the little drop-down arrow to see a list of places you can visit immediately!

Click to look around.

Click to move around.

Move slider to zoom in and out.

Layers:
Earth locations to explore.

Double-click a category to dive into a quick example.

Keyboard / Mouse shortcuts to help navigate:

Zoom: Mouse wheel
Hold right-click and move mouse cursor up or down.

Angle: Hold Ctrl and then click and hold the left-mouse button to desired destination.
*Very helpful when on surface of the earth to simulate flying.

Extension Activity:

1. What name would you give the little yellow and orange figure used in Google Maps?

2. Why is this figure useful in Google Maps? What does it do?

3. What other outfits did you notice on this figure during your exploration?

4. Create your own outfit for this figure. You will need to share where this outfit would be used on Google Maps. Draw and color on top of the picture below.

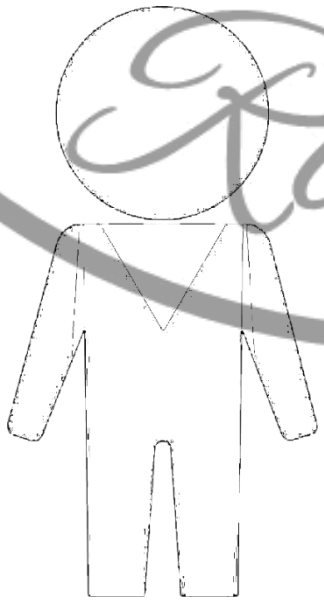


Figure Name _____

Where would it be found?

_____

_____

End of preview.