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- Introduction
- www.21learning.net
- My Book from Corwin Press: Google Apps for Education Meets Common Core
- Harry Dickens' book [Apps for Learning](#)
- www.learninginhand.com Tony Vincent
- iPad Basics
 - Screen shots- Press both the Home Button and Sleep Wake Button at the same time to take a picture of the screen.
 - Photos then go to Camera Roll or Photos
 - Zoom and retake
 - Swipe left to search
 - Pinch to zoom
 - Pull down notifications menu in iOS 5
 - Split keyboard
- Google Application
 - This App has maps embedded and ties nicely to your Google Account



(this is what it looks like in the App Store)

Includes many features:

- Gmail
- Calendar
- Docs
- News
- Google +
- Photos

This application is great for users of Google Apps for Education. If your school uses Google for its mail then you have access to a host of FREE applications that students and teachers can use to create, collaborate and share.



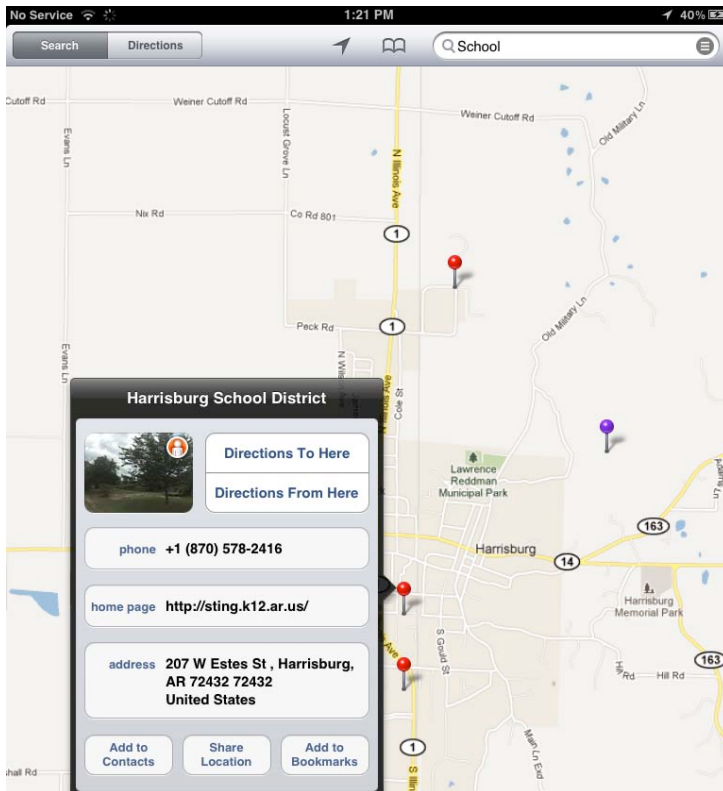
- Google Maps Application
 - Search v. Directions

Search lets the user search out a specific location. When searching a place by name or zip it will show only that location. Directions lets the user obtain directions to and from the location with turn by turn capabilities. Get directions by car, bus, or walk.

- Current Location- is the compass arrow pointing northeast. Press this to find your exact GPS location.
- Contacts (the open book)- This allows the user to search for addresses of your contacts.
- Search for anything in the search bar not just places
- Results (past results from recent searches)- Inside the search bar is a list of recent searches. Click to see recent history.
- Pin- Red Pins are searched locations and possible hits to that information. Purple Pins are pins that the user has dropped.



In this screen shot a search for “school” around my current location, resulted in two pins being dropped. Touch a pin to reveal Peg Man and the *i*. Press the *i* to reveal information about the location including phone, website and address.



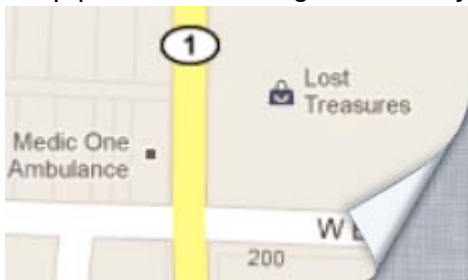
To drop a pin press and hold on the location you want to view. If that location registers with Google's records then it will show all the information it knows when the user presses the *i*. Click directly on the web address to open Safari automatically.

Peg Man is a gateway to Google's Street View. Press Peg Man to reveal street level imagery about the location you are searching.

If Peg Man is darkened, then Google has not taken a picture of that location.

To exit street view just click the round map in the bottom right hand corner.

Drop pin to access Peg Man on any map, anywhere in the world.



- Flip Page
 - Standard
 - Satellite
 - Hybrid
 - Terrain—Good for social studies, shows topography
 - Traffic—Google can monitor traffic by 3G enabled devices
- Dropped pins allow you to share location, add to contacts, and add to bookmarks
- Search
 - Search for anything
 - Suggested examples:

- Zip code
- Tacos
- Parks

Directions

- Current location
 - Get directions by car, public transportation, or walking to anywhere in the world.
 - Use directions to get the mileage and time in which to travel.
- Street View
 - See screen shots
 - Click on Peg Man to activate street view. Also drop a pin anywhere to activate street view. Click on the circle in the bottom right hand corner to deactivate street view.
- Use Pegman to view interesting things in the places you visit. Search Rome and see the coliseum.
- Drive by your house or school.
- Iraq Museum
- Detroit Zoo
- Universities
- Rome

iTravel: Virtual Field Trips with Google Maps App

In this lesson students will use the Google Maps Application to create a virtual vacation of their choice.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Use the mathematical practices to guide the students thinking and work.

Driving questions:

1. What are the steps involved in planning a vacation?
2. What mathematics do I need to understand to properly plan my trip?

CCSS Math 6th Grade

- a. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
- b. Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?*

- c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

CCSS Math 7th Grade

Analyze proportional relationships and use them to solve real-world and mathematical problems.

- d. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.*
- e. Recognize and represent proportional relationships between quantities.
- f. Use proportional relationships to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.*

CCSS English Language Arts Standards
Production and distribution of Writing

- g. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- h. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- i. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Students:

Plan a trip anywhere in the world that you can get there by driving a vehicle. You have \$3,000 to spend and you need to take into account the number of people you want to go with you, food, gas, and hotel. Assume that the gas cost \$3.50 a gallon. Food will cost you \$50 per day per person. Please be creative as possible and make sure to have fun on your trip, but you must not go over budget. When you get to your location use Google Street View to see interesting things the place has to offer. Take note of what you learn as you tour the location.

Additional Information that will help you plan your trip:

--A SUV can hold up to 7 people with luggage and average 15 miles to the gallon.

--A car gets 30 miles to the gallon and can hold 4 people with luggage.

Use the Google Maps Application to plan your trip and use Expedia.com or hotels.com to find your cost of lodging per night and use Google to find fun activities and their estimated prices.

Activities include:

Professional Sports Teams

Museums

Once you get to your location use street view to sight see.

Create a brochure or pamphlet explaining your adventure include:

1. The top sites to see
2. Description of city including population and other notable aspects
3. Detail the expenditures of the trip including a review of the hotel
4. Short narrative describing the adventure.

Students will Share their work with the teacher for grading with the rubric given to you previously.

iTravel Vacation

Students:

Plan a trip anywhere in the world that you can get there by driving a vehicle. You have \$3,000 to spend and you need to take into account the number of people you want to go with you, food, gas, and hotel. Assume that the gas cost \$3.50 a gallon. Food will cost you \$50 per day per person. Please be creative as possible and make sure to have fun on your trip, but you must not go over budget. When you get to your location use Google Street View to see interesting things the place has to offer. Take note of what you learn as you tour the location.

Additional Information that will help you plan your trip:

- A SUV can hold up to 7 people with luggage and average 15 miles to the gallon.
- A car gets 30 miles to the gallon and can hold 4 people with luggage.

- Use Google Maps to plan your trip including finding miles driven and routes
- Use Expedia.com or hotels.com to find your cost of lodging per night
- Use Google Search to find fun activities and their estimated prices.
 - Use official websites such as the city's chamber of commerce website or other websites that are official. **(Ask teacher for help determining this)**

Activities include:

- Professional Sports Teams
 - Museums
 - Theme Parks
 - Beaches
 - Water Parks
 - Tours (example Grand Canyon tour)
- Once you get to your location use Google Street View to sight see.
 - Create a brochure or pamphlet using the Google Document that the teacher has shared with you as a template explaining your adventure.
1. The top sites to see
 2. Description of city including population and other notable aspects
 3. Detail the expenditures of the trip including a review of the hotel
 4. Descriptive narrative describing the adventure.

Students will Share their work via Google Documents with the teacher for grading with the rubric given previously.

Teacher Preparation:

1. Share student documents with each class period in Google Groups.
2. Instruct the students to login to their Google Apps for Education Account.
 - a. Find the document titled iTravel Adventure
 - b. Find the document titled Expenditure Report
 - c. Find the document titled Brochure
3. Instruct students to read the documents and fill them out appropriately then share the project with the teacher for grading.
4. Prior understanding of Google Maps, Google Docs and Street View are suggested.

Driving questions:

1. What are the steps involved in planning a vacation?
2. What mathematics do I need to understand to properly plan my trip?

CCSS Math 6th Grade

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2. Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?*

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Production and distribution of Writing

- a. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- a. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- a. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Expenditure Report

In this space the students will create their own expenditure report with guidance from teacher. The goal is to have the students explore different tools that will help them organize their information in a legible report.

Brochure

Use this space to create a brochure that will serve as the writing portion of their document. Students need to use the collaborative tools of Google Apps to create their own templates and other ways to achieve the goals of the lesson. Cookie cutter brochures will not score as high as creative ways to display the required information.

