

# *Digging in with Google:*

*Search Tips & Strategies for Researchers*



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**1. What kind of trees are these?**

(No guessing. You should be able to figure this out definitively.)

**2. When I took this picture, I could hear a bell ringing in the distance. Why was the bell ringing?**

(Hint: It wasn't from someone's house.)

# Most pictures have metadata

- Download EXIF data (lat, long):  
37.36480833333333, -122.1466108333333

## Exif Metadata:

Contrast: 0  
LightSource: 9  
Flash: 0  
ImageUniqueID: OAELO1  
ExposureMode: 0  
CompressedBitsPerPixel: 0.0  
FNumber: 2.75  
Saturation: 0  
PixelYDimension: 1,944  
Sharpness: 0  
ApertureValue: 2.75  
ExposureBiasValue: 0.0  
MeteringMode: 4  
ShutterSpeedValue: 10.455  
SceneCaptureType: 0  
MaxApertureValue: 2.75  
FlashEnergy: 0.0  
CustomRendered: 1  
ExposureIndex: 0.0  
FocalLength: 3.43  
SubjectDistRange: 0  
DateTimeOriginal: 2013:04:04 16:35:18  
SceneType: 1  
ColorSpace: 1  
PixelXDimension: 2,592  
SensingMethod: 2  
DigitalZoomRatio: 1  
BrightnessValue: 0.0  
DateTimeDigitized: 2013:04:04 16:35:18  
WhiteBalance: 0  
SubjectDistance: 0.0  
ExposureTime: 0.00071  
ExposureProgram: 3

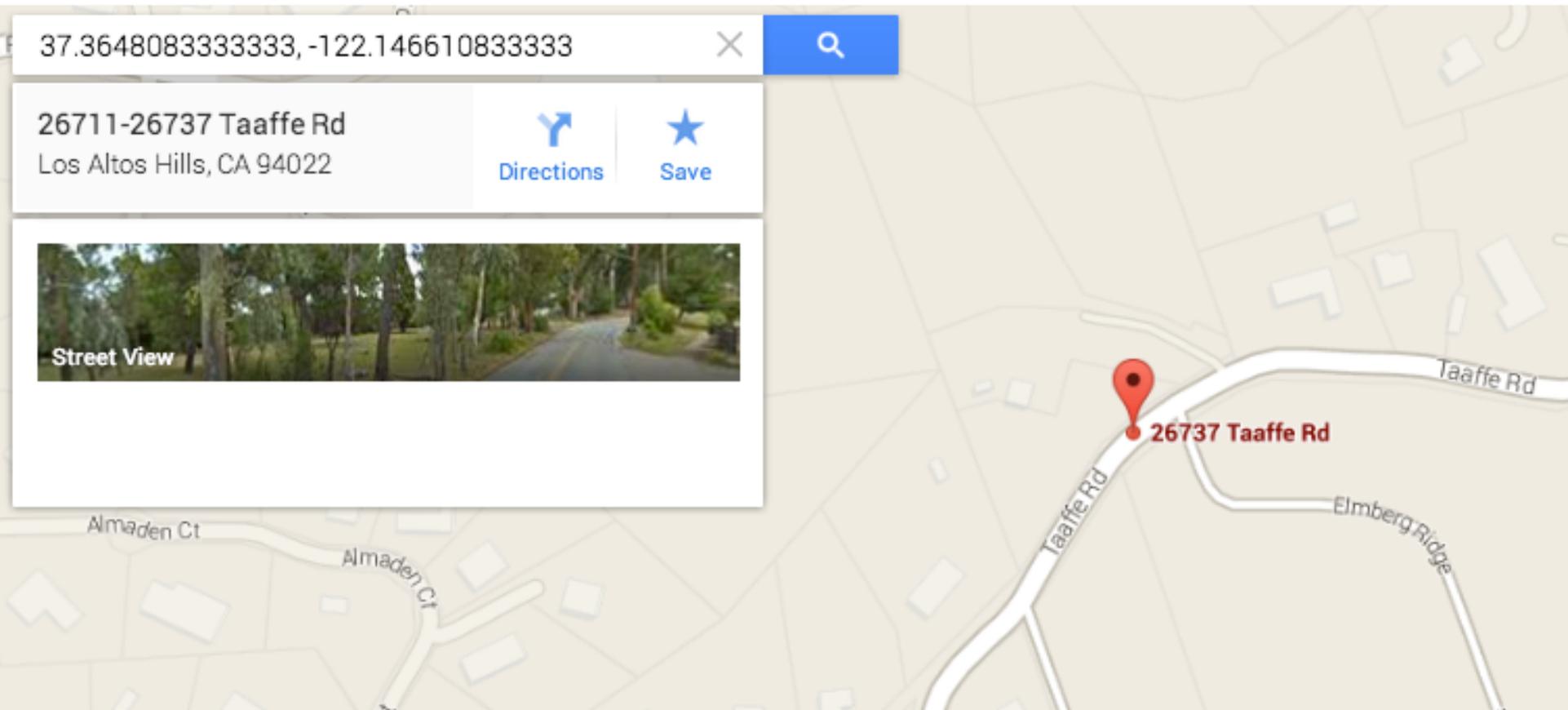
## GPS Metadata:

Latitude: 37.36480833333333  
AltitudeRef: 0  
DateStamp: 2013:04:04  
Altitude: 139  
Longitude: 122.1466108333333



# Streetview to reproduce image

- Go to Google Streetview and put in lat/long:



# *Click through to Streetview...*

26726 Taaffe Road, Los Altos Hills, United States  
Address is approximate





26726 Taaffe Road, Los Altos Hills, United States  
Address is approximate



***Rotate your point-of-view to see street sign; Zoom in.***



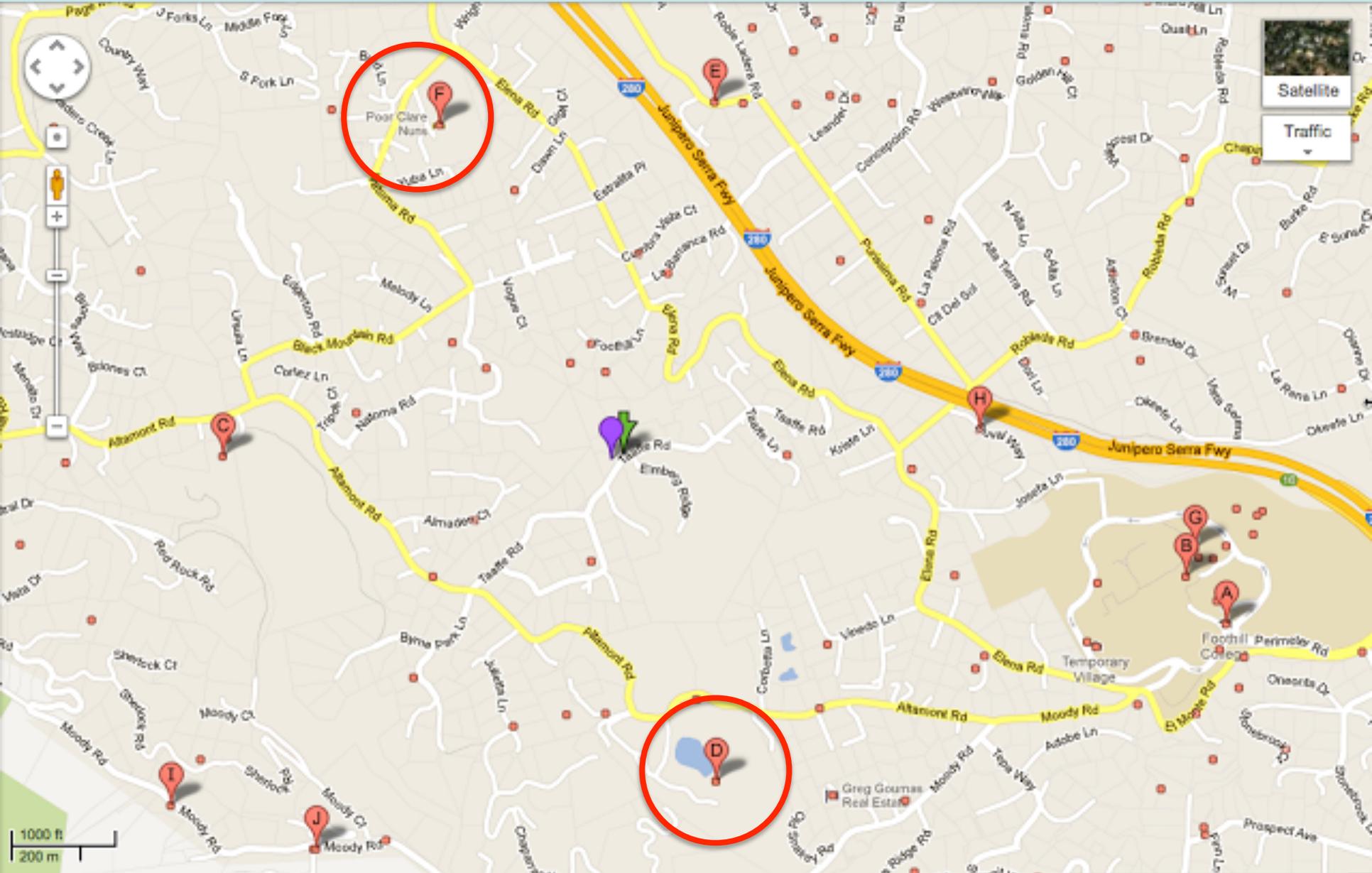
***Do the obvious search:***

[ **Taaffe House Los Altos Hills** ]

[ **Taaffe House William Packard** ]

[ **\*** ]

# Look for all likely bell sources...



# *Either a church (too far away) or a monastery nearby*

EXIF data shows picture time:  
2013:04:04 16:35:18  
April 4, 2013 at 4:35PM



[ **Poor Clare's Los Alto Hills bells** ]

→ <http://poorclares.wordpress.com/a-day-in-the-monastery/>

## **Now you know:**

- what kind of trees...
- why the bell...
- who lived there...

## **Examples / Tactics / Strategies / Gotchas**

**define:**

**filetype:**

**site:**

**Control-F**

**antireading**

**Search-by-image...**

## **8 Lessons in what expert searchers know**

## 8 Lessons

1. Know what's possible to ask
2. Use more than 1 resource
3. Understand language
4. Understand concepts of genre & media
5. Know capabilities of tools
6. Know the structure of information
7. Able to search for tools
8. Know how to use different media types

## ***Basics: Control-F to find a word on the page***

- **Does the California Vehicle Code regulate the use of “pocket bikes” on roads?**

**[ California Vehicle Code ]**

# It'll look like this...

- It's 65 pages long
- Is the phrase **“pocket bike”** used here?

www.leginfo.ca.gov/cgi-bin/displaycode?section=veh&group=00

Wordnik gDefine (Spanish) Dan's FB page GoogleWebSearchE... Palo Alto City Librar...

## VEHICLE CODE SECTION 100-680

100. Unless the provision or context otherwise requires, these definitions shall govern the construction of this code.

102. "Ability to respond in damages" means financial responsibility.

105. An "agricultural water-well boring rig" is a motor vehicle which is used exclusively in the boring of water-wells on agricultural property.

108. "Airbrakes" means a brake system using compressed air either for actuating the service brakes at the wheels of the vehicle or as a source of power for controlling or applying service brakes which are actuated through hydraulic or other intermediate means.

109. "Alcoholic beverage" includes any liquid or solid material intended to be ingested by a person which contains ethanol, also known as ethyl alcohol, drinking alcohol, or alcohol, including, but not limited to, alcoholic beverages as defined in Section 23004 of the Business and Professions Code, intoxicating liquor, malt beverage, beer, wine, spirits, liqueur, whiskey, rum, vodka, cordials, gin, and brandy, and any mixture containing one or more alcoholic beverages. Alcoholic beverage includes a mixture of one or more alcoholic beverages whether found or ingested separately or as a mixture.

For purposes of the Driver License Compact, "intoxicating liquor" as used in Section 15023 has the same meaning as "alcoholic beverage" as used in this code.

110. "Alley" is any highway having a roadway not exceeding 25 feet in width which is primarily used for access to the rear or side entrances of abutting property; provided, that the City and County of San Francisco may designate by ordinance or resolution as an "alley"

470. "Person" includes a natural per:  
association, limited liability compan

pocket bike 1 of 2

471. A "pickup truck" is a motor truck with a manufacturer's gross vehicle weight rating of less than 11,500 pounds, an unladen weight of less than 8,001 pounds, and which is equipped with an open box-type bed not exceeding 9 feet in length. "Pickup truck" does not include a motor vehicle otherwise meeting the above definition, that is equipped with a bed-mounted storage compartment unit commonly called a "utility body."

472. A "pilot car" is a motor vehicle, except a motorcycle, motorized bicycle, or motorized quadricycle, which is used to escort one or more other vehicles, when required, due to the vehicles' size or character of load, in accordance with conditions set forth in a permit issued by the appropriate state agency or by a local authority.

473. (a) A "pocket bike" is a two-wheeled motorized device that has a seat or saddle for the use of the rider, and that is not designed or manufactured for highway use. "Pocket bike" does not include an off-highway motorcycle, as defined in Section 436.

(b) For purposes of this section, a vehicle is designed for highway use if it meets the applicable Federal Motor Vehicle Safety Standards, as contained in Title 49 of the Code of Federal Regulations, and is equipped in accordance with the requirements of this code.

***Control-F aka CMD-F aka Edit>Find***



# Control-F



sale 1 of 59

260. (a) A "commercial vehicle" is a required to be registered under this code used or maintained for the transportation of persons for hire, compensation, or profit or designed, used, or maintained primarily for the transportation of property.  
(b) Passenger vehicles and house cars that are not used for the transportation of persons for hire, compensation, or profit are not commercial vehicles. This subdivision shall not apply to Chapter 4 (commencing with Section 6700) of Division 3.  
(c) Any vanpool vehicle is not a commercial vehicle.  
(d) The definition of a commercial vehicle in this section does not apply to Chapter 7 (commencing with Section 15200) of Division 6.

265. The "commissioner" is the Commissioner of the California Highway Patrol.

266. A "consignment" is an arrangement under which a dealer agrees to accept possession of a vehicle of a type required to be registered under this code from an owner for the purpose of selling the vehicle and to pay the owner or the owner's designee from the proceeds of the sale.

267. A "converter" is a person, other than a vehicle manufacturer, who, prior to the retail sale of a new vehicle, does any of the following to the vehicle:  
(a) Assembles, installs, or affixes a body, cab, or special equipment to the vehicle chassis.  
(b) Substantially adds to, subtracts from, or modifies the vehicle, if it is a previously assembled or manufactured new vehicle.

270. "County" includes every county and city and county within this State.

273. A "crib sheet" or "cribbing device" is any paper or device designed for cheating by supplying examination answers without questions to an applicant for the purpose of fraudulently qualifying the applicant for any class of driver's license, permit, or certificate.



**NOTE!**

# *Key lesson 1*

**Expert searchers know  
what's possible to ask.**

## \* *Finding and using other resources*

Someone told me that in the mid-1800's, people often would carry around a special kind of notebook. They would use the notebook to write down quotations that they heard, or copy passages from books they'd read. The notebook was an important part of their education, and it had a particular name.

**Question:** What was this kind of notebook called?

# Answer

- This is a really hard question. The best way to answer it is to first look for a reverse dictionary.

**[ reverse dictionary ]**

- Then, go to the reverse dictionary

<http://www.onelook.com/reverse-dictionary.shtml>

... and type in the words  
**[ notebook quotations ]**  
 then look thru the list of  
 words it shows you.

- **Answer:** “commonplace book”



OneLook®  
 Dictionary Search

[<< Return to the reverse dictionary page](#)

Describe concept here:

**Words and phrases matching your pattern:**  
 (We're restricting the list to terms we think are related to **note**)

1. <a href="#">commonplace book</a>	26. <a href="#">notebook computer</a>
2. <a href="#">jotter</a>	27. <a href="#">bus spotting</a>
3. <a href="#">playbook</a>	28. <a href="#">book</a>
4. <a href="#">cahier</a>	29. <a href="#">pcmcia</a>
5. <a href="#">loose-leaf</a>	30. <a href="#">mobile computer</a>
6. <a href="#">notebook entry</a>	31. <a href="#">lithium ion battery</a>
7. <a href="#">planner</a>	32. <a href="#">personal</a>
8. <a href="#">scratch</a>	

Google™  
Earth





Opened floodgate in Morganza spillway in Louisiana on May 15, 2011 © 2011 Google, GeoEye

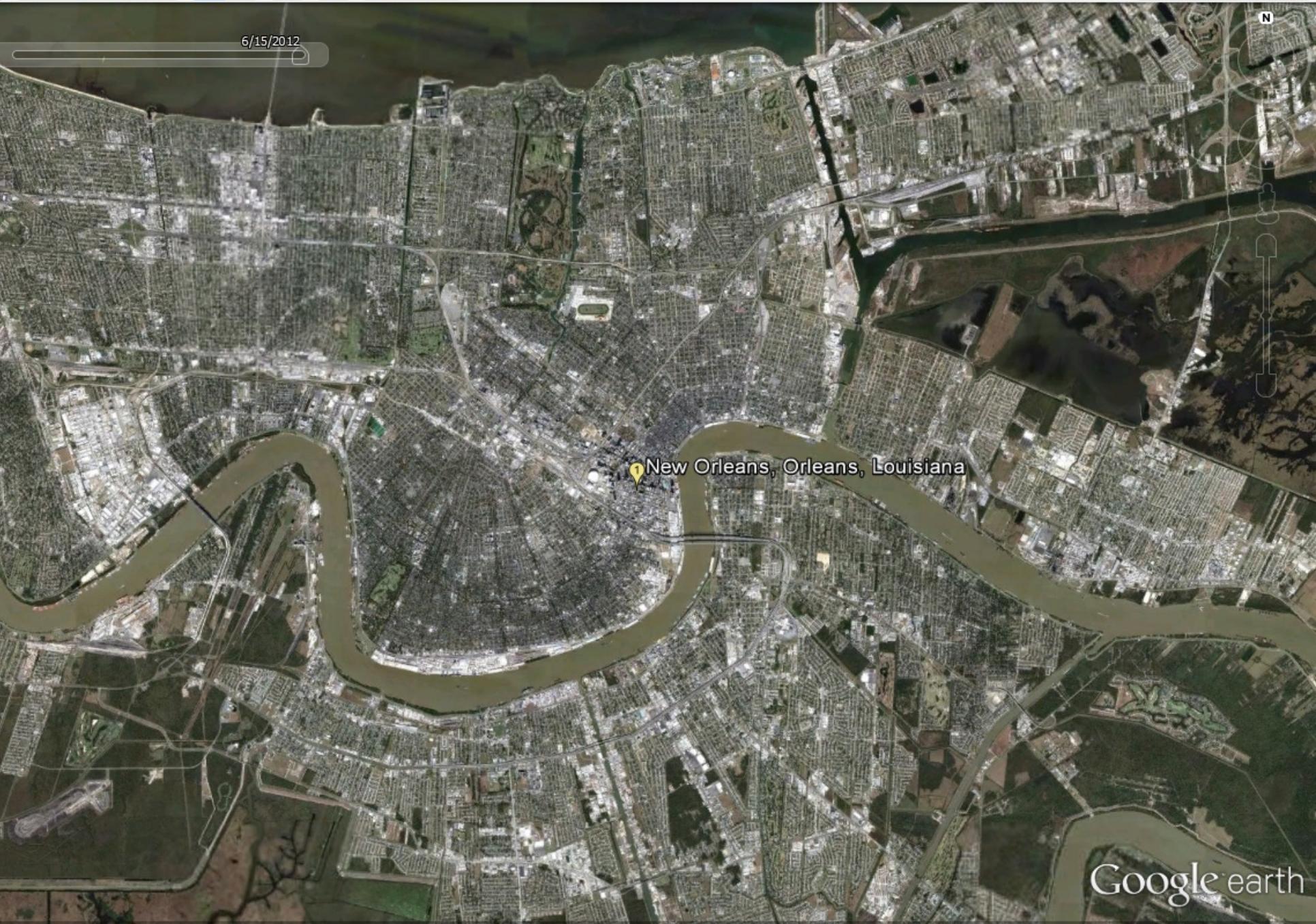


Helena, Arkansas in 2009. © 2011 Google



Helena, Arkansas on May 11, 2011. © 2011 Google,  
GeoEye

6/15/2012



New Orleans, Orleans, Louisiana

Google earth

2/22/1998



New Orleans, Orleans, Louisiana

Image U.S. Geological Survey

Google earth

7/1950  
 1950 2011

Timeline slider showing the date 7/1950 and a range from 1950 to 2011.

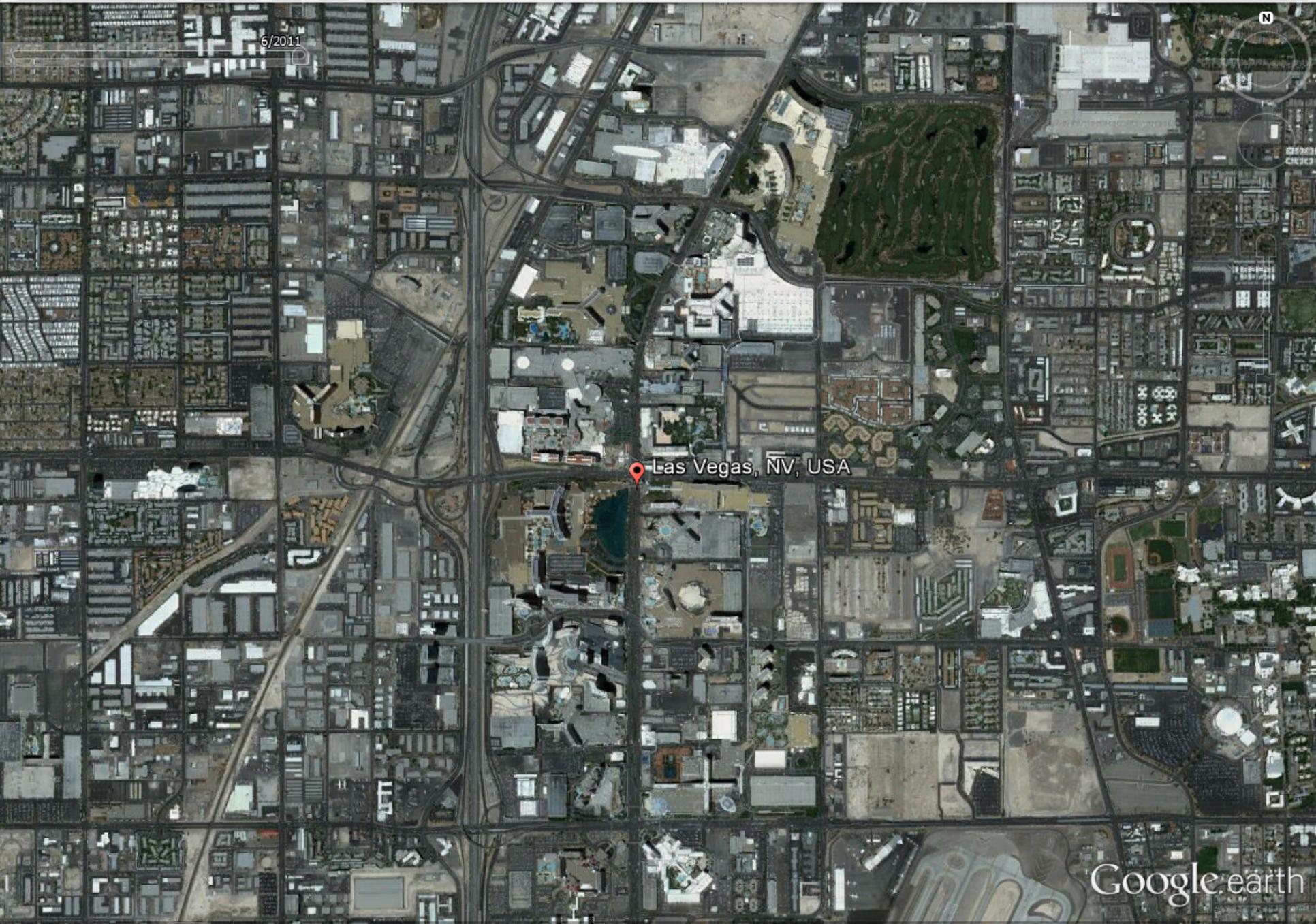
N

Navigation controls including a north arrow, zoom in/out buttons, and a street view pegman.

Las Vegas, NV, USA

Image NASA  
 Image U.S. Geological Survey

Google earth

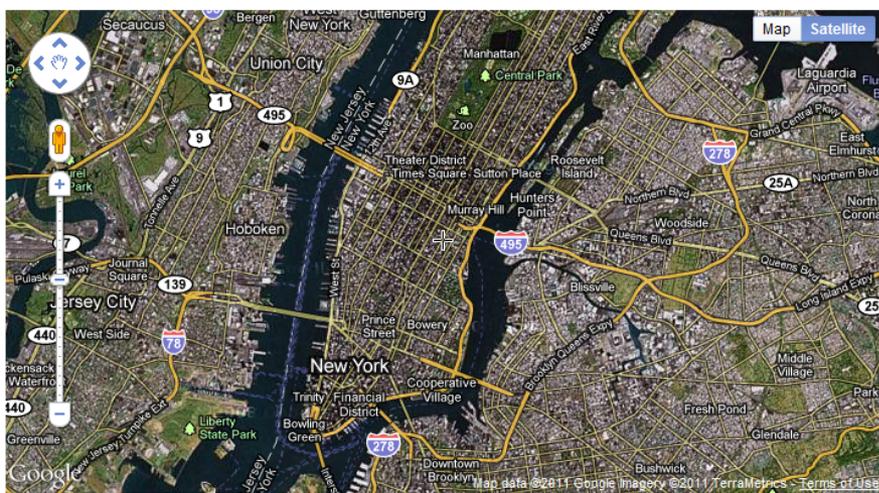


Las Vegas, NV, USA

Google earth



Welcome to Follow Your World (beta). Find out when new imagery is available in both [Google Maps](#) and [Google Earth](#). It's simple. Search for your location, mark the point, and submit. Each time we update the satellite and aerial imagery in your area of interest, we'll notify you.



**Step 1. Find a location**

Search Location

Search for an address or latitude/longitude.

**Step 2. Drag the map to center the cross-hairs on the exact point you would like to mark. Click **Select Point** to generate the correct latitude and longitude.**

Select Point

**Step 3. Enter a location or edit the name to track this point in your dashboard. Click **Submit** when all the info below is correct.**

Latitude:

Longitude:

Location Name:

Email address:

Submit

# Search / Visualize Public Data

The screenshot shows a Google search for "unemployment rate texas". The search results include a line chart and a summary card for Texas.

**6.4% (Apr 2013)**  
Texas, Unemployment rate

The line chart displays the unemployment rate for Texas, California, and Florida from 2006 to 2013. The Y-axis represents the unemployment rate percentage, ranging from 0 to 15. The X-axis represents the year, with labels for 2006, 2008, 2010, and 2012. The legend indicates the following rates:

- California: 9.0%
- Florida: 7.2%
- Texas: 6.4%

**Texas**  
US State

Texas is the second most populous and the second-largest of the 50 states in the United States of America, and the largest state in the 48 contiguous United States. [Wikipedia](#)

**Unemployment rate elsewhere**

<a href="#">New York</a>	7.8% (Apr 2013)	
<a href="#">United States of America</a>	7.5% (Apr 2013)	
<a href="#">Massachusetts</a>	6.4% (Apr 2013)	

Sources include: U.S. Bureau of Labor Statistics

[Local Area Unemployment Statistics Home Page](#)  
[www.bls.gov/lau/](http://www.bls.gov/lau/)

Sources include: U.S. Bureau of Labor Statistics

[Feedback / More info](#)

# Search, Visualize, and Upload datasets



Search public data or change visualization



dmrussell@gmail.com



+ Share



## Public Data

- Unemployment in the U.S.
  - Employment
  - Labor force
  - Unemployment
  - Unemployment rate**

Clear

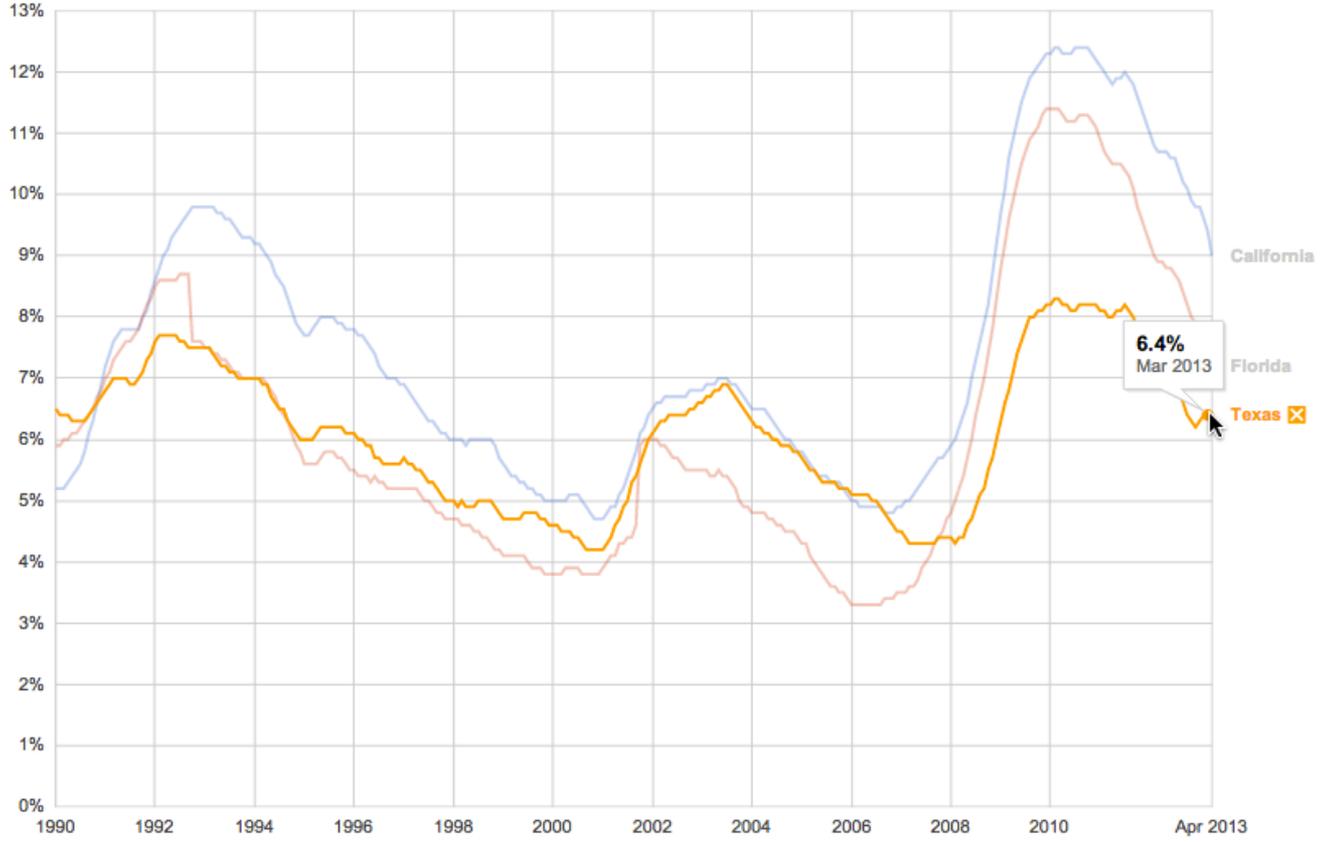
Compare by Country

- United States
  - Alabama
  - Alaska
  - Arizona
  - Arkansas
  - California**
  - Colorado
  - Connecticut
  - Delaware
  - District of Columbia
  - Florida**
  - Georgia
  - Hawaii
  - Idaho
  - Illinois
  - Indiana
  - Iowa
  - Kansas
  - Kentucky
  - Louisiana

Clear selections

- Age
- Seasonality** Seasonally Adjusted
- Sex

## Unemployment rate - Seasonally Adjusted



Data from U.S. Bureau of Labor Statistics Last updated: Jun 7, 2013

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<http://www.google.com/publicdata/>

# *Key lesson 1*

## **Expert searchers what's possible to ask.**

- *Google Earth*
- *Public Data Explorer*
- *Medline*
- *Reverse Dictionary*
- *...*

## *Key lesson 2*

**Expert searchers use  
more than one resource.**

# Using more than one resource...

- Nearby there's a very famous statue that's clad with an exterior of **steatite** that's placed in very, very prominent location. His right hand points to the strip of sand I was on; a world-famous beach that's famed in song and story. **What beach am I on?**



# *Using more than one resource*

1. **[ define steatite ]** → soapstone
2. **[ statue covered soapstone ]** → "Christ the Redeemer"
3. View "Cristo Redentor" in Google Earth (or Maps) to direction



Cristo Redentor

Google earth

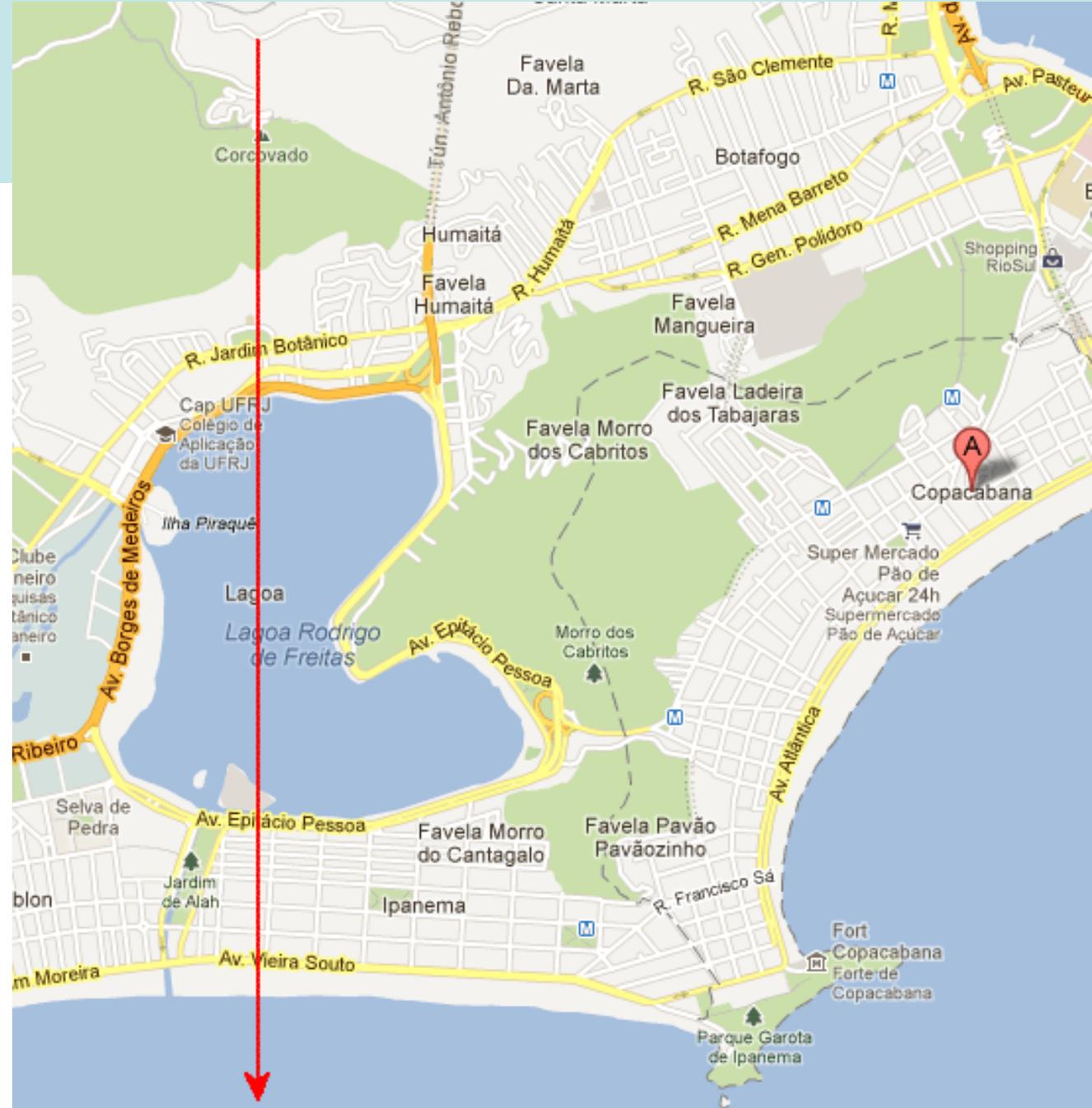
ry Date: 6/24/2009

22°57'06.55" S 43°12'35.73" W elev 2170 ft

Eye alt 2520 ft

# Draw line...

- Right hand points to Ipanema and Copacabana



Avenida Vieira Souto, Rio de Janeiro, Brazil  
Address is approximate



# Ipanema



Mystery Beach Photo

**Streetview:**  
Copacabana



Copacabana, Rio D.J., Brazil

## *Key lesson 2*

**Expert searchers use more than one resource.**

- using multiple resources*
- linking results*

## *Key lesson 3*

**Expert searchers deeply understand their language, especially synonyms.**

# **Skill:** Choosing search terms... Naming the un-namable

While searching for information about plastic surgery, I wanted to know what to call... this....

**Question:** What's this boundary between lip and skin called?



# Answer

- Start with the simplest search you can think of:

**[ boundary between lip and skin ]**

If it's not right, you can always modify it.

- When I did this, I clicked on the first result. There's a nice article there about something called the ***vermilion border***
- Then I double checked on that by doing a **[ define vermilion border ]**

# ***Skill: Use most obvious language***

- What is this thing called?



**Try this query:** [ **bright spot in sky near sun** ]

**Moral #1:** when in doubt, describe the object-of-interest in the way you think others will...

**Moral #2:** the first answer may-or-may-not be what you're looking for... Evaluate the result wrt your search goal.

## ***Skill: Think of synonyms!***

- Sometimes you need to keep trying, thinking your problem through in different ways. Usually, if **you think about how someone else would describe the thing** you're looking for, that will suggest search terms for you.

# *Gotcha: Side-effect of framing in synonyms*

- **Question:** A friend told me that there is an forgotten city in the waters of San Francisco Bay. Is that true?

If it IS true, what was the name of the supposed city?



# Answer

- Yes, it's true... there IS an abandoned city near what is now Fremont. It was called **Drawbridge**.
- The trick here is to think about other ways of describing an “abandoned city”—don't just assume that's the best way to describe it. Try this search:

[ [ghost town san francisco bay](#) ]



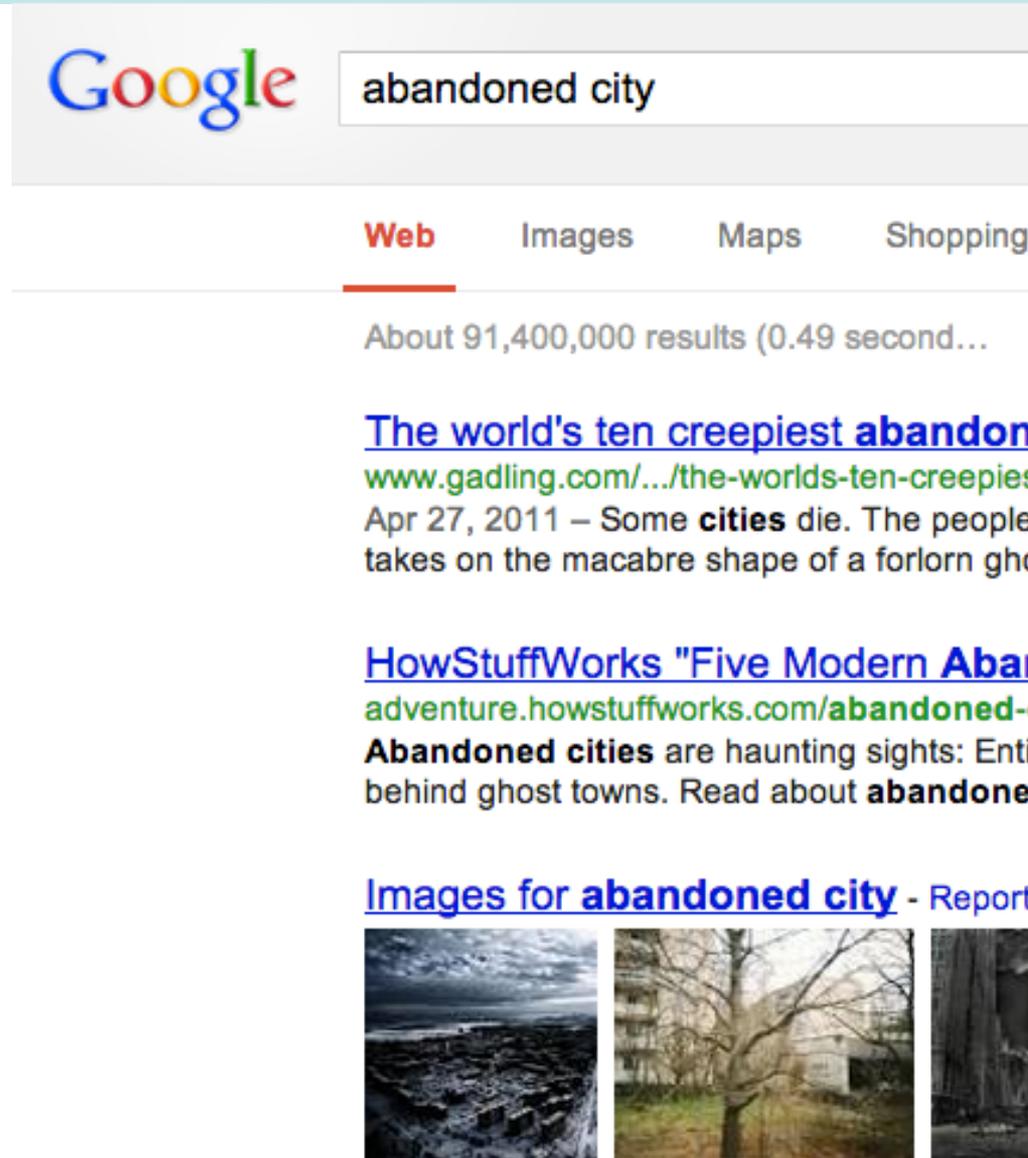
The former town of Drawbridge  
(Story about [ abandoned city ] )

## **Strategy:** *Term choice.. the 3 Elses*

- **When you're failing at a search:**
  - Sit back and figure out how **ELSE** you can say it...
  - How would someone **ELSE** talk about what you seek?
  - It's not about your language, it's about someone **ELSE!**

# Strategy: Another way to syn... related searches

- Or... use the Reverse Dictionary w/ **[ abandoned city ]**
- Or... try **Related Searches**
  - Explore the concepts
  - Look for synonyms
  - Related searches



The screenshot shows a Google search interface. The search bar contains the text "abandoned city". Below the search bar, there are tabs for "Web", "Images", "Maps", and "Shopping". The "Web" tab is selected. The search results show "About 91,400,000 results (0.49 second...)". The first result is a link to "The world's ten creepiest abandoned cities" from www.gadling.com, dated Apr 27, 2011. The second result is a link to "HowStuffWorks 'Five Modern Abandoned Cities'" from adventure.howstuffworks.com. Below the search results, there is a section for "Images for abandoned city" with three small thumbnail images showing abandoned buildings and ruins.



Web

Images

Maps

Shopping

News

More ▾

Search tools

Any time ▾

All results ▾

Knoxville, TN ▾

[The world](#)

[www.gadlin](#)

Apr 27, 201

takes on th

[HowStuff](#)

[adventure.](#)

**Abandone**

behind gho

[Images f](#)



- ✓ All results
- Sites with images
- Related searches
- Visited pages
- Not yet visited
- Dictionary
- Reading level
- Personal
- Nearby
- Translated foreign pages
- Verbatim



[cities | Gadling.com](#)

[andoned-citie...](#)

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wn - crumbling with.

[ned Cities"](#)

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es and their demises.

es





abandoned city



**Web**

Images

Maps

Shopping

News

More ▾

Search tools

Any time ▾

Related searches ▾

Clear

### Related searches for **abandoned city**:

[pripyat](#)

[chernobyl](#)

[san zhi](#)

[centralia](#)

[urban exploration](#)

[pryiat](#)

[ghost town](#)

[pripiat](#)

[hashima island](#)

[gukanjima](#)

[abandoned city russia](#)

[abandoned city ukraine](#)

[abandoned city detroit](#)

[abandoned city usa](#)

[minecraft abandoned city map](#)



### [The world's ten creepiest \*\*abandoned cities\*\* | Gadling.com](#)

[www.gadling.com/.../the-worlds-ten-creepiest-abandoned-city...](#)

Apr 27, 2011 – Some **cities** die. The people leave, the streets go quiet, and the isolation takes on the macabre shape of a forlorn ghost-town - crumbling with.

### [HowStuffWorks "Five Modern \*\*Abandoned Cities\*\*"](#)

[adventure.howstuffworks.com/abandoned-city.htm](#)

**Abandoned cities** are haunting sights: Entire populations uproot, move on and leave behind ghost towns. Read about **abandoned cities** and their demises.

### [Images for \*\*abandoned city\*\* - Report images](#)



## ***Tactic: Think about synonyms within language variants***

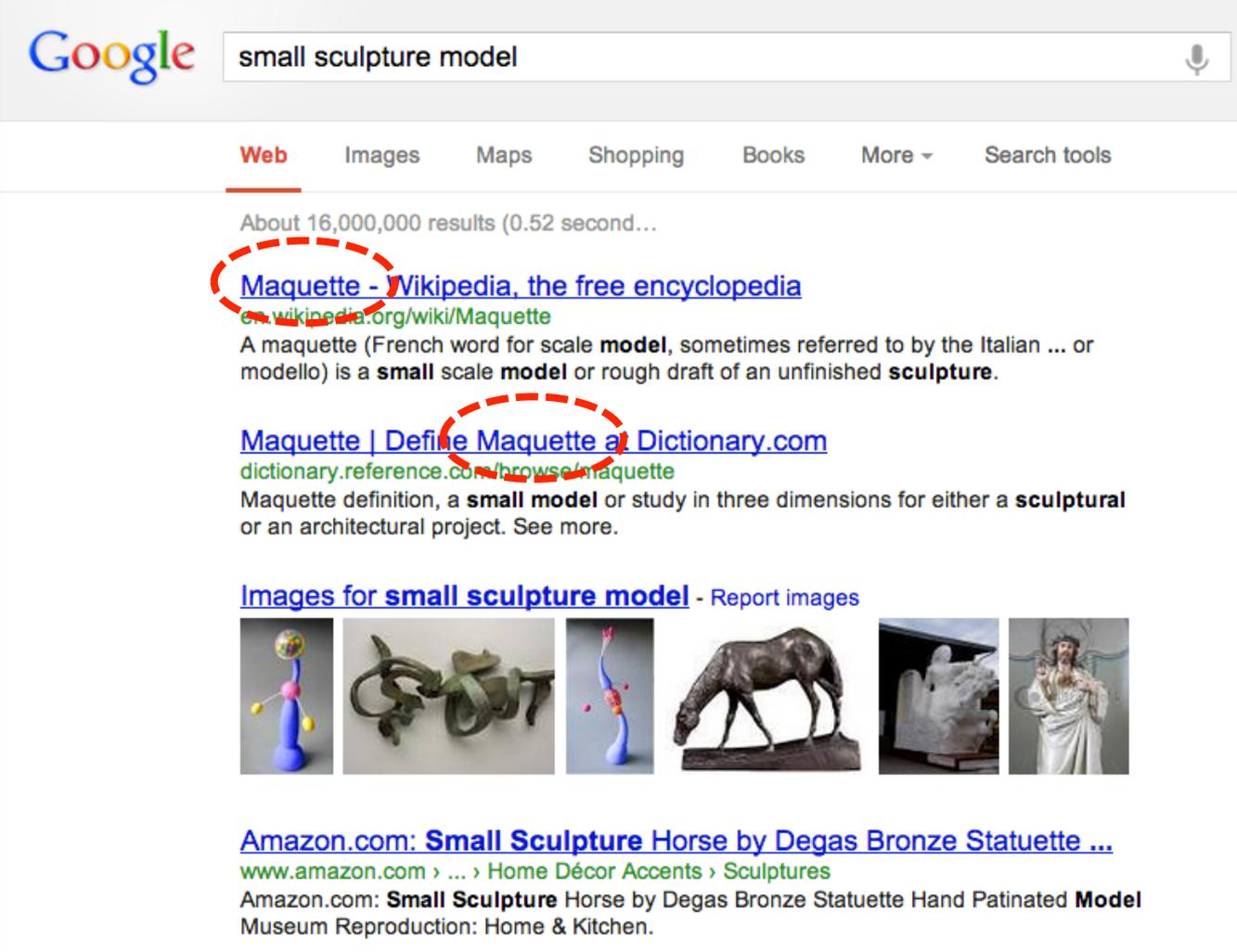
- You know that when you eat pig, the meat is called “pork.”  
When you eat sheep, the meat is called “mutton.”  
When you eat deer, the meat is called “venison.”
- Consider shift in language from place-to-place
  - PIN (property identification number) differs by state
  - creek, run, stream, brook, burn, rivulet...

# ***Consider regional variations:***

- Don't have to tell you about UK vs. US English
  - bonnet = windshield, etc.
- But US regional variations can be impressive:
  - branch, brook, beck, burn, creek, crick, gill (occasionally ghyll), kill, lick, rill, river, syke, bayou, rivulet, streamage, wash, run or runnel.

# Skill: Anti-reading

- **Anti-reading:** Looking for terms you don't know



Google search results for "small sculpture model". The search bar contains the text "small sculpture model". The results show "About 16,000,000 results (0.52 second...)". The first result is "Maquette - Wikipedia, the free encyclopedia" with a URL "en.wikipedia.org/wiki/Maquette". The second result is "Maquette | Define Maquette at Dictionary.com" with a URL "dictionary.reference.com/browse/maquette". Below the text results is a section "Images for small sculpture model - Report images" with a row of six small images: a colorful abstract sculpture, a green abstract sculpture, a blue abstract sculpture, a bronze horse sculpture, a white abstract sculpture, and a white religious sculpture. The bottom result is "Amazon.com: Small Sculpture Horse by Degas Bronze Statuette ..." with a URL "www.amazon.com > ... > Home Décor Accents > Sculptures".

Google search results for "small sculpture model".

Web Images Maps Shopping Books More ▾ Search tools

About 16,000,000 results (0.52 second...)

[Maquette - Wikipedia, the free encyclopedia](#)  
en.wikipedia.org/wiki/Maquette  
A maquette (French word for scale **model**, sometimes referred to by the Italian ... or modello) is a **small scale model** or rough draft of an unfinished **sculpture**.

[Maquette | Define Maquette at Dictionary.com](#)  
dictionary.reference.com/browse/maquette  
Maquette definition, a **small model** or study in three dimensions for either a **sculptural** or an architectural project. See more.

[Images for small sculpture model](#) - Report images



[Amazon.com: Small Sculpture Horse by Degas Bronze Statuette ...](#)  
www.amazon.com > ... > Home Décor Accents > Sculptures  
Amazon.com: **Small Sculpture** Horse by Degas Bronze Statuette Hand Patinated **Model** Museum Reproduction: Home & Kitchen.

# Skill: SERP Reading...



palo alto recycle milk cartons 

**Web** Images Maps Shopping More ▾ Search tools

About 487,000 results (0.51 second...)

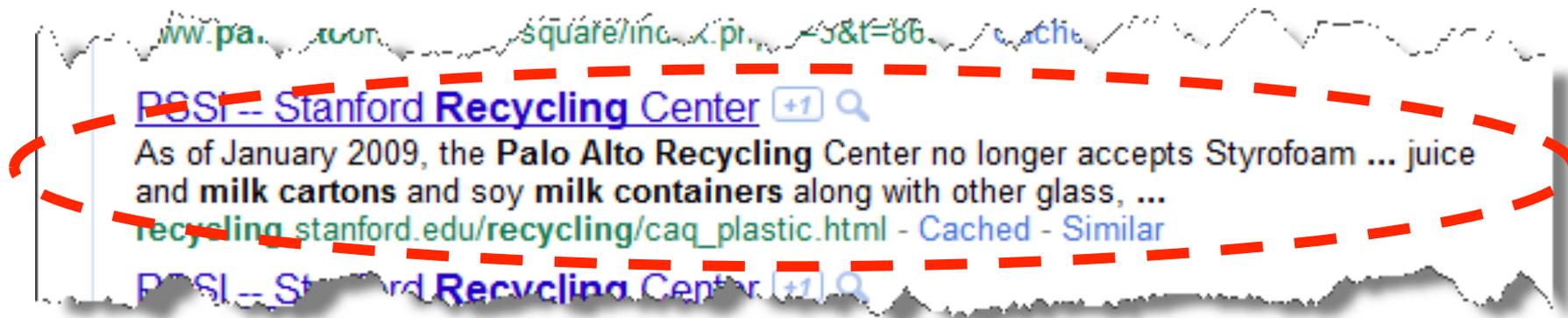
[Curbside Services - City of Palo Alto](#)  
[www.cityofpaloalto.org/gov/depts/pwd/.../curbside.asp](http://www.cityofpaloalto.org/gov/depts/pwd/.../curbside.asp)

[Are milk cartons recyclable? - Palo Alto Online - Town Square To...](#)  
[www.paloaltoonline.com/square/index.php?i=3&t=8684](http://www.paloaltoonline.com/square/index.php?i=3&t=8684)  
Jul 25, 2009 – Click for **Palo Alto**, California Forecast ... Earlier this year, the **Recycling** Drop-Off Center stopped accepting **milk cartons**, but there was a notice ...

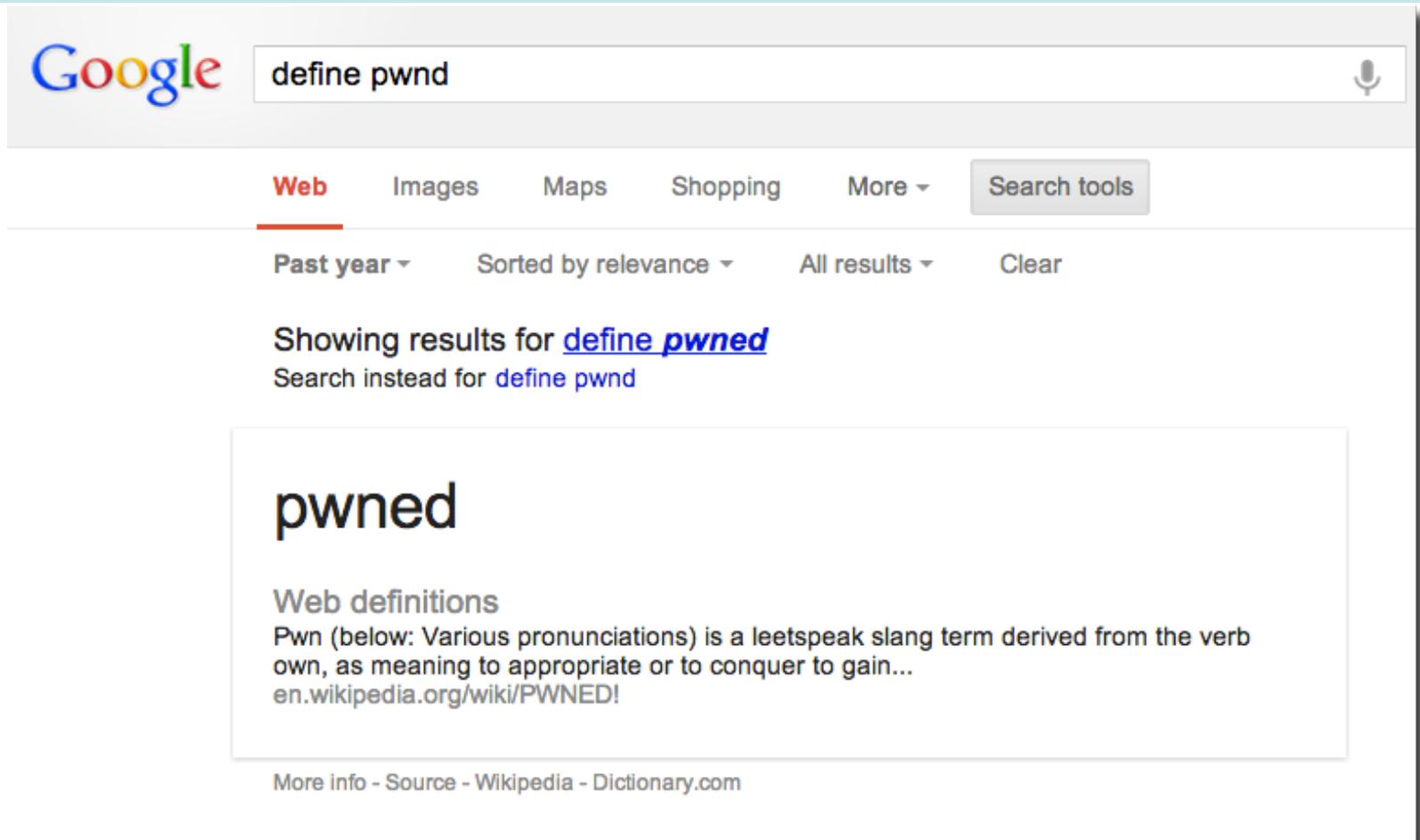
[Palo Alto | GreenWaste Recovery](#)  
[www.greenwaste.com](http://www.greenwaste.com) › Residential Services Share

# Big lesson...

- ... you **CANNOT** just read the snippet and understand the story...



# Skill: Use of define



The screenshot shows a Google search interface. The search bar contains the text "define pwnd". Below the search bar, the "Web" tab is selected. The search results show "Showing results for [define pwned](#)" and "Search instead for [define pwnd](#)". A definition box for "pwned" is displayed, containing the text "Web definitions" and "Pwn (below: Various pronunciations) is a leetspeak slang term derived from the verb own, as meaning to appropriate or to conquer to gain... en.wikipedia.org/wiki/PWNED!". At the bottom of the definition box, it says "More info - Source - Wikipedia - Dictionary.com".

- Example: [\[ define loxodrome \]](#)  
[\[ define Mollweide projection \]](#)



define mrsa



Web

Images

Maps

Shopping

More ▾

Search tools

About 520,000 results (0.59 second...)

# mrsa

## Abbreviation

Methicillin-resistant *Staphylococcus aureus*, a bacterium with antibiotic resistance.

More info - Dictionary.com - The Free Dictionary

## [MRSA infection - MayoClinic.com](#)

[www.mayoclinic.com/health/mrsa/DS00735](http://www.mayoclinic.com/health/mrsa/DS00735)

**Definition.** By Mayo Clinic staff. **Methicillin-resistant Staphylococcus aureus (MRSA)** infection is caused by a strain of staph bacteria that's become resistant to the ...

[Symptoms](#) - [Treatments and drugs](#) - [Causes](#) - [Prevention](#)



define predator drone



dmrussell@gmail.com



**Web**

Images

Maps

Shopping

More ▾

Search tools



SafeSearch

About 182,000 results (0.37 seconds)

## predator drone

### Web definitions

The General Atomics MQ-1 Predator is an unmanned aerial vehicle (UAV) used primarily by the United States Air Force (USAF) and Central...  
[en.wikipedia.org/wiki/Predator\\_drone](https://en.wikipedia.org/wiki/Predator_drone)

[More info](#) - [Source](#)

### See results about



[General Atomics MQ-1 Predator](#)

Aircraft model

The General Atomics MQ-1 Predator is an unmanned aerial vehicle built by General Atomics and used ...



define man in the middle attack



dmrussell@gmail.com

**Web**

Images

Maps

Shopping

More ▾

Search tools



About 24,500,000 results (0.46 seconds)

## man in the middle attack

### Web definitions

In cryptography, the man-in-the-middle attack (often abbreviated MITM), bucket-brigade attack, or sometimes Janus attack, is a form of...  
[en.wikipedia.org/wiki/Man-in-the-middle\\_attack](https://en.wikipedia.org/wiki/Man-in-the-middle_attack)

[More info](#) - [Source](#)

# *Boilerplate / repeated language*

[ “pertusiss” **OR** “whooping cough” “confirmed cases” **OR** “new cases” ]

[ “Smith denied” **OR** “Smith claimed” **OR** “Smith argued” ]

[ “postive findings” **OR** “confirmed cases” **OR** “positive results” ]

## *Key lesson 3*

**Expert searchers deeply understand their language, especially synonyms.**

- use of boilerplate language*
- how to read summaries*
- anti-reading*

## *Key lesson 4*

**Expert searchers  
understand the language  
of their domain **AND**  
know how to read the  
genre.**

## **Strategy:** Use images

- I was hiking in the woods nearby in March when I saw a pretty blue flower. It was about 3 feet high, and grew along the pathway in the middle of the woods in Henry Coe State Park.



- **Question:** Here's the picture... can you tell me what the common and Latin name is of this flower?

What are the common AND the Latin names of this flower?



## **Tactic:** Using a georef as context term

- Search: web for [ blue wildflowers henry coe ]
  - Look for collections of pictures. Look for a matching / similar picture.
- Trick: add a **context term** to look for collections of pictures
  - [ blue wildflowers henry coe album ]
  - [ blue wildflowers henry coe image collection ]
- **Answer:** Ithuriel's Spear (*Triteleia laxa*)
  - AKA Grass Nut, Wally's Basket...

## **Tactic:** Using domain specific language

- I kind of like that wildflower! What else can I find out about it of a horticultural or botanical nature?
  - *Where does it grow near my home?*
  - *Does it like to live in the sun or the shade?*
  - *What level of acidity does it prefer in the soil?*
  - *Where can I buy this plant for my home garden?*

# Answer

- I started with the Latin name because it's the MOST specific term you can use. So I did a copy & paste from the previous search:

## **[Triteleia laxa]**

and then started looking around. I quickly found that I could see it in Coe Park, near Morgan Hill.

- When I looked up the Wikipedia entry, I found that it likes shady conditions. I then checked my work by doing a search for

## **[Triteleia laxa shady ]**

Sure enough, other places say the same thing. It checks out!

## *Key lesson 4*

**Expert searchers  
understand the language  
of their domain **AND**  
know how to read the  
genre.**

## *Key lesson 5*

**Expert searchers know  
the capabilities of their  
tools.**

## \* *Using Maps*

- **Using Google Maps is a great way to find where something is. But suppose you want to find out how far APART two things are.**

### **Question:**

- (a) Can you figure out how far the De Young museum is from the San Francisco train station?
- (b) Suppose you want to hike from the Yosemite Visitor's Center up to Glacier Point. How would you figure out how far a hike that is?
- (c) Can you find a tool that will let you measure arbitrary distances on the map? (Example: that will let you measure the length of a path or trail that you define... not one that's already given.)

# Answer

- Use maps with driving directions to get the rough distance from point to point.
- For Yosemite, you have to look for a map at the Yosemite Park website.
- Then... use the maps “Create a New Map” (under My Maps)

Get directions

My places

Collaborate

Edit

### Rhus Ridge trail run

One of my favorites. Start at Rhus Ridge trailhead, then switch over to the Black Mountain trail. Go uphill as far as you like, then return back the same way. Usually deserted (esp. midweek)

Public · 0 views

Created on Jul 31 · By Dan Russell · Updated Jul 31

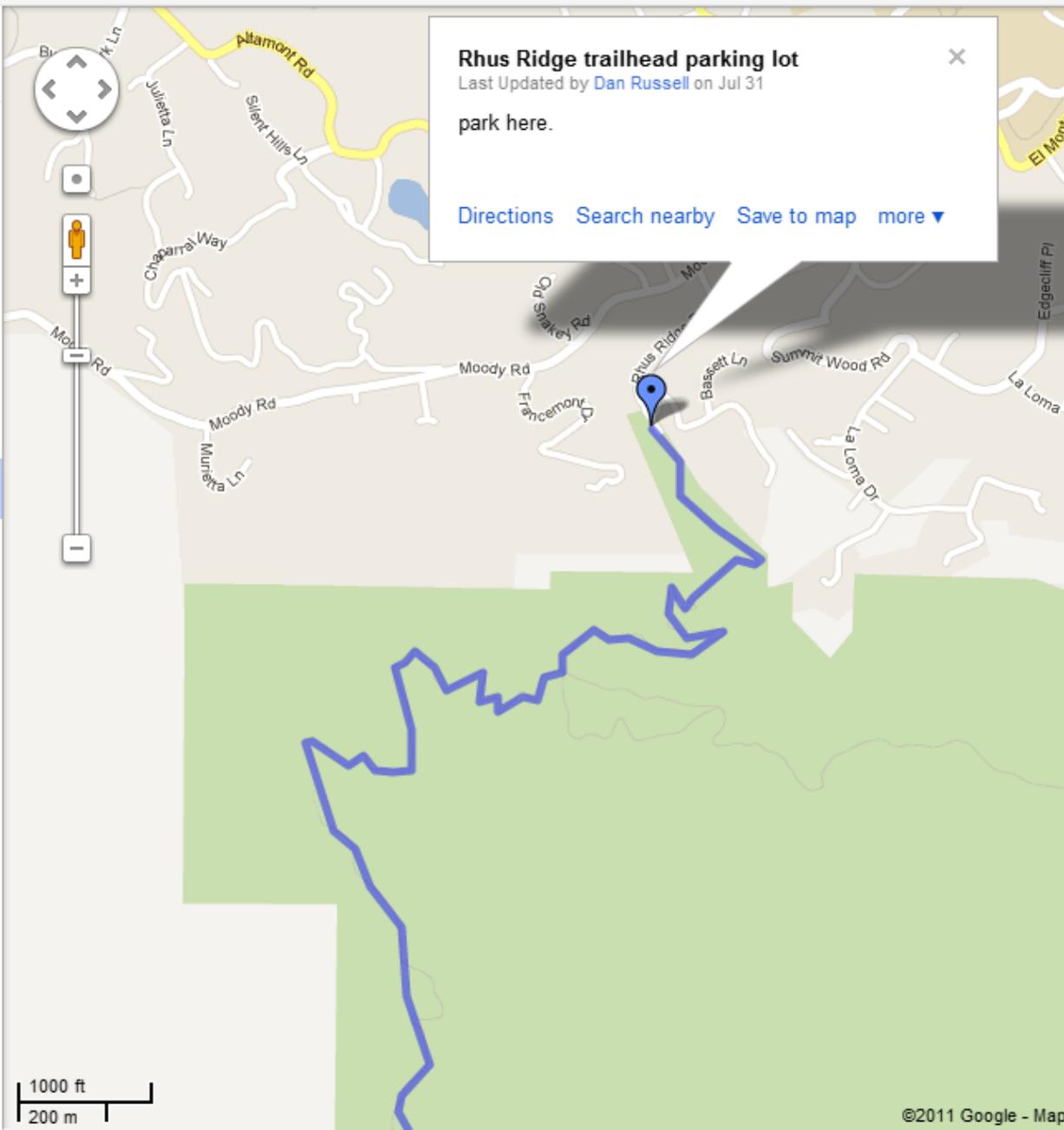
[Rate this map](#) · [Write a comment](#) · [KML](#) ·

+1 0

Rhus Ridge trailhead parking lot  
park here.

#### Out and back

This is a 3 mile out and 3 miles back trail. The first 1 mile is pure uphill.



**Rhus Ridge trailhead parking lot** ✕

Last Updated by [Dan Russell](#) on Jul 31

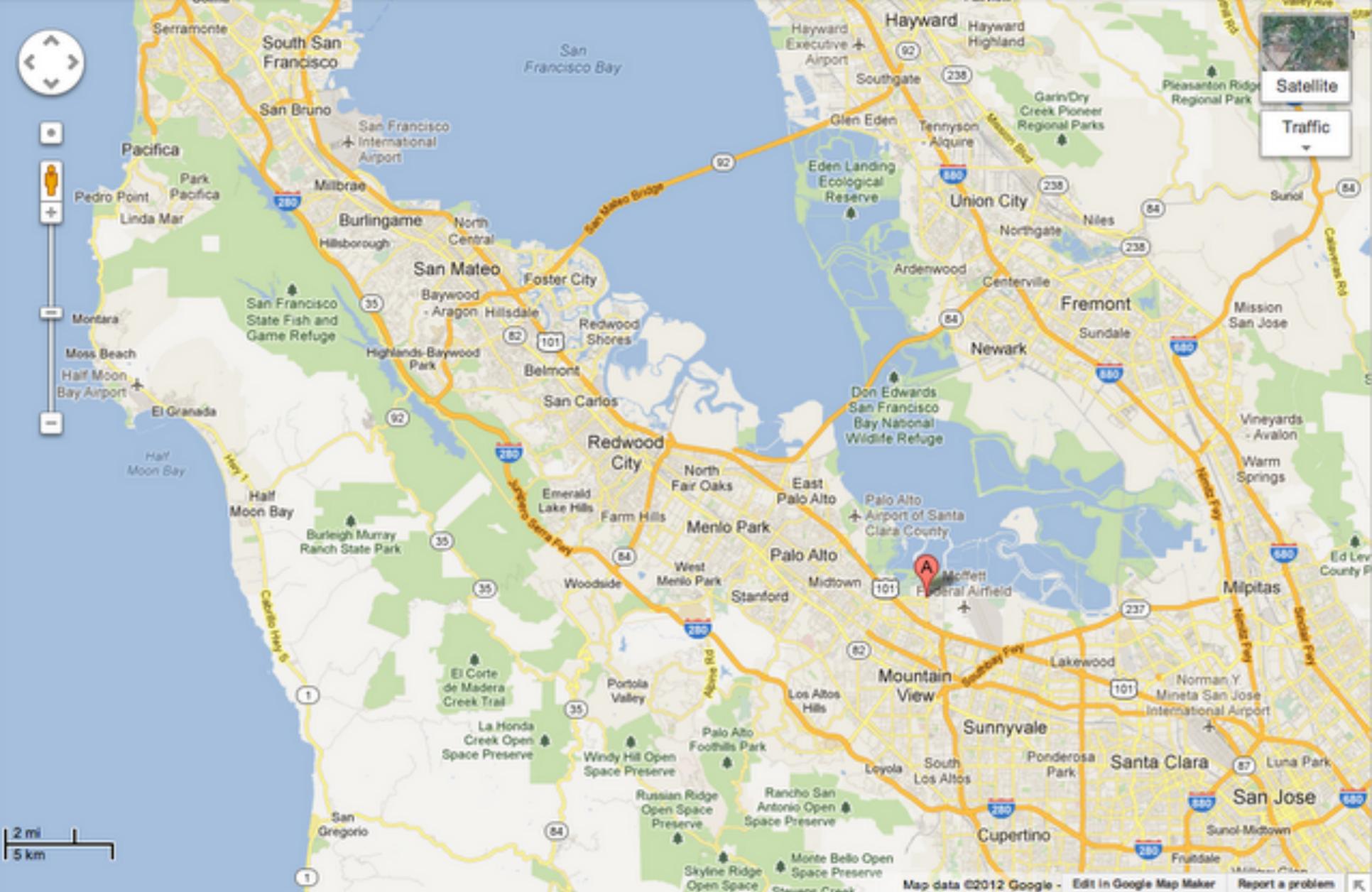
park here.

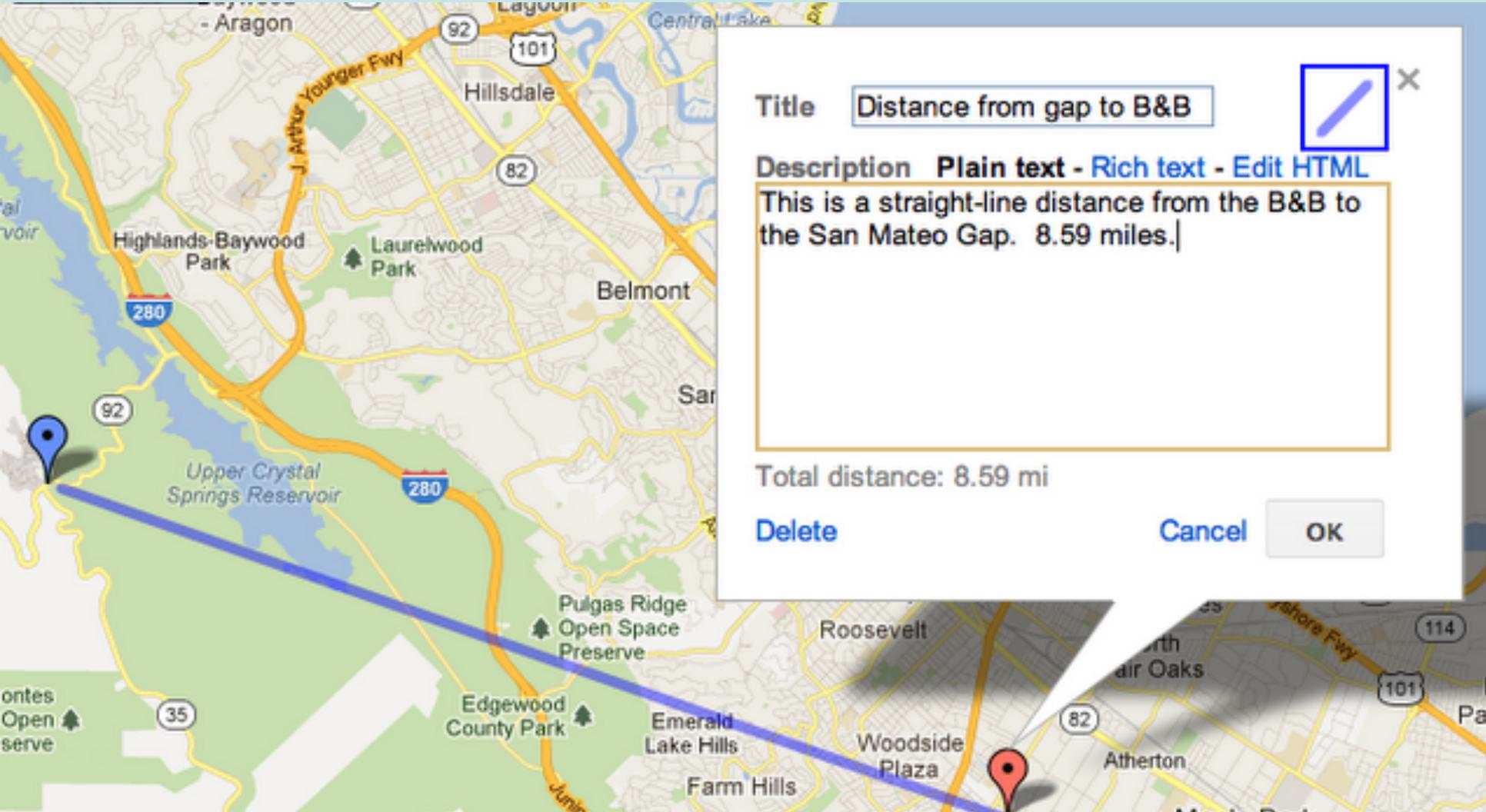
[Directions](#) [Search nearby](#) [Save to map](#) [more ▼](#)

# ***Goal: Find a B&B that has a view of this fog...***

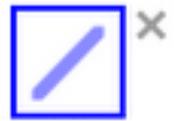
Must be in coastal range;  
within 10 miles of B&B;  
Near a long lake...  
Near the Googleplex....







Title



Description **Plain text** - **Rich text** - **Edit HTML**

This is a straight-line distance from the B&B to the San Mateo Gap. 8.59 miles.

Total distance: 8.59 mi

Delete

Cancel

OK

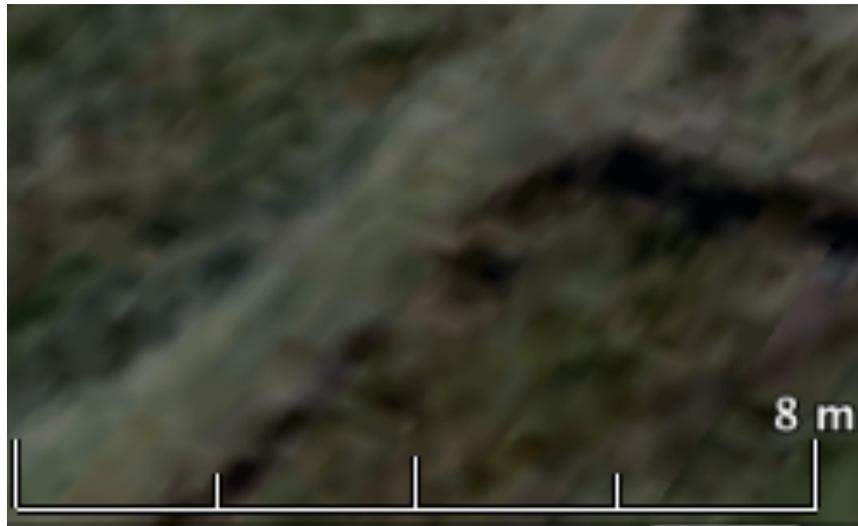
# *Flying into JFK (from the east to west)*



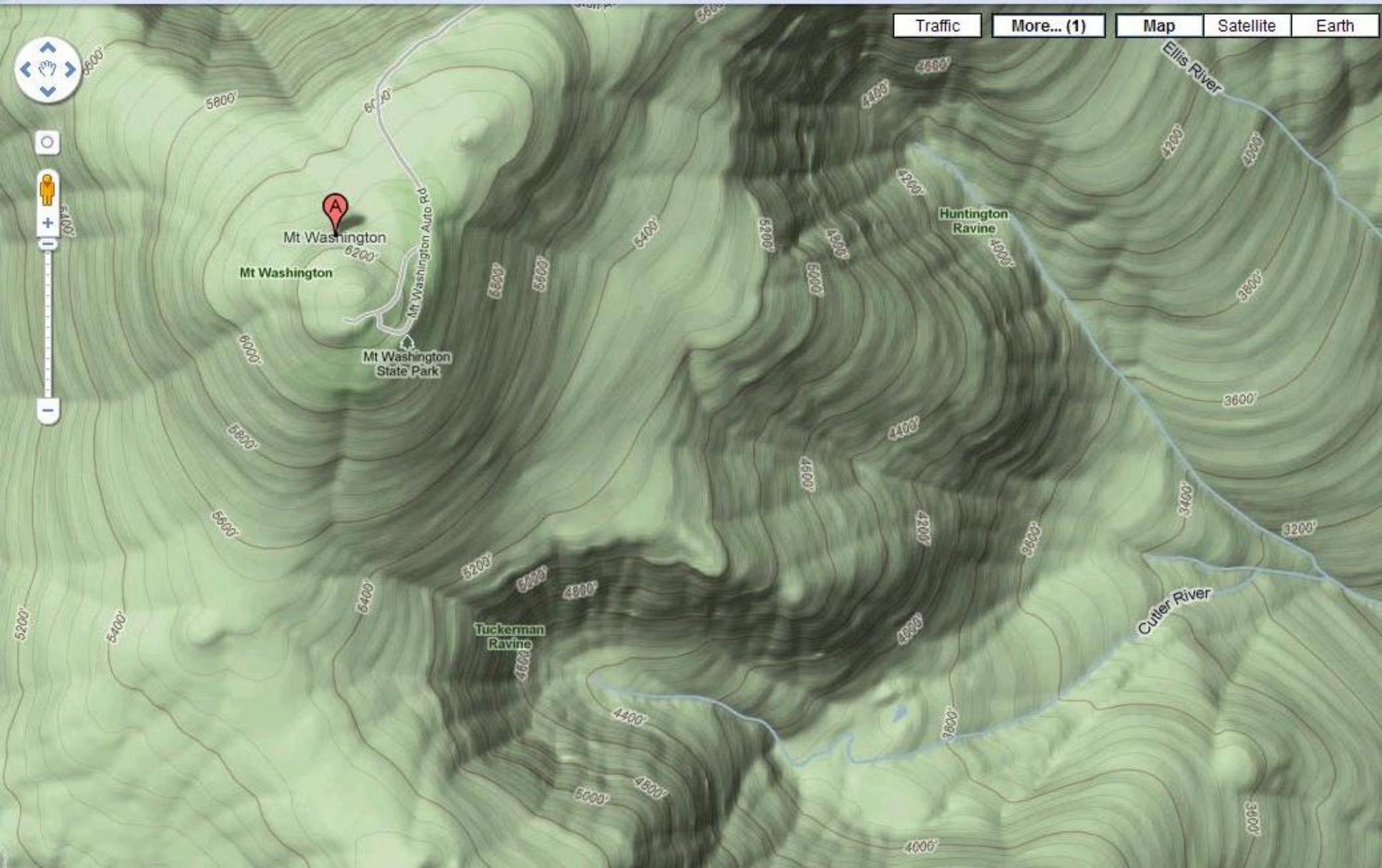
What's causing those rectilinear features ?

# How big are those features?

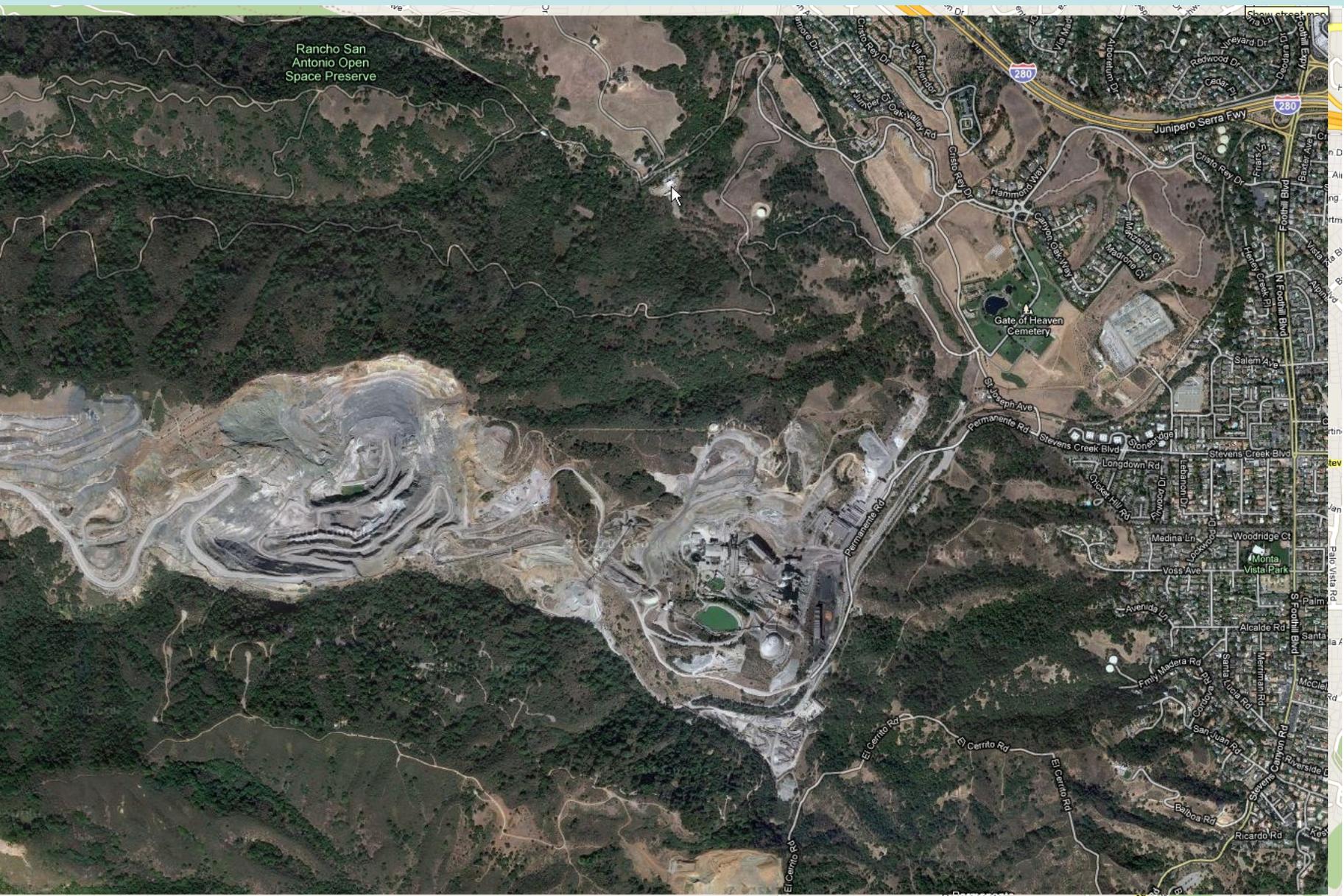
- Use Google Earth (or Maps) to zoom in with a measuring tool



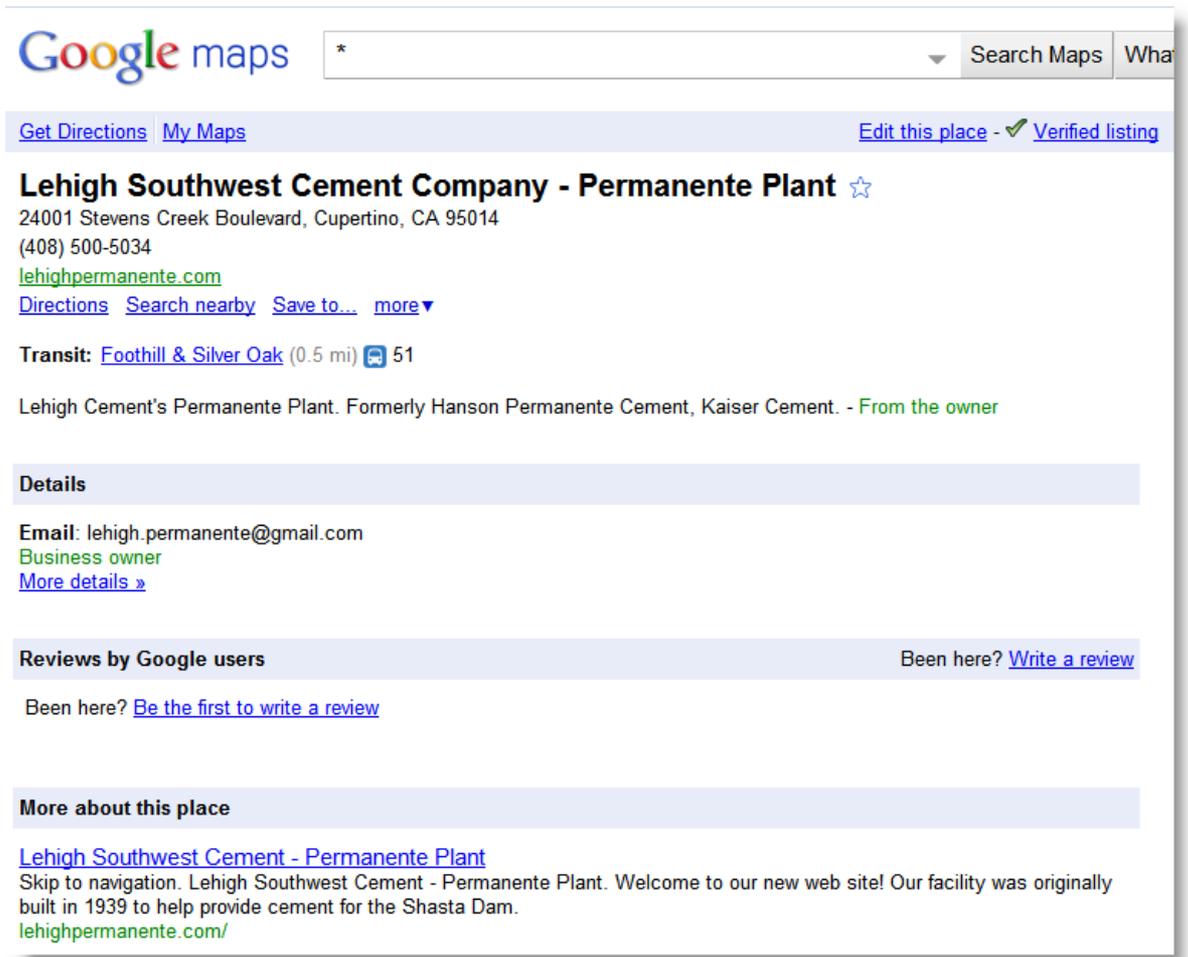
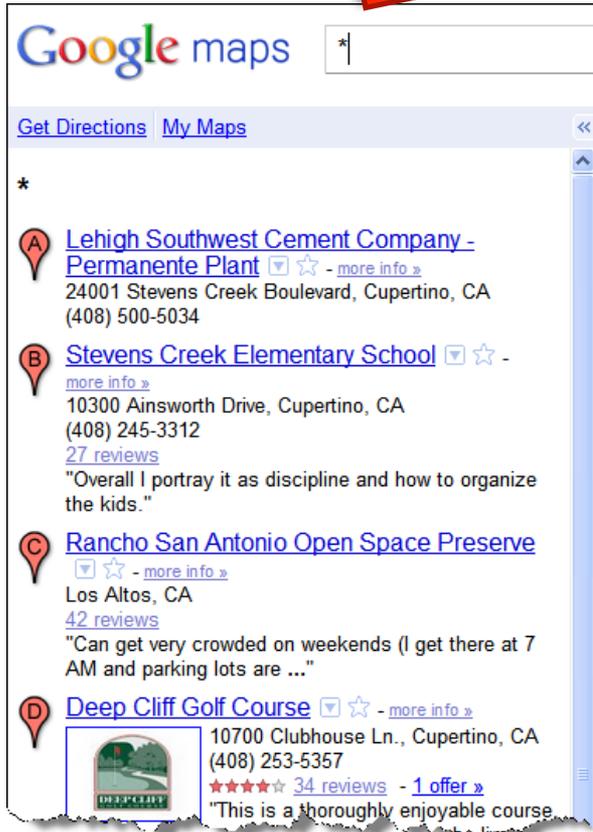
- Realize that these aren't **CANALS**, they're more like **DITCHES!**



# For our purposes, what can YOU find?



# “What’s around here?”



# *What's the news story...*

- ... now that you know what the company is, you can find associated news stories.
- With the map, you can identify the source of the company's pollution, where it's going, and who is (should-be) worried about it!

# *How to remove bogus results from your searches*

- Sometimes you want to look up something that's pretty common, so there are LOTS of web pages out there. It's even worse when the word is really common. So how do you eliminate things you don't want?
- **Question:** Can you find a great recipe for salsa to make for dinner tonight? IN PARTICULAR... your nephew is allergic to tomatoes. Can you find a salsa recipe without tomatoes in it?

# Example of minus use... removing

- The trick here is to remove all those “salsa as dancing” meanings. The quick way to do that in a web search is with the MINUS sign.

[ salsa -dancing ] -- this will remove all the dancing references

[ salsa -dancing -tomatoes ] – and the vegetables

No space  
after the  
minus sign!!



# Quotes

- Use double quotes to search for an exact phrase

[ when venus the goddess of beauty and love ]

Vs.

[ "when venus the goddess of beauty and love" ]

when venus the goddess of beauty and love

---

About 8,820,000 results (0.31 seconds)

---

[Venus \(mythology\) - Wikipedia, the free encyclopedia](#)  
[en.wikipedia.org/wiki/Venus\\_\(mythology\)](http://en.wikipedia.org/wiki/Venus_(mythology))

**Venus** (Latin: [ˈwɛnʊs]) is the Roman **goddess** whose functions encompassed **love, beauty, sex, fertility, prosperity and victory**. In Roman mythology, she was ...

**Venus, Goddess of Love and Beauty**

"when venus the goddess of beauty and love"

---

About 3,040 results (0.40 seconds)

---

[Newman's Ale - Golden Hind Music](#)  
[www.goldenhindmusic.com/lyrics/NEWMANSA.html](http://www.goldenhindmusic.com/lyrics/NEWMANSA.html)

**When Venus, the goddess of beauty and love.** Arose from the froth that swam on the sea. Minerva sprang out of the cranium of Jove A coy, sullen dame as most ...

You visited this page on 6/6/12.

## \* *Finding a particular kind of document*

- Your brother is a teacher at the local high school, and needs to find a lesson plan for a unit on superconducting materials.
- **Question:** Can you find a lesson plan for him?
- Hint: Look for a particular KIND of document...

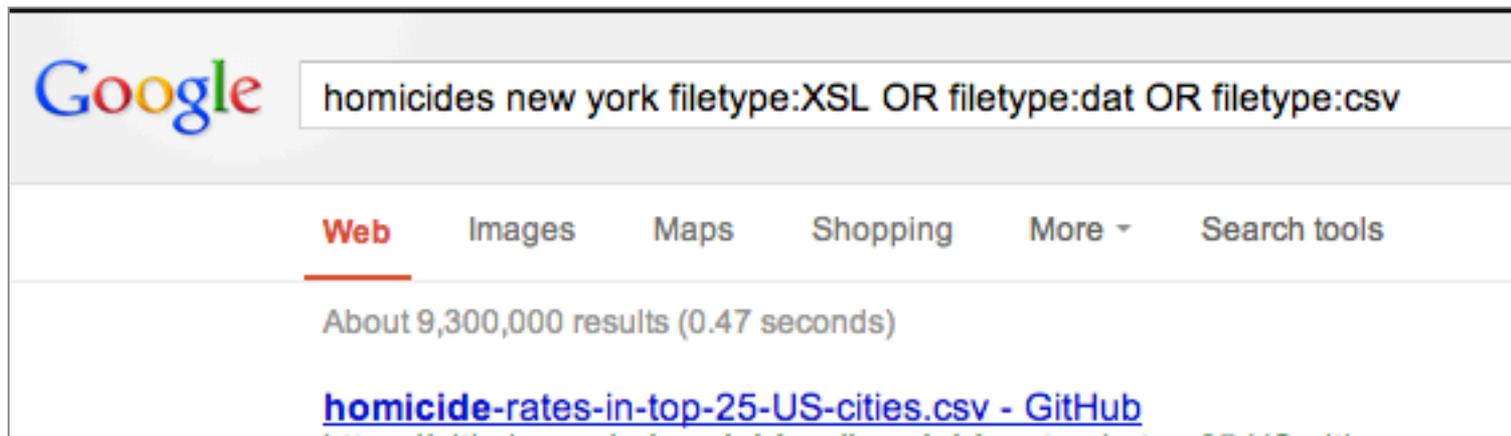
# Answer

- Use the operator FILETYPE: to focus in just on presentations

[ superconductor high school **filetype:ppt** ]

- **Note** that filetype: can take on ANY file extension –
  - PDF, PPT, XLS, DOC, WMV, TXT, CSV, SKP, KMV, ...

(In fact, arbitrary extensions... e.g., AQS)



## \* *Searching within a particular site*

- Someone told me that I'd been quoted in the New York Times. OMG! What did I say that was quotable?
- Can you find a page in the New York Times where I (Dan Russell) was quoted?

# Answer

- Use the site: operator to search within a particular web site...

[ “Daniel M Russell” **site:nytimes.com** ]

... and see the number 1 hit. (Yes, I worked at IBM.)

- Answer:**
1. Because “Daniel Russell” is a very common name.
  2. The NYTimes has the convention of always spelling a person’s name out completely, including middle initials

Gotcha: [ site:.EDU query ]

*careful about EDU*



site:.edu journalism



Web

Images

Maps

Shopping

Blogs

More ▾

Search tools

About 9,030,000 results (0.44 seconds)

[Berkeley Graduate School of Journalism: Home](#)

[journalism.berkeley.edu/](http://journalism.berkeley.edu/) ▾

Admissions, students, faculty, and alumni. Plus events and resources.

[Columbia University Graduate School of Journalism: Home](#)

[www.journalism.columbia.edu/](http://www.journalism.columbia.edu/) ▾

Trains **journalists** in a program that stresses academic rigor, ethics, **journalistic** inquiry and professional practice. The school includes courses in radio, television ...

[Missouri School of Journalism](#)

[journalism.missouri.edu/](http://journalism.missouri.edu/) ▾

The Official Website for the School of **Journalism** at the University of Missouri.

[Medill School of Journalism, Media, Integrated Marketing ...](#)

[www.medill.northwestern.edu/](http://www.medill.northwestern.edu/) ▾

Provides degree programs focused on marketing, **journalism** and communications. Contains overviews of majors, events calendar, and faculty information.

# term **AROUND(n)** term

[ “jerry brown” AROUND(9) “tea party” ]

"Jerry Brown" AROUND(9) "tea party"

About 809,000 results (0.41 seconds)

[Tax the rich ... more? Why Jerry Brown changed his plan to save ...](#)  
[www.reteaparty.com/.../tax-the-rich-more-why-jerry-brown-changed...](http://www.reteaparty.com/.../tax-the-rich-more-why-jerry-brown-changed...)  
 Mar 17, 2012 – Why Jerry Brown changed his plan to save California." Tax the rich ... more? Why **Jerry Brown changed his plan to save California**. - Tea Party ...

[Jerry Brown: Facebook's \\$2.5 Billion "Friend" - Chico Tea Party ...](#)  
[chicoteaparty.ning.com/.../jerry-brown-facebook-s-2-5-billion-friend](http://chicoteaparty.ning.com/.../jerry-brown-facebook-s-2-5-billion-friend)  
 Mar 28, 2012 – Jerry Brown and Democrats in Sacramento hope to cash in on Facebook's pending IPO by already spending the anticipated tax revenue in this ...

[McGurn: Jerry Brown vs. Chris Christie « Tea Party for California](#)  
[tppatriots.com/2012/05/15/mcgurn-jerry-brown-vs-chris-christie/](http://tppatriots.com/2012/05/15/mcgurn-jerry-brown-vs-chris-christie/)  
 May 15, 2012 – In his January 2011 inaugural address, California Gov. Jerry Brown declared it a "time to honestly assess our financial condition and make the ...

[NEW: Jerry Brown twists out 'pretzel palace' budget « Tea Party f...](#)  
[tppatriots.com/.../new-jerry-brown-twists-out-pretzel-palace-budget/](http://tppatriots.com/.../new-jerry-brown-twists-out-pretzel-palace-budget/)  
 May 15, 2012 – SACRAMENTO—Setting the stage for the Legislature to pass another phony majority vote budget, Democratic Gov. Jerry Brown presented a ...

[California Teachers Association backs Gov. Jerry Brown's tax plan ...](#)  
[tppatriots.com/.../california-teachers-association-backs-gov-jerry-bro...](http://tppatriots.com/.../california-teachers-association-backs-gov-jerry-bro...)  
 Jan 30, 2012 – Kevin Yamamura in the Sacramento Bee — 1/30/12. The California Teachers Association officially agreed Sunday to back Gov. Jerry Brown's ...

[jerry brown | Tea Party Patriots](#)  
[www.teapartypatriots.org/tag/jerry-brown/](http://www.teapartypatriots.org/tag/jerry-brown/)  
 Jan 31, 2012 – Congressman Gary Miller (California 42nd District) sits on the House Transportation and Infrastructure Committee which convened a hearing ...

[11/16/10 - Dear Jerry Brown - No Smart Meters | Central Coast Te...](#)  
[mocoip.com/posts/111610-dear-jerry-brown-no-smart-meters](http://mocoip.com/posts/111610-dear-jerry-brown-no-smart-meters)  
 Dear Mr. Brown: I call on you to halt the Smart Meter program in California and open an investigation into it now. There are many serious problems and issues ...

[Gov. Jerry Brown faces tough 2012 — « Tea Party for California](#)  
[tppatriots.com/2012/01/02/gov-jerry-brown-faces-tough-2012/](http://tppatriots.com/2012/01/02/gov-jerry-brown-faces-tough-2012/)  
 Jan 2, 2012 – With Buchanan in the San Francisco Chronicle ...

"Jerry Brown" "tea party"

About 826,000 results (0.42 seconds)

[Tax the rich ... more? Why Jerry Brown changed his ... - RE Tea Party](#)  
[www.reteaparty.com/.../tax-the-rich-more-why-jerry-brown-changed...](http://www.reteaparty.com/.../tax-the-rich-more-why-jerry-brown-changed...)  
 Mar 17, 2012 – By Daniel B. Wood, The Christian Science Monitor. California Gov. **Jerry Brown** (D) is willing to ratchet up taxes on the rich in order to ensure ...

[Jerry Brown: California, Country Facing 'Regime Crisis' Similar To ...](#)  
[losangeles.cbslocal.com/.../jerry-brown-gop-stalling-budget-reform/](http://losangeles.cbslocal.com/.../jerry-brown-gop-stalling-budget-reform/)  
 Apr 10, 2011 – Check back for more of the interview with **Jerry Brown** to be posted here on ..... The **TEA PARTY** has it right the media just won't admit it!

[Jerry Brown: Facebook's \\$2.5 Billion "Friend" - Chico Tea Party ...](#)  
[chicoteaparty.ning.com/.../jerry-brown-facebook-s-2-5-billion-friend](http://chicoteaparty.ning.com/.../jerry-brown-facebook-s-2-5-billion-friend)  
 Mar 28, 2012 – **Jerry Brown** and Democrats in Sacramento hope to cash in on Facebook's pending IPO by already spending the anticipated tax revenue in this ...

[McGurn: Jerry Brown vs. Chris Christie « Tea Party for California](#)  
[tppatriots.com/2012/05/15/mcgurn-jerry-brown-vs-chris-christie/](http://tppatriots.com/2012/05/15/mcgurn-jerry-brown-vs-chris-christie/)  
 May 15, 2012 – In his January 2011 inaugural address, California Gov. **Jerry Brown** declared it a "time to honestly assess our financial condition and make the ...

[Bluegrass Pundit: Jerry Brown Calls Tea Party Members ...](#)  
[www.bluegrasspundit.com/.../jerry-brown-calls-tea-party-members.ht...](http://www.bluegrasspundit.com/.../jerry-brown-calls-tea-party-members.ht...)  
 Jul 11, 2010 – **Jerry Brown** has joined the list of moonbat liberals calling **Tea Party** members ... Labels: **Jerry Brown**, moonbat, **tea party**, teabaggers, video ...

[VIDEO: Open Letter to Governor Jerry Brown | Green Party of CA](#)  
[www.cagreens.org/news/wells-open-letter-to-governor-brown](http://www.cagreens.org/news/wells-open-letter-to-governor-brown)  
 Apr 5, 2012 – ... No To Affordable Care Act - Napa police up security for national **Tea Party** Express and Green ... VIDEO: Open Letter to Governor **Jerry Brown** ...

[jerry brown | Tea Party Patriots](#)  
[www.teapartypatriots.org/tag/jerry-brown/](http://www.teapartypatriots.org/tag/jerry-brown/)  
 Jan 31, 2012 – The **Tea Party** Patriots' mission is to restore America's founding principles of Fiscal Responsibility, Constitutionally Limited Government and ...

[Jerry Brown - Tea Party Tribune](#)  
[www.teapartytribune.com/tag/jerry-brown/](http://www.teapartytribune.com/tag/jerry-brown/)  
 31, 2012 Tea Party Tribune, Tea Party and Political News Reporting ... Tea



What's the phone number of the office this image was taken from?



## *Work with what you have...*

- I searched for [**tp office building**] ... *voila!*
- You can also figure this out by doing an Image search for [**tp**]
- Knowing this, I could easily get the street address for the TP building:  
***14/16 Twarda Street, Warsaw***

And once you know that...

**Original photo**

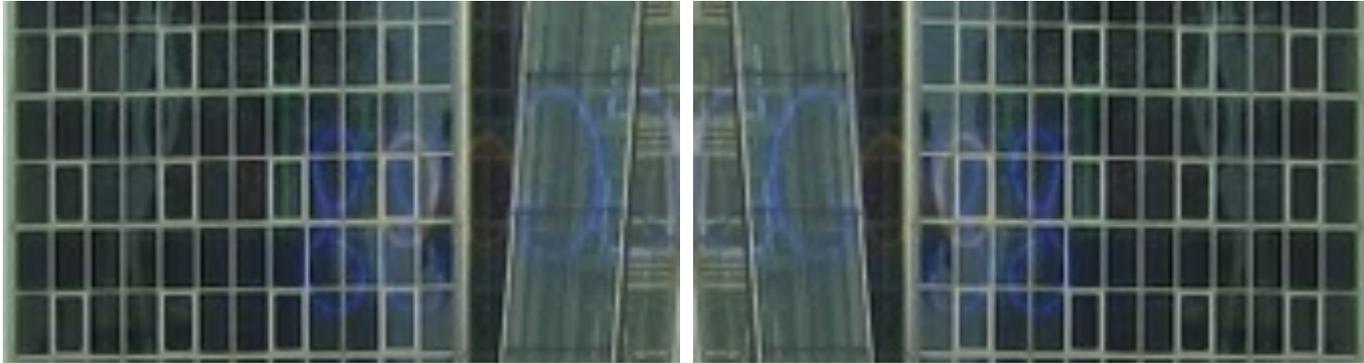


**Google Earth model**



© 2012 Cnes/Spot Image  
Image © 2012 WRC/BA/RA/16.01-001 Warszawa, Poland

# *Now, which office are you in?*



Search [**google offices warsaw**] to find that the information is at: <http://www.google.com/about/company/address.html>

Google Warsaw

Warsaw Financial Center

Emilii Plater 53

00-113 Warszawa

Poland

Phone: +48 22 207 19 00

Fax: +48 22 207 19 21

## *Key lesson 5*

**Expert searchers know the capabilities (and limits!) of their tools.**

## *Key lesson 6*

**Expert searchers know the structure of their information space.**

# Limit search by time...

Google search interface for 'mary schapiro'. The search bar contains 'mary schapiro'. The user is logged in as 'dmrussell@gmail.com'. The search results are filtered by 'Web' and 'All results' in 'San Antonio, TX'. A dropdown menu for time filtering is open, showing options: Any time (checked), Past hour, Past 24 hours, Past week, Past month, Past year, and Custom range... (highlighted with a red arrow and a circled '2').

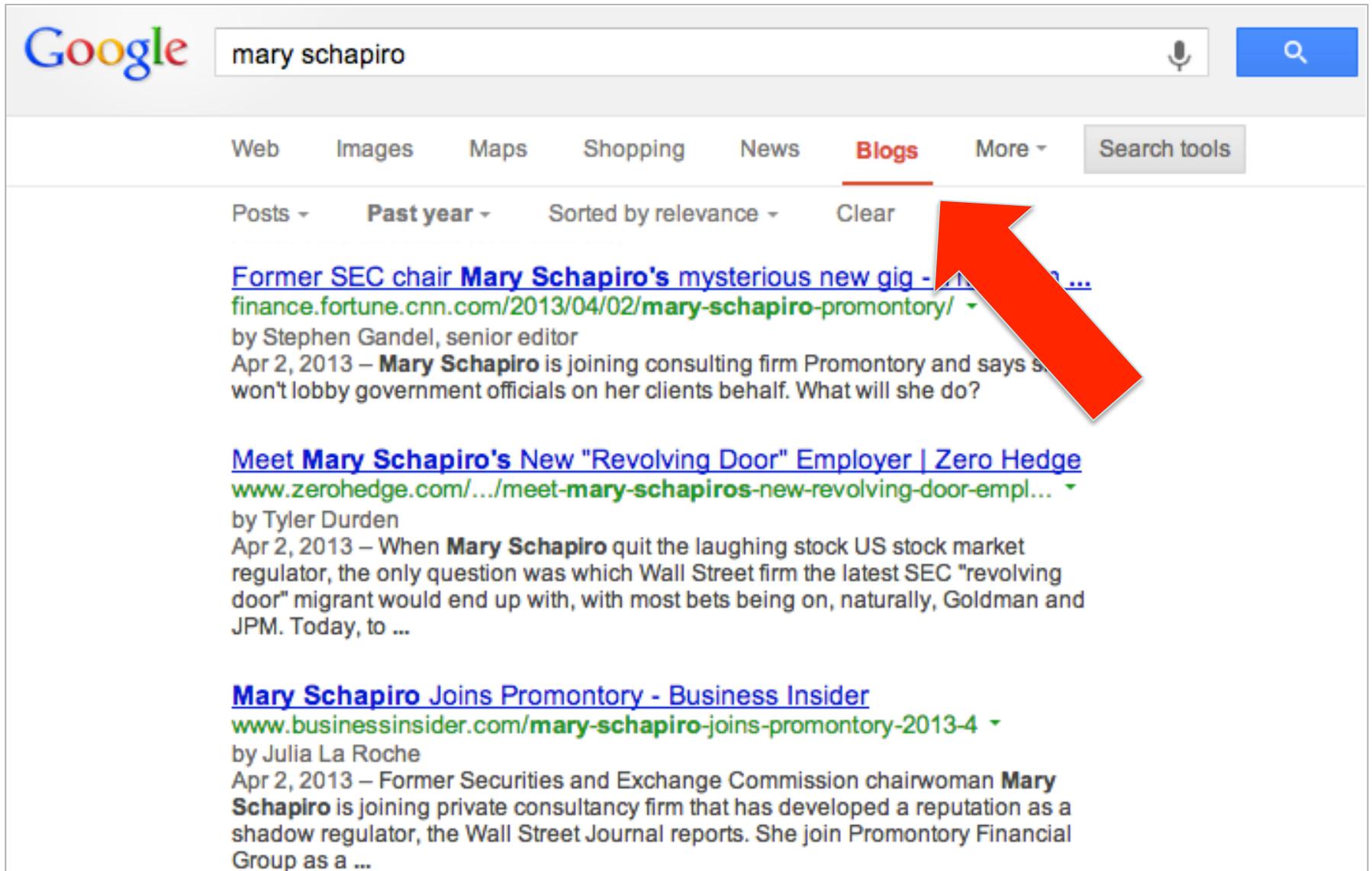
Search results include:

- [Wikipedia, the free encyclopedia](#)
- [Mary Schapiro](#) - June 19, 1955 served as the 29th Chairman of the U.S. Securities and Exchange Commission (SEC). She was appointed by President Barack Obama on January 27, 2009. - Career prior to the SEC - SEC Chairman - References
- [Chairman Mary L. Schapiro](#) - [Commissioner/schapiro.htm](#) - 29th Chairman of the U.S. Securities and Exchange Commission. Schapiro was appointed by President Barack Obama on January 27, 2009.
- [Mary Schapiro: Out of the SEC and Into the Shadows - Businessweek](#) - [www.businessweek.com/.../mary-schapiro-out-of-the-sec-and-into-the-shadows](#) - Apr 2, 2013 - After 25 years as a regulator, Mary Schapiro, most recently chairman of the U.S. Securities and Exchange Commission, is switching sides. Well ...

Knowledge panel for Mary Schapiro:

- Mary Schapiro** (labeled '1')
- Acting Chairman of Securities and Exchange Commission
- Mary L. Schapiro served as the 29th Chairman of the U.S. Securities and Exchange Commission. She was appointed by President Barack Obama, and assumed the Chairmanship on January 27, 2009. [Wikipedia](#)
- Born:** June 19, 1955 (age 58), [New York](#)
- Office:** Chairperson, Securities and Exchange Commission since 2009
- Party:** Democratic Party
- Education:** [The George Washington University Law School](#) (1980), [More](#)

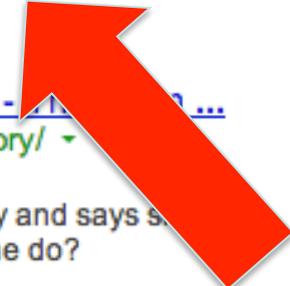
# Combine date restrict with content type



The image shows a Google search interface. The search bar contains the text "mary schapiro". Below the search bar, the navigation tabs include "Web", "Images", "Maps", "Shopping", "News", "Blogs", and "More". The "Blogs" tab is selected and underlined. To the right of the tabs is a "Search tools" button. Below the tabs, there are filters: "Posts", "Past year", "Sorted by relevance", and "Clear". A large red arrow points to the "Clear" button. The search results are displayed below the filters. The first result is a link to a CNN article titled "Former SEC chair Mary Schapiro's mysterious new gig - finance.fortune.cnn.com/2013/04/02/mary-schapiro-promontory/". The second result is a link to a Zero Hedge article titled "Meet Mary Schapiro's New 'Revolving Door' Employer | Zero Hedge www.zerohedge.com/.../meet-mary-schapiros-new-revolving-door-empl...". The third result is a link to a Business Insider article titled "Mary Schapiro Joins Promontory - Business Insider www.businessinsider.com/mary-schapiro-joins-promontory-2013-4".

Google   

Web Images Maps Shopping News **Blogs** More

Posts **Past year** Sorted by relevance Clear 

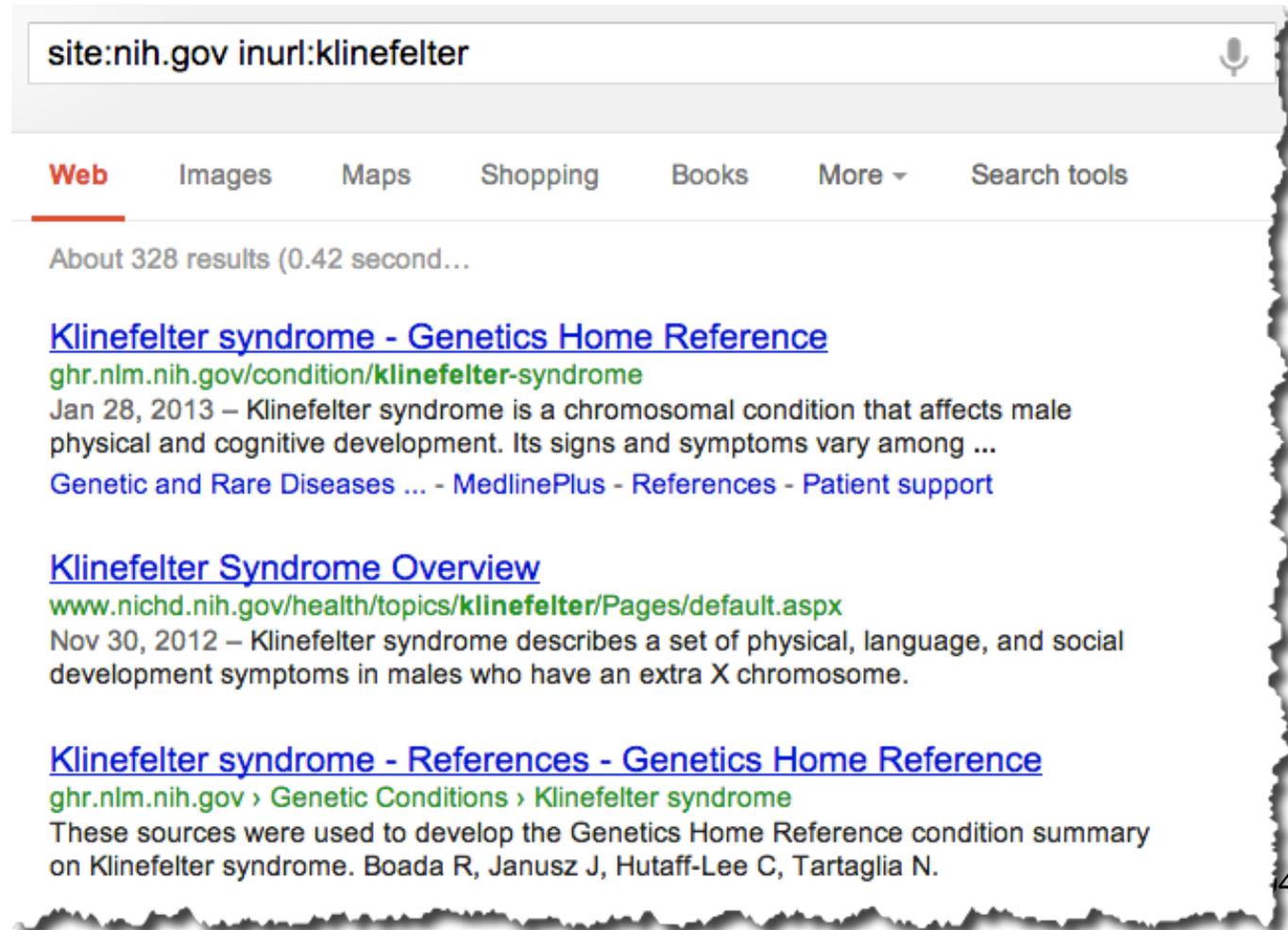
[Former SEC chair \*\*Mary Schapiro's\*\* mysterious new gig - finance.fortune.cnn.com/2013/04/02/mary-schapiro-promontory/](#)  
by Stephen Gandel, senior editor  
Apr 2, 2013 – **Mary Schapiro** is joining consulting firm Promontory and says she won't lobby government officials on her clients behalf. What will she do?

[Meet \*\*Mary Schapiro's\*\* New "Revolving Door" Employer | Zero Hedge www.zerohedge.com/.../meet-mary-schapiros-new-revolving-door-empl...](#)  
by Tyler Durden  
Apr 2, 2013 – When **Mary Schapiro** quit the laughing stock US stock market regulator, the only question was which Wall Street firm the latest SEC "revolving door" migrant would end up with, with most bets being on, naturally, Goldman and JPM. Today, to ...

[Mary Schapiro Joins Promontory - Business Insider www.businessinsider.com/mary-schapiro-joins-promontory-2013-4](#)  
by Julia La Roche  
Apr 2, 2013 – Former Securities and Exchange Commission chairwoman **Mary Schapiro** is joining private consultancy firm that has developed a reputation as a shadow regulator, the Wall Street Journal reports. She join Promontory Financial Group as a ...

# *inurl: searches for a term within URL*

**inurl:**



The screenshot shows a Google search interface. The search bar contains the query "site:nih.gov inurl:klinefelter". Below the search bar, navigation tabs include "Web" (highlighted with a red underline), "Images", "Maps", "Shopping", "Books", "More", and "Search tools". The search results indicate "About 328 results (0.42 second...)". Three results are visible, each with a blue title link, a green URL, and a brief description.

site:nih.gov inurl:klinefelter

**Web** Images Maps Shopping Books More Search tools

About 328 results (0.42 second...)

[Klinefelter syndrome - Genetics Home Reference](#)  
[ghr.nlm.nih.gov/condition/klinefelter-syndrome](http://ghr.nlm.nih.gov/condition/klinefelter-syndrome)  
Jan 28, 2013 – Klinefelter syndrome is a chromosomal condition that affects male physical and cognitive development. Its signs and symptoms vary among ...  
[Genetic and Rare Diseases ... - MedlinePlus - References - Patient support](#)

[Klinefelter Syndrome Overview](#)  
[www.nichd.nih.gov/health/topics/klinefelter/Pages/default.aspx](http://www.nichd.nih.gov/health/topics/klinefelter/Pages/default.aspx)  
Nov 30, 2012 – Klinefelter syndrome describes a set of physical, language, and social development symptoms in males who have an extra X chromosome.

[Klinefelter syndrome - References - Genetics Home Reference](#)  
[ghr.nlm.nih.gov](http://ghr.nlm.nih.gov) › [Genetic Conditions](#) › [Klinefelter syndrome](#)  
These sources were used to develop the Genetics Home Reference condition summary on Klinefelter syndrome. Boada R, Janusz J, Hutaff-Lee C, Tartaglia N.

## **Strategy:** Learning IA and using inurl:

- **Question:** Find a person who lives on an island in or near Australia, and whose Google-plus profile lists his LinkedIn, Twitter, and Pinterest profile URLs.



- **Now that you've found him, what color is the piece of furniture on his company's website home page?**



- Answer: Red
- [ **site:plus.google.com**  
**inurl:about**  
**au.linkedin.com**  
**twitter.com pinterest** ]
- **Why this query?**
  1. Limit query to search JUST G+ profiles. site:
  2. Search plus.Google.com for all of the ABOUT pages.  
If you look at a few G+ ABOUT pages, you'll see they all have a URL that looks like this:  
<https://plus.google.com/u/0/01234567890123456/about>

*intext: requires that the text be in the body of page*

site:nih.gov inurl:klinefelter intext:bethesda

Web

Images

Maps

Shopping

More ▾

Search tools

About 27 results (0.43 second...)

### [Child Psychiatry Branch - NIMH](#)

[intramural.nimh.nih.gov/chp/klinefelter.html](http://intramural.nimh.nih.gov/chp/klinefelter.html)

Oct 5, 2012 – Participation involves coming to the National Institutes of Health (NIH) in **Bethesda**, Maryland (just outside of Washington D.C.) for a one-day ...

### ["Klinefelter Syndrome" - Books Result](#)

[www.ncbi.nlm.nih.gov/.../entrez?...%22Klinefelter%20Syndro...](http://www.ncbi.nlm.nih.gov/.../entrez?...%22Klinefelter%20Syndro...) Share

PDQ Cancer Information Summaries [Internet]. **Bethesda** (MD): National Cancer Institute (US); 2002-. Dictionary of Cancer Terms. 2. Mac... e Curie Bioscience ...

### [Klinefelter Syndrome - MeSH - NCBI](#)

[www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov) > [NCBI](#) > [Literature](#)

... Accessibility | Contact · National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, **Bethesda** MD, 20894 USA.

## *Combing operators – site: with intext:*

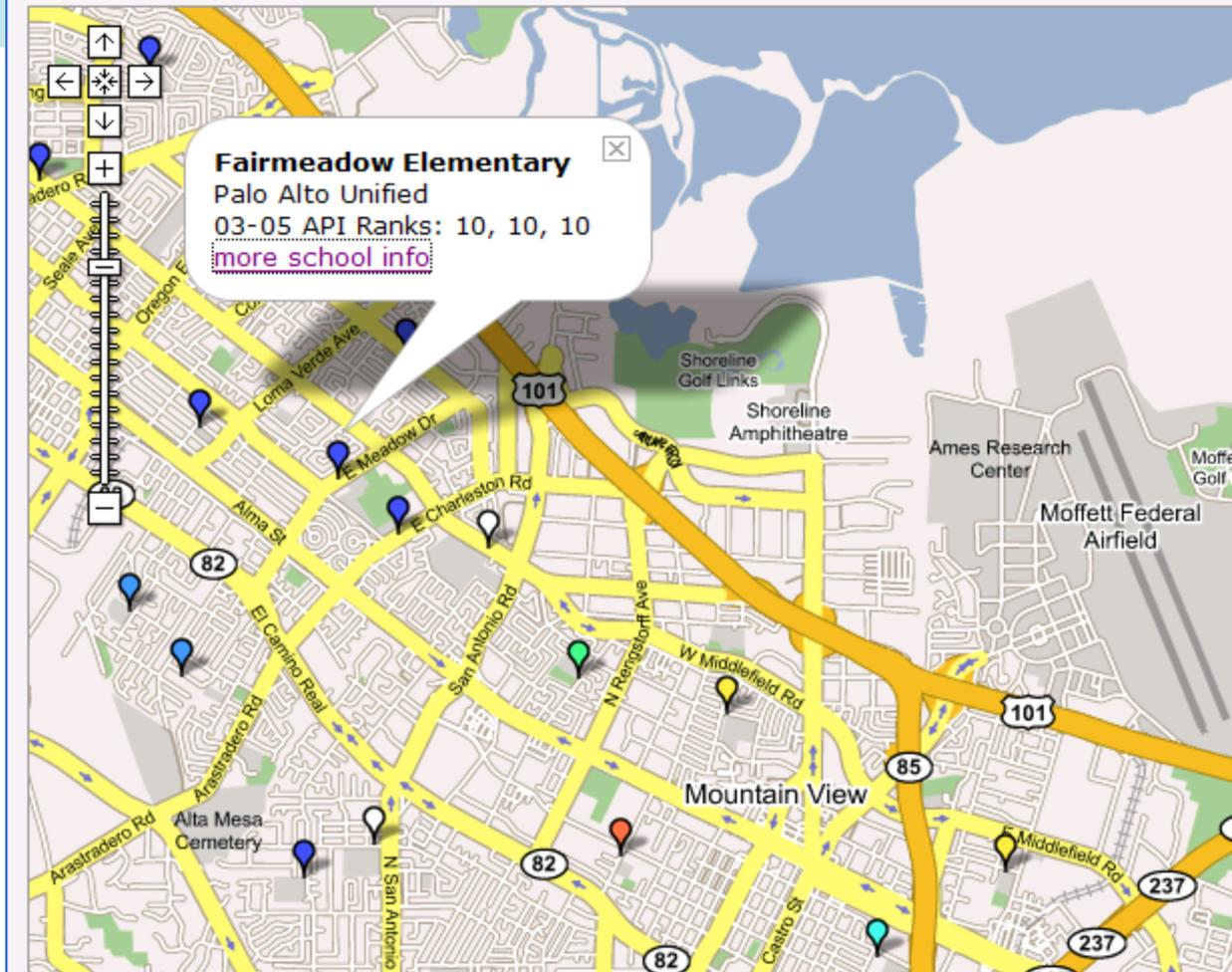
[ **site:stanford.edu**  
"coral bleaching" **intext:geophysics** ]

### Summary:

Coral reefs around the world are sustaining massive damage at an alarming rate. "Geological Approaches to Coral Reef Ecology" provides a uniquely historical perspective on the destruction – through both natural and human processes – of coral reef ecosystems. Chapters applying the principles of geophysics, paleontology, geochemistry, and physical and chemical oceanography supply novel insights into the workings of coral reefs, complementing real-time ecological studies and providing critical information for crafting realistic environmental policy. By reconstructing the ecological history of coral reefs, the authors are able to evaluate whether or not recent, dramatic changes to reef ecosystems are novel events or part of a long-term trend or cycle. The contributions examine the interacting causes of change, which include hurricane damage, regional outbreaks of coral-consuming predators, disease epidemics,

School Types:  Elementary  Secondary  Other

Mapping 33 schools... done



## Mashups (IA)

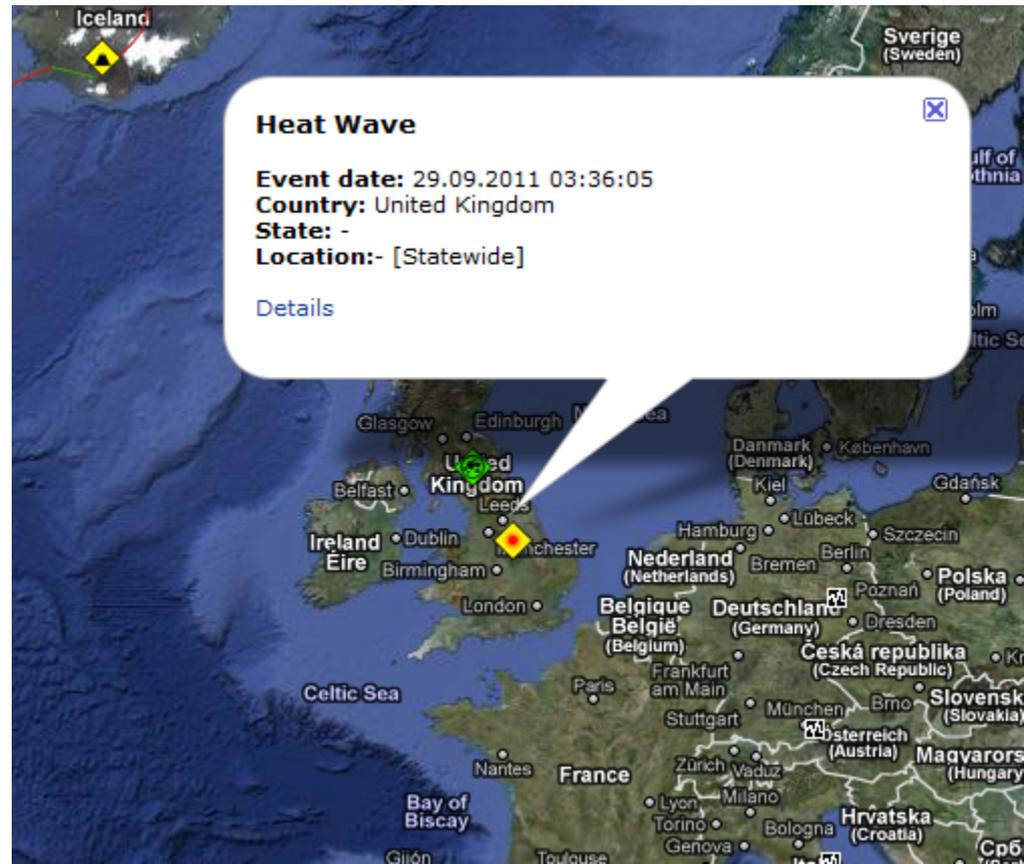
<http://schoolperformancemaps.com/>

- Combines data from multiple sources into single view
- To find mashups: **[ mashup <topic> ]**
- Examples: **[ mashup school performance ]**

## ***Question: Can you find a mashup...***

- .. That shows current emergency situations worldwide?

- Do the following search: [ [mashup worldwide emergencies](#) ]
- <http://hisz.rsoe.hu/alertmap/index2.php?area=usa&lang=eng>



## *Key lesson 6*

**Expert searchers know the structure of their information space.**

## *Key lesson 7*

**Expert searchers search for tools when they have a tool-shaped problem.**

## **Strategy:** *Search for tools to do the task....*

- Suppose you want to know... when will the sunlight hit the beach here?



# Where is the beach?



Wailea-Makena, HI 96753, USA

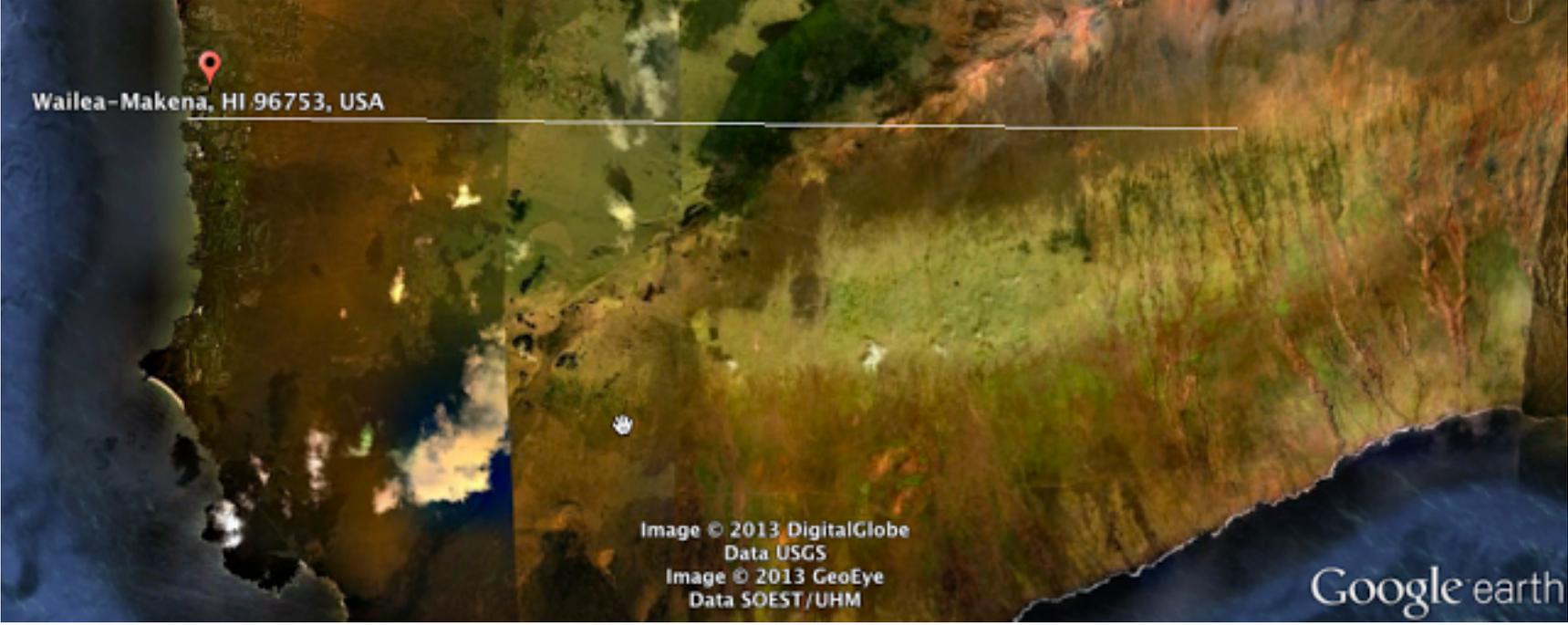
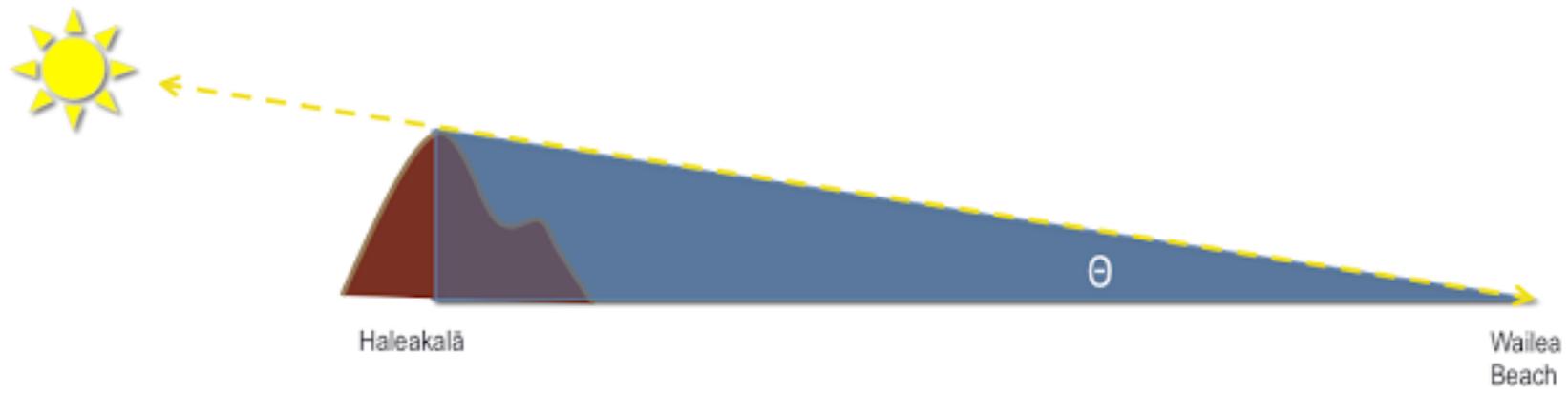
Data MBARI  
Data LDEO-Columbia, NSF, NOAA  
Image © 2013 TerraMetrics  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth

# *But there's giant mountain here: Haleakala*

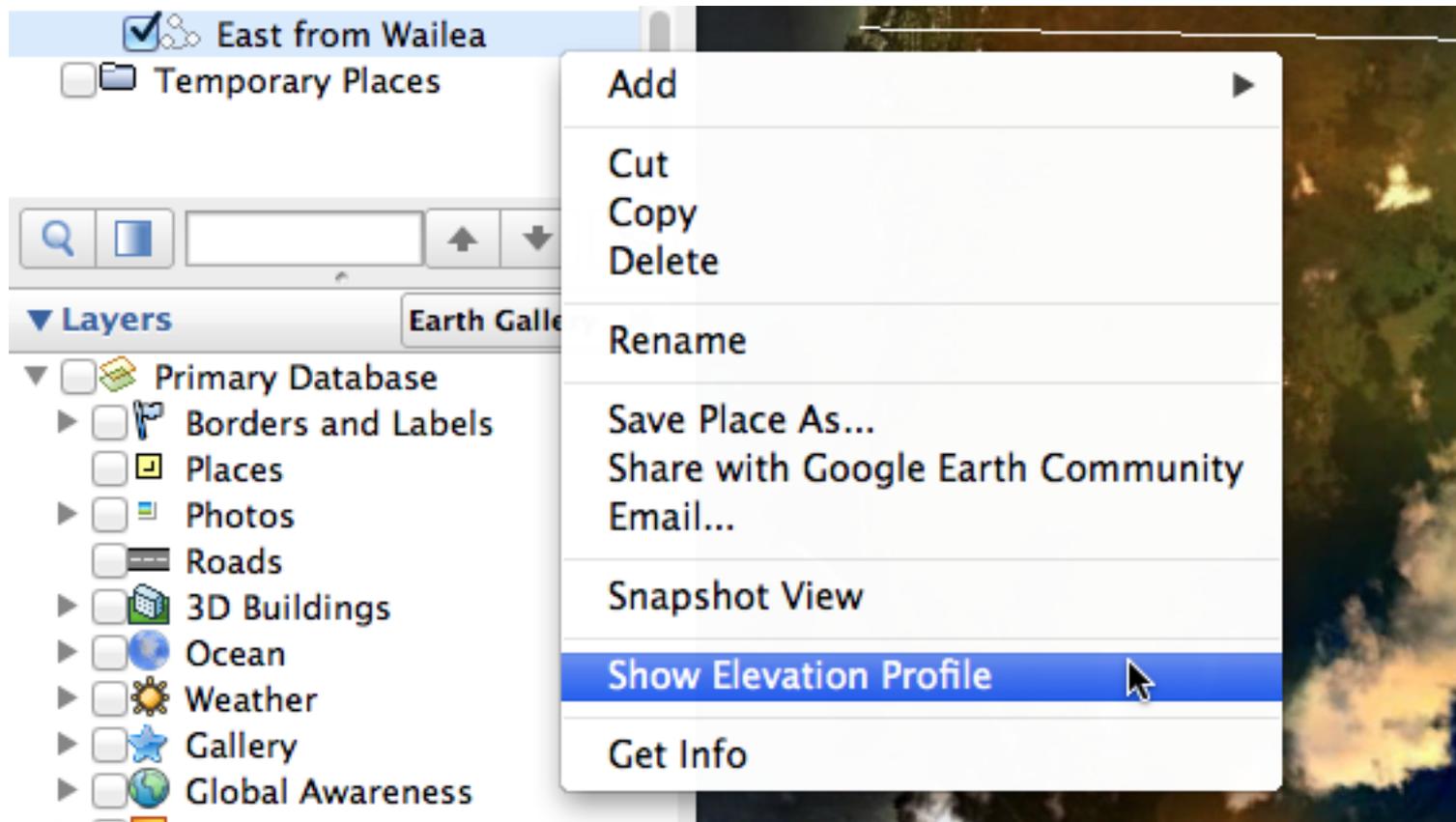


# Some basic trig...

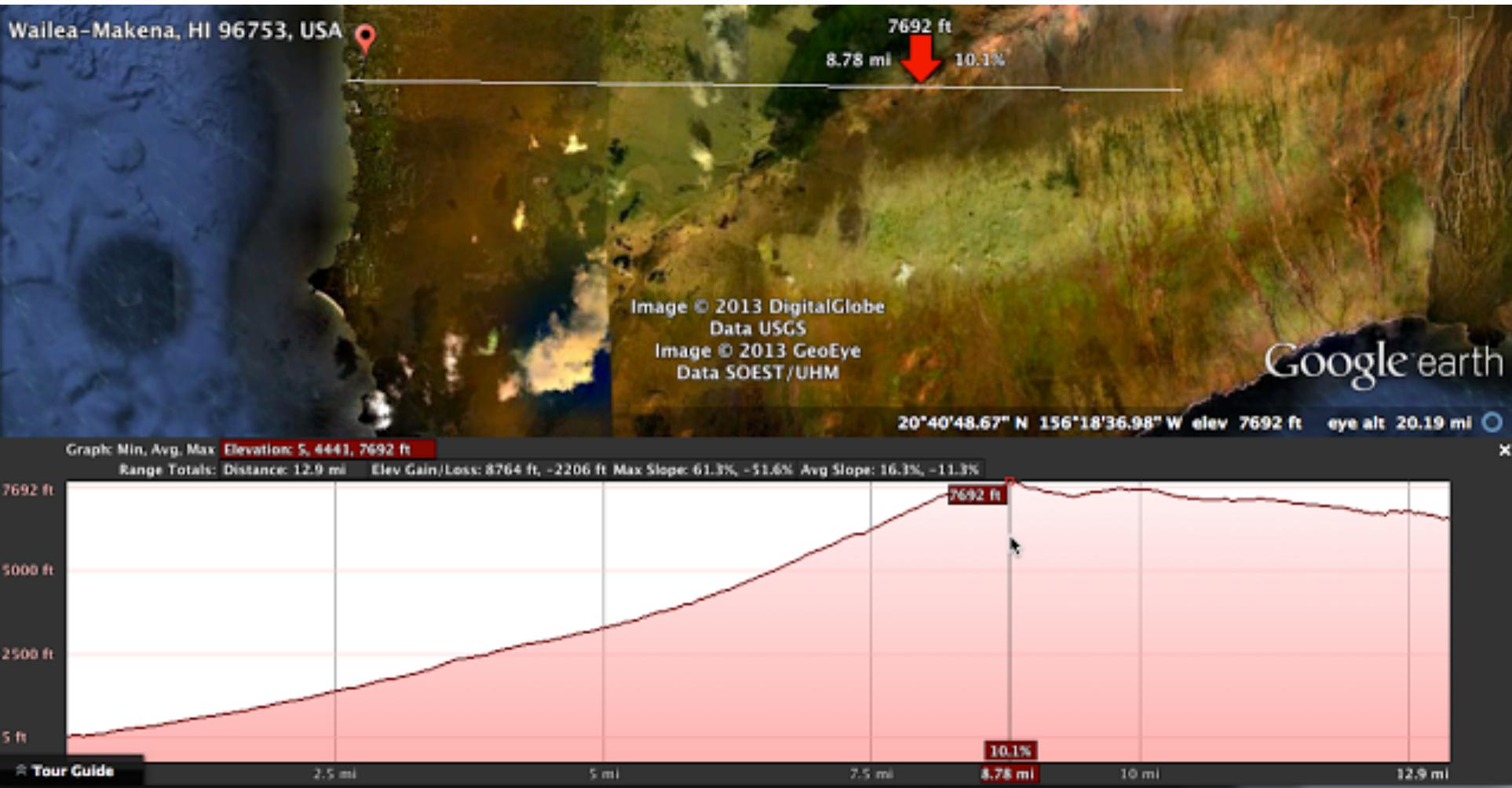


# *Search for a tool to do the heavy lifting*

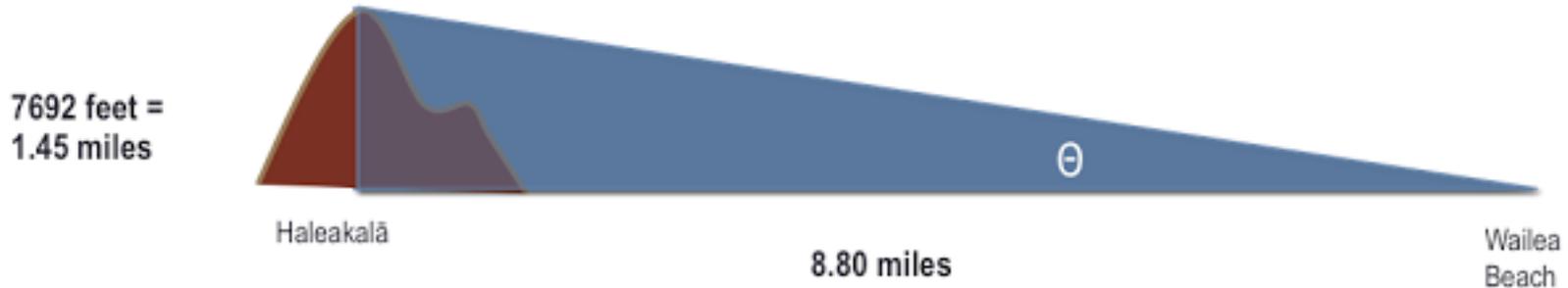
- Google Earth tools...



# Elevation profile...



# Plug in the numbers...



[ trig identities ]

$$\text{opposite} / \text{adjacent} = \tan ( \Theta )$$

[ 7692 feet in miles ]

$$1.45 / 8.78 = \tan ( \Theta )$$

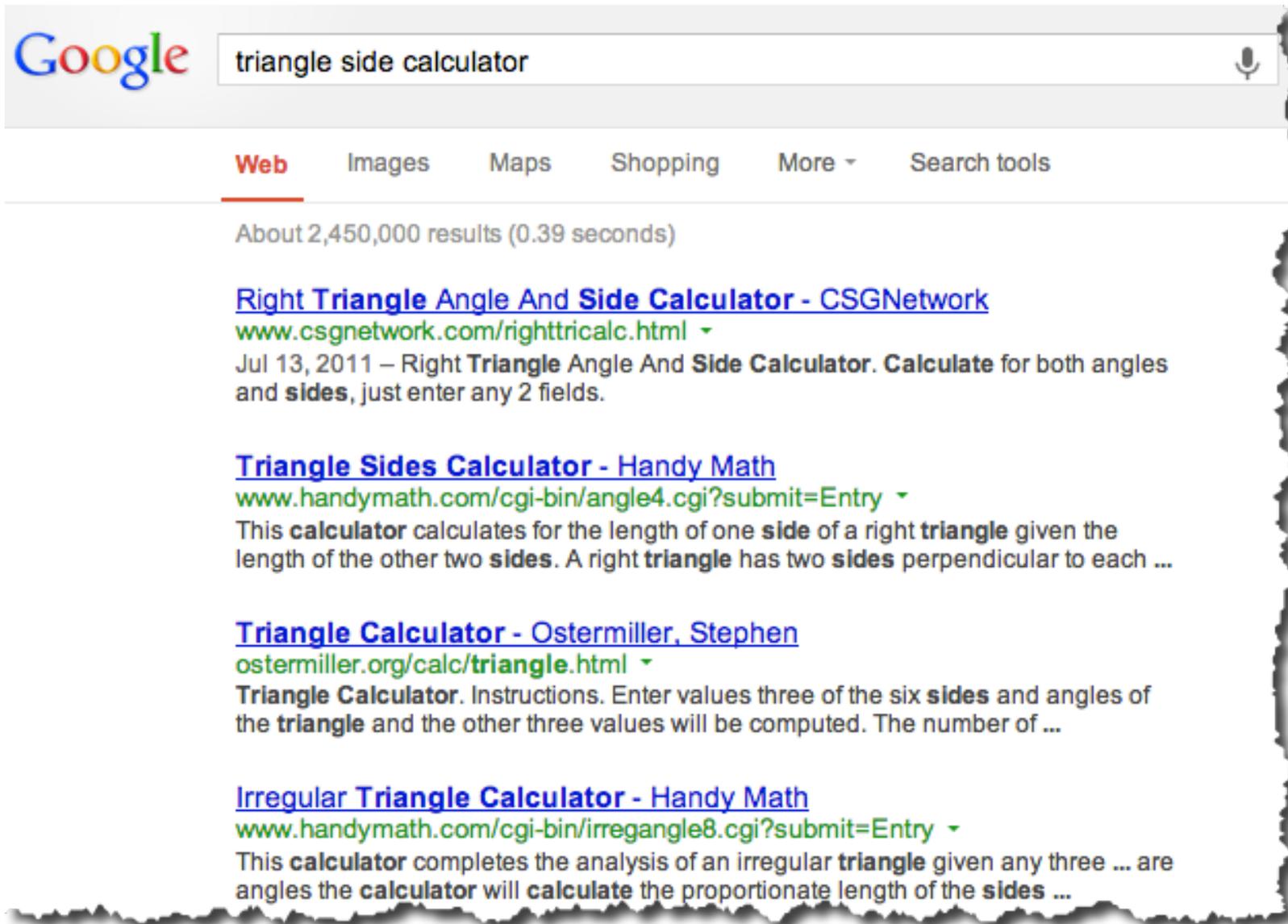
$$1.45 / 8.78 = 0.1651$$

[ arctan (0.1651) ]

Last step—how many minutes will it take the sun to climb 9.3749 degrees?

$$9.3749 / 0.27 = 34.7 \text{ minutes}$$

*Or... you could just look for a tool to do it...*



Google triangle side calculator

**Web** Images Maps Shopping More ▾ Search tools

About 2,450,000 results (0.39 seconds)

[Right Triangle Angle And Side Calculator - CSGNetwork](#)  
[www.csgnetwork.com/righttricalc.html](http://www.csgnetwork.com/righttricalc.html) ▾  
Jul 13, 2011 – Right Triangle Angle And Side Calculator. Calculate for both angles and sides, just enter any 2 fields.

[Triangle Sides Calculator - Handy Math](#)  
[www.handymath.com/cgi-bin/angle4.cgi?submit=Entry](http://www.handymath.com/cgi-bin/angle4.cgi?submit=Entry) ▾  
This calculator calculates for the length of one side of a right triangle given the length of the other two sides. A right triangle has two sides perpendicular to each ...

[Triangle Calculator - Ostermiller, Stephen](#)  
[ostermiller.org/calc/triangle.html](http://ostermiller.org/calc/triangle.html) ▾  
Triangle Calculator. Instructions. Enter values three of the six sides and angles of the triangle and the other three values will be computed. The number of ...

[Irregular Triangle Calculator - Handy Math](#)  
[www.handymath.com/cgi-bin/irregangle8.cgi?submit=Entry](http://www.handymath.com/cgi-bin/irregangle8.cgi?submit=Entry) ▾  
This calculator completes the analysis of an irregular triangle given any three ... are angles the calculator will calculate the proportionate length of the sides ...



Wailea Beach, HI  
7:42 AM

**\* General principle: Look for tools** *(know what's possible)*

Can you find a way to graph the equation:

$$y = x^2 + \sin(x)$$

# ... just type it directly into Google



Search

About 5,770,000,000 results (0.29 seconds)

Everything

Images

Maps

Videos

News

Shopping

Applications

More

Mountain View, CA

Change location

Any time

Past hour

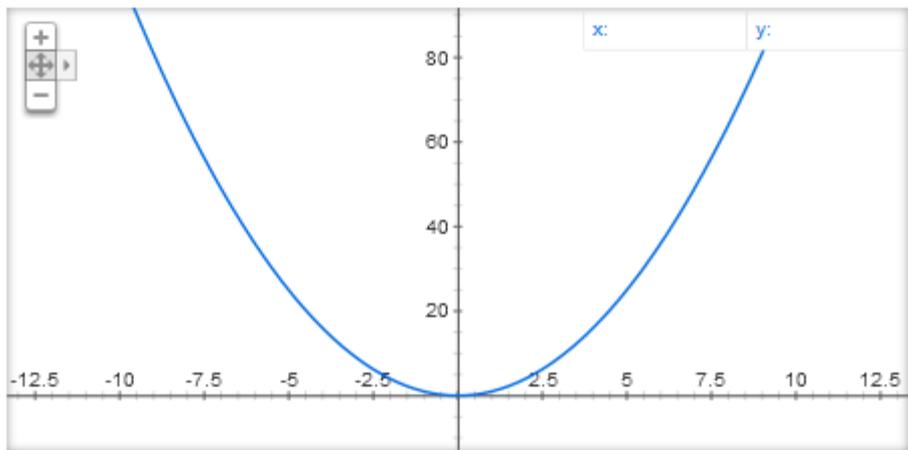
Past 24 hours

Past 2 days

Past week

Past month

Graph for  $x^2$



[X2 \(2003\) - IMDb](#)

[www.imdb.com/title/tt0290334/](http://www.imdb.com/title/tt0290334/)

★★★★★ Rating: 7.6/10 - 171,342 votes

The X-Men band together to find a mutant assassin who has made an attempt on the President's life, while the Mutant Academy is attacked by military forces.

Directed by [Bryan Singer](#). Starring [Patrick Stewart](#), [Hugh Jackman](#).

↳ [Full cast and crew](#) - [Alan Cumming](#) - [Memorable quotes](#) - [Trivia](#)



$x^{\sin(y)}$

Search

20 personal results. 25,800,000 other results.

Web

Images

Maps

Videos

News

Shopping

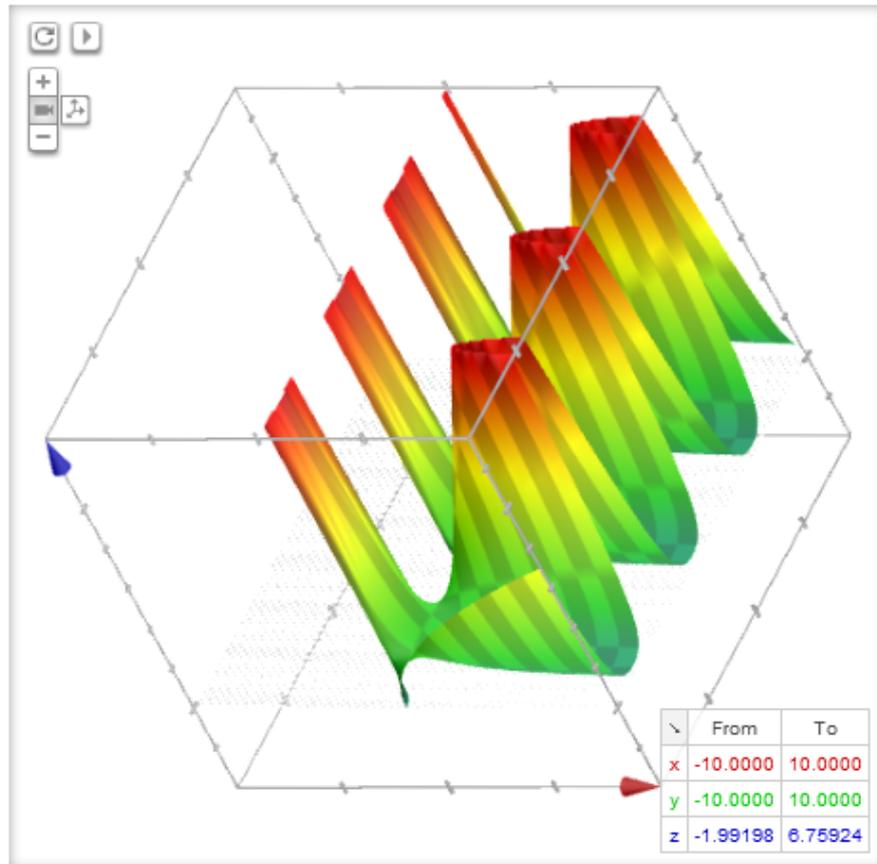
Discussions

More

Palo Alto, CA  
Change location

Show search tools

Graph for  $x^{\sin(y)}$



## \* **Calculator / Conversions**

- Can you figure out how to use the calculator on Google?
  - Once you have figured it out try figuring these out!
    1.  $4 + 5 + 19 = ??$
    2.  $45023 / 34 + 5 / 29 = ??$
    3.  $\text{Sin}(0.5) ** 2 = ??$

# Calculator... answer

sin(0.5) 

**Web** Images Maps Shopping More ▾ Search tools

About 70,900,000 results (0.45 second...)

sin(0.5 radians) =  
**0.4794255386**

Rad		x!	(	)	%	AC
Inv	sin	ln	7	8	9	÷
π	cos	log	4	5	6	×
e	tan	√	1	2	3	-
Ans	EXP	x <sup>y</sup>	0	.	<b>=</b>	+

# Conversions

- General pattern: [ *number units1 in units2* ]

100 meters in miles 

**Web** Images Maps Shopping More ▾ Search tools

About 4,300,000 results (0.49 second...)

Length ▾

100	=	0.0621371
Meter ▾		Mile ▾

# Conversions

- Conversions:

[ **212F in C** ]

[ **400 yards in miles** ]

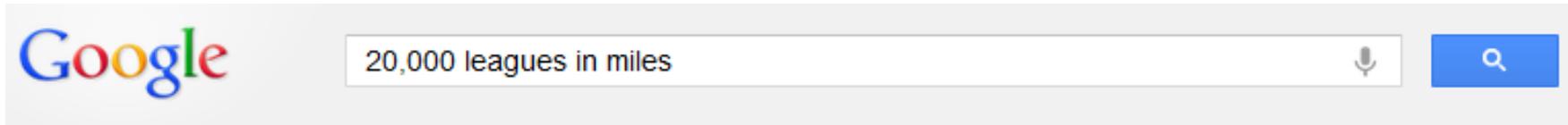
[ **32 euros in USD** ]

[ **23 bushels in quarts** ]

[ **2 inches in Angstroms** ]

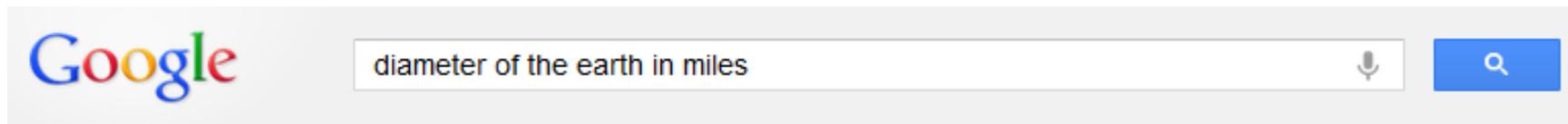
[ **23 cm in ml** ] *CAUTION: Won't tell you when  
you're incompatible.....*

# *Just to double check things you think you know...*



**20 000 leagues = 69 046.7669 miles**

[More about calculator.](#)



**diameter of the earth = 7 926.3352 miles**

[More about calculator.](#)

# Alerts <http://www.google.com/alerts>

aka “standing queries”

- Scan news, groups, web, videos, comprehensive...
- Generate emails automatically
  - Use in conjunction with advanced search techniques

[Web](#) [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼

Google alerts  
beta

Search terms:  [Preview results](#)

Type:

How often:

Volume:

Your email:

## Monitor the Web for interesting new content

Google Alerts are email updates of the latest relevant Google results (web, news, etc.) based on your choice of query or topic.

Enter the topic you wish to monitor, then click preview to see the type of results you'll receive. Some handy uses of Google Alerts include:

- monitoring a developing news story
- keeping current on a competitor or industry
- getting the latest on a celebrity or event
- keeping tabs on your favorite sports teams

You can also [sign in to manage your alerts](#)

## \* *Google Trends*

- search volume patterns across specific regions, categories, time frames and properties

**[ Google Trends ]**

## Explore trends

## Hot searches

Search terms 

× flu

× influenza

+ Add term

▸ Other comparisons

## Limit to

Web Search ▸

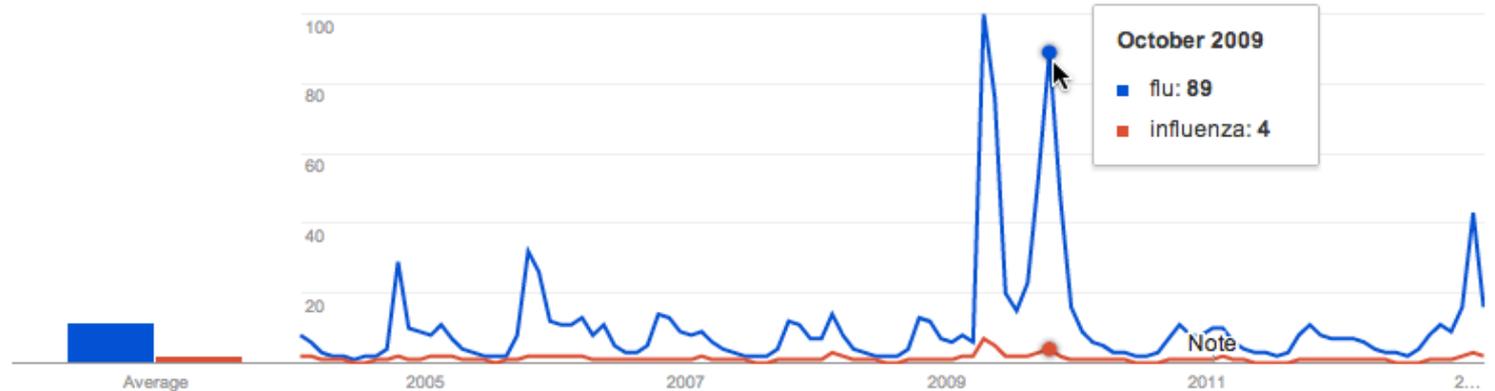
United States ▸

2004 - present ▸

All Categories ▸

Interest over time 

The number 100 represents the peak search volume

 News headlines Forecast 

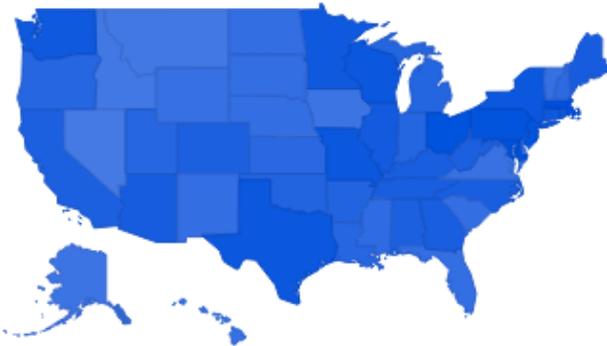
Embed

flu

influenza

Regional interest 

Worldwide &gt; United States

Related terms 

Top

Rising

swine flu

100



flu symptoms

70



the flu

55



flu shot

45



symptoms swine flu

25



flu a

25



stomach flu

25



# Trends [ football, basketball, baseball ]

Trends

Web Search Interest: **football, basketball, baseball**. Worldwide, 2004 - present.

Explore trends

Hot searches

Search terms

- football
- basketball
- baseball
- + Add term
- Other comparisons

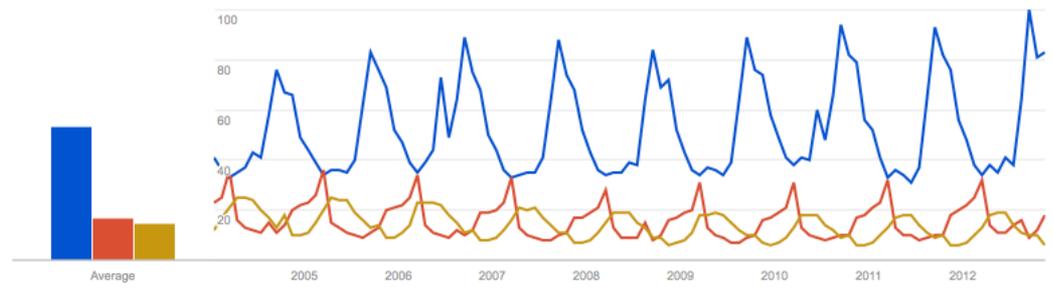
Limit to

- Web Search
- Worldwide
- 2004 - present
- All Categories

Interest over time

The number 100 represents the peak search volume

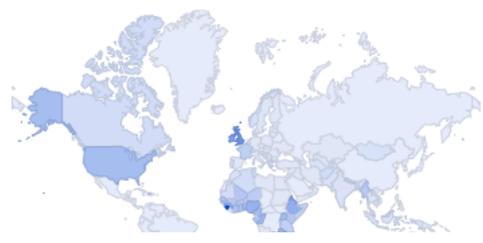
News headlines  Forecast



Embed

football | basketball | baseball

Regional interest



Related terms

Top | Rising

Term	Interest Score
fantasy football	100
bbc	75
bbc football	75
college football	50
football manager	45
football games	30

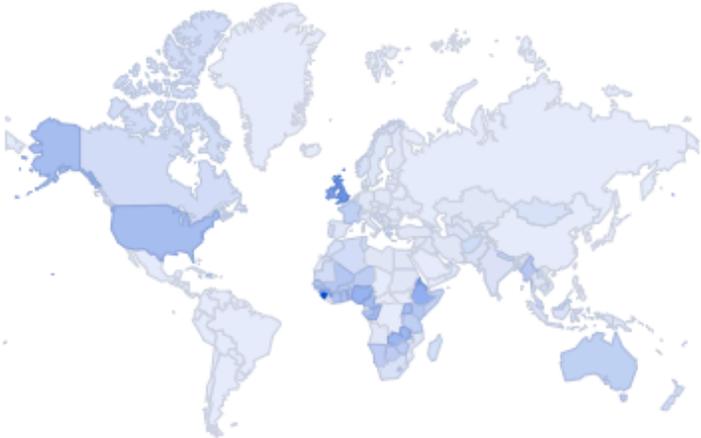
# Lower half: filter by region

Limit to Embed

Web Search ▾  
Worldwide ▾  
2004 - present ▾  
All Categories ▾

**football**    basketball    baseball

**Regional interest** ?  



0  100      Region | City

▸ View change over time ? Embed

**Related terms** ? Top Rising

fantasy football	100	
bbc	75	
bbc football	75	
college football	50	
football manager	45	
football games	30	
games	30	
football team	25	
espn football	25	
live football	25	

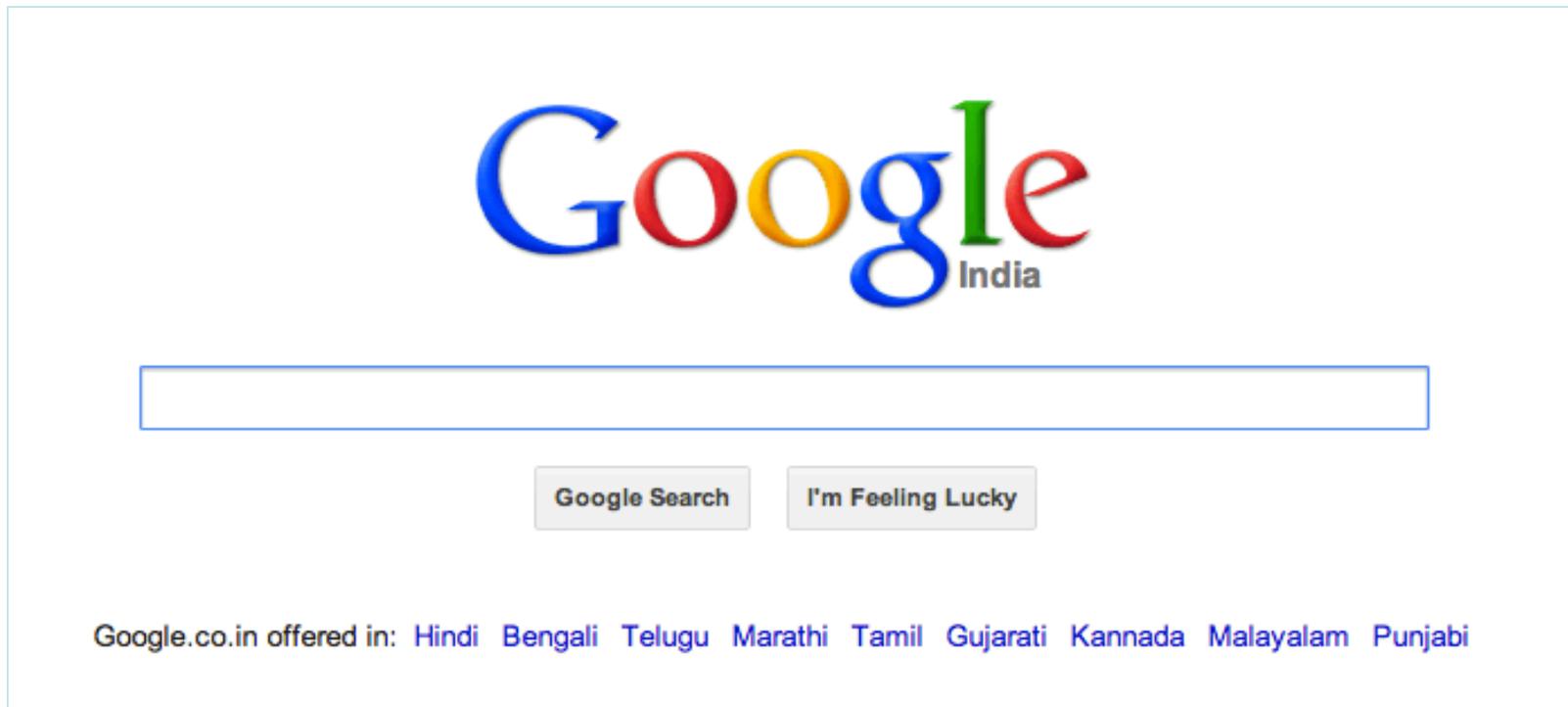
Embed

# ***Methods to find information from other languages***

1. Go to the Google web search for that country.
2. Use the built-in other-language tool

# 1. Go to country's own Google

- Example: Google.co.in



# Selecting Hindi from the home page: [ eurozone ]

## खोज

लगभग 53,600,000 परिणाम (0.27 सेकंड)

### वेब

#### [Eurozone - Wikipedia, the free encyclopedia](#)

[en.wikipedia.org/wiki/Eurozone](http://en.wikipedia.org/wiki/Eurozone) - इस पृष्ठ का अनुवाद करें

### छवियां

The **eurozone** ( About this sound pronunciation (help·info)), officially called the euro area, is an economic and monetary union (EMU) of 17 European Union (EU) ...

### नक्शे

[Member states](#) - [Administration and representation](#) - [Economy](#) - [Bailout provisions](#)

### समाचार

### अधिक

#### [eurozone की छवियां](#) - छवियों की रिपोर्ट करें



### ...के पास खोजें

### वेब

#### [Euro Zone | Reuters.com](#)

[www.reuters.com/subjects/euro-zone](http://www.reuters.com/subjects/euro-zone) - इस पृष्ठ का अनुवाद करें

### भारत के पृष्ठ

Israel's top diplomat scorns EU rebuke on Jerusalem settlement. JERUSALEM - Israel's foreign minister on Saturday dismissed criticism by the European Union ...

### अनुवादित विदेशी पृष्ठ

### अधिक खोज उपकरण

# Different Googles to try...

- Pay attention to the languages version
  - Google.co.za (S. Africa)
  - Google.co.ke (Kenya)
  - Google.co.id (Indonesia)
  - Google.co.vt (Việt Nam)
  - etc....



# Exceptions

- Notes:
  - MOST countries use **Google.co.??** as their domain
  - BUT.. Some are **Google.com.??** (e.g., Ghana: Google.com.gh )
  - SOME.. Are **Google.??** (e.g., Rwanda: Google.rw )
  
- Not possible to use Google to search some domains:
  - Bhutan
  - Mayotte
  - etc...
  
  - But you CAN use the site:yt to search Mayotte (YT) or site:bt to search Bhutan (BT)

# *Different Googles to try...*

- Fastest way to find country Google access?
  - [ Google <country> ]

## *Key lesson 7*

**Expert searchers search for tools when they have a tool-shaped problem.**

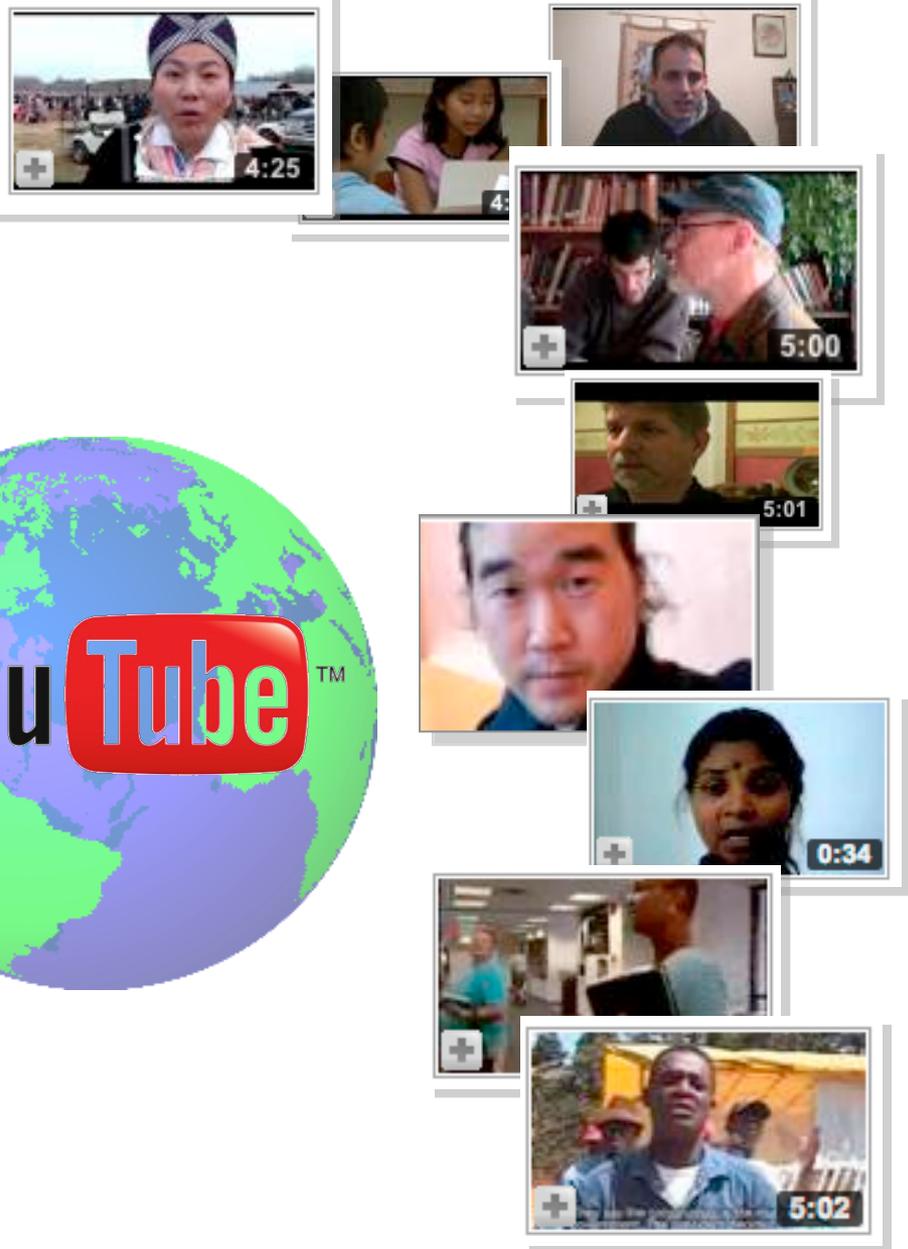
# *Key lesson 8*

**Know how to use  
different media types.**

Every minute  
100+ hours of video are uploaded

3 billion  
videos watched every day

70%  
of traffic is international



# Breaking news on YouTube – youtube.com/citizentube

## YouTube CITIZENTUBE

POST TO:   

MONDAY, JULY 19, 2010

### Singaporeans Fret Over 3rd Flash Flood in 30 Days

Singapore's parliament opened hearings today on a series of damaging flash floods which have swept the city in the past month, most recently this weekend. Singapore's environment minister [blamed a prevailing "La Nina" wet weather pattern](#) and Typhoon Conson, but said [global climate change](#) may also play a part.

**Flood in singapore Roti Prata House upp thoms..**



YouTube

0:00 / 2:40

#### About CitizenTube

CitizenTube is a feed of the latest breaking news videos on YouTube. If you've uploaded or discovered news footage, please tweet it to us (@citizentube) with as much context as you're able to provide.

#### Blog Archive

- ▼ 2010 (317)
  - ▼ July (79)
    - [Citizens Capture Deadly Drug Trafficker-Mexican Ar...](#)
    - [Wildfire Scorches Central Washington State](#)
    - [San Francisco Police Knock Out Resisting Suspect](#)
    - [Singaporeans Fret Over 3rd Flash Flood in 30 Days](#)
    - [India Train Crash Kills 61, Sabotage Not Ruled Out...](#)
    - [Scaffolding Collapse Delays Central American Games...](#)
    - [Convict Loses in Oakland Freeway Shootout with Hig...](#)
    - [Cyclone Dumps Thousands of Mollusks on Pakistan Be...](#)
    - [Climate Change Protestors Shut Down](#)

# YouTube Trends – the “watercooler of the web”

www.youtube.com/trends

**YouTube Trends** Discover your own YouTube Trends

**Glide 2**  
by StraylightUK

0:05 / 1:56 240p

**4 @ 4 PM**

**Frozen Train Station**

Camera films a train station in slow motion as it whizzes past for a unique effect. The video was posted in August.

**Glide 2**  
by StraylightUK | undefined 03, 2010  
568,194 views

I Hope This Gets T...

Frozen Train Station

Play

Comfortably Numb

Current

**Newsroom**

## How the TSA Went 'Viral' on YouTube

By Kevin Allocca 12:06 PM | Dec 3, 2010 | Categories: **Newsroom**

The Transportation and Security Administration has been a hot topic in the past month, and today our top trending video is footage captured at an Oklahoma City airport of wheel-chair bound Tammy Barvick, who **stepped to her underwear** to avoid a search. That clip, which you can **view directly here**, has been viewed over a million times in the past day.

**Airport Security TSA - Longest line ever!**  
by omgspencer

0:05 / 0:24 360p

**Trending Topics**

- Turkey Host Blows
- Bruno Mars Grenade
- Qatar Uzbekistan Football Miss in History
- Susan Boyle On The View
- Chris Brown Bow Wow Official
- Cleveland LeBron James

**Top 10 Searches**

- Tom Cruise
- America's Future
- Baby Otters
- Lady Gaga
- How To

**Most Shared**

- Christmas Food Court Flash Mob, Hallelujah Chorus...
- Cats Playing Patty-Cake, What They Were Saying...

**Most Viewed 'TSA' Videos** Click graphs to watch

Video Title	Views
TSA Screening, Terminal 2	783.4K
TSA's enhanced security spurs	1.3M
Longest Line Ever	251.3K
Young Boy Strip Searched by TSA	1.8M
Help You Make It To Your Flight	783.4K

**Best of '10**

## Most Watched Movie Trailers of the Year

By Kevin Allocca 3:54 PM | Categories: **Best of '10**

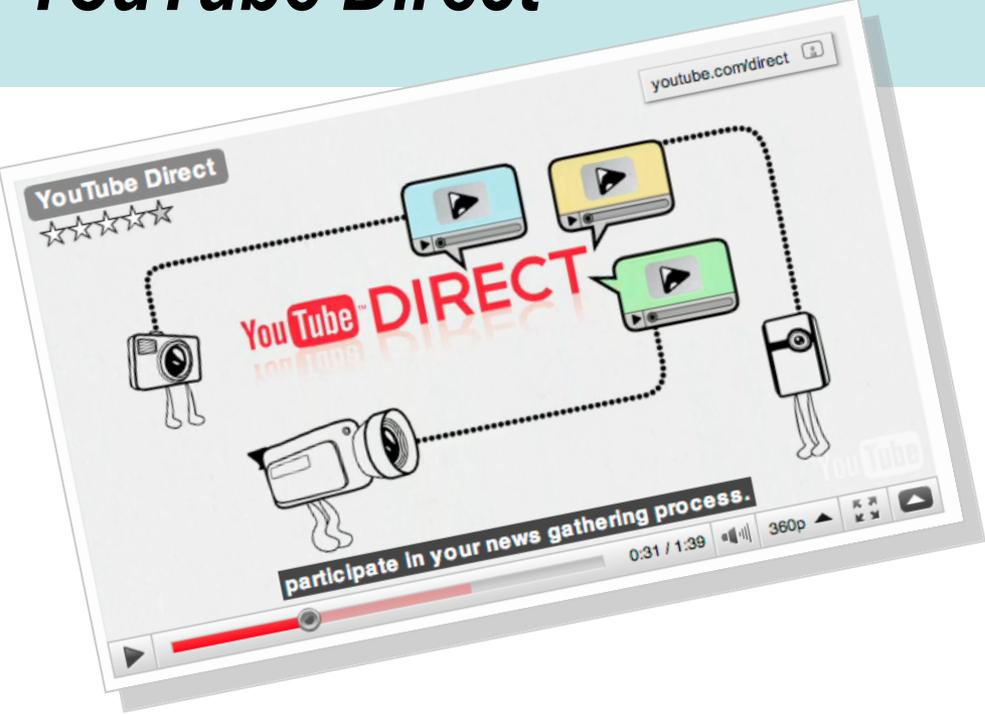
MUST RE-ENTER NUMBERS

As movie trailers go, 2010 was dominated on YouTube by the *Twilight* franchise and the third film *Twilight: Eclipse*. The top viewed trailers for that film combined for **over 30 million worldwide views** this year. "Eclipse trailer" was also the **top spiking search** on YouTube for March of this year.

Here are the most viewed trailers in the US:

This Year	Trailer	US Views
1	<b>THE TWILIGHT SAGA: ECLIPSE - Trailer</b> by OfficialTwilightFilm	5.23 M
2	<b>Clash of the Titans CHOOSE (30sec Spot) Now Pla...</b> by clashofthetitans	4.72 M
3	<b>Harry Potter and the Deathly Hallows Trailer Offi...</b> by clevverTV	2.94 M
4	<b>Watch the new THE KARATE KID Trailer in HD</b> by SonyPictures	2.62 M
5	<b>The Expendables' Trailer HD</b> by hollywoodstreams	2.19 M
6	<b>The Virginity Hit - In Theaters 9/10</b> by virginityhit	2.18 M
7	<b>Iron Man 2 Trailer 2 (OFFICIAL)</b> by MARVEL	2.13 M
8	<b>Despicable Me - Trailer 6</b> by DespicableMeMovie	1.69 M
9	<b>Toy Story 3: Trailer 2</b> by DisneyMovieTrailers	1.58 M
10	<b>'Resident Evil: Afterlife' Trailer HD</b> by hollywoodstreams	1.37 M

# YouTube Direct



## youtube.com/direct

YouTube Direct allows you to embed the upload functionality of YouTube directly into your own site, enabling your organization to request, review, and re-broadcast user-submitted videos with ease. News organizations can ask for citizen reporting.

"Going Rogue" special: Can Sarah Palin make a political comeback? Would that be good or bad for the GOP?

Share this [Facebook] [Twitter] [LinkedIn] [Reddit] [StumbleUpon] [Dribbble] [Delicious] [Bookmark] [Print] [Email]



powered by YouTube

**PROJECT POLITICO**

Want your opinion to be seen and heard? Be a part of the conversation by sharing your video feedback with POLITICO.

[Submit Your Video](#)

# Email uploads: [www.youtube.com/account](http://www.youtube.com/account)

Account Settings

- Overview
- Profile Setup
- Customize Homepage
- Playback Setup
- Email Options
- Privacy
- Activity Sharing
- Mobile Setup**
- Manage Account

### Mobile Setup

**Upload videos from your phone by sending them to:**  
**[t1pg7y4bhxyz@m.youtube.com](mailto:t1pg7y4bhxyz@m.youtube.com)**

(Tip: Enter this address into your phone book as a contact.)

Note: This is your own unique address. All videos sent to this address will be uploaded to the account [sdgrove11](#). Want a different address? [Click Here](#)

# For Schools: YouTube.com/edu

YouTube  Q ▼ [Browse](#) | [Movies](#) | [Upload](#) Dan Russell **21** + 

[Videos](#) [Music](#) [Movies](#) [Shows](#) [Live](#) [Sports](#) [Education](#) [News](#)

 Welcome to YouTube EDU. [Learn more.](#) ✕

**EDU** > [All Categories](#) ▼



**Solving Systems Graphically**  
by [khanacademy](#)  
Some practice solving systems graphically!  
2:22



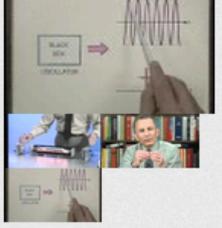
**Hurricane Sandy**  
by [NASATelevision](#)  
Space Station Cameras Capture Views of Approaching Hurric...  
8:33



**Teenage life in ancient Rome**  
by [TEDEducation](#)  
Welcome to the world of Lucius Popidius Secundus, a 17-ye...  
6:35

◀ ● ● ● ▶

**University** » 1 of 3 ◀ ▶



**MIT Understanding Lasers and**  
COURSE by MIT



**Iain Banks, in conversation with The**  
by [OUlearn](#)



**MIT 9.00SC Introduction to**  
COURSE by MIT



**Public Sociology, Live!**  
COURSE by [UCBerkeley](#)



**EDUCATE. ENGAGE. INSPIRE.**

[LEARN MORE](#)

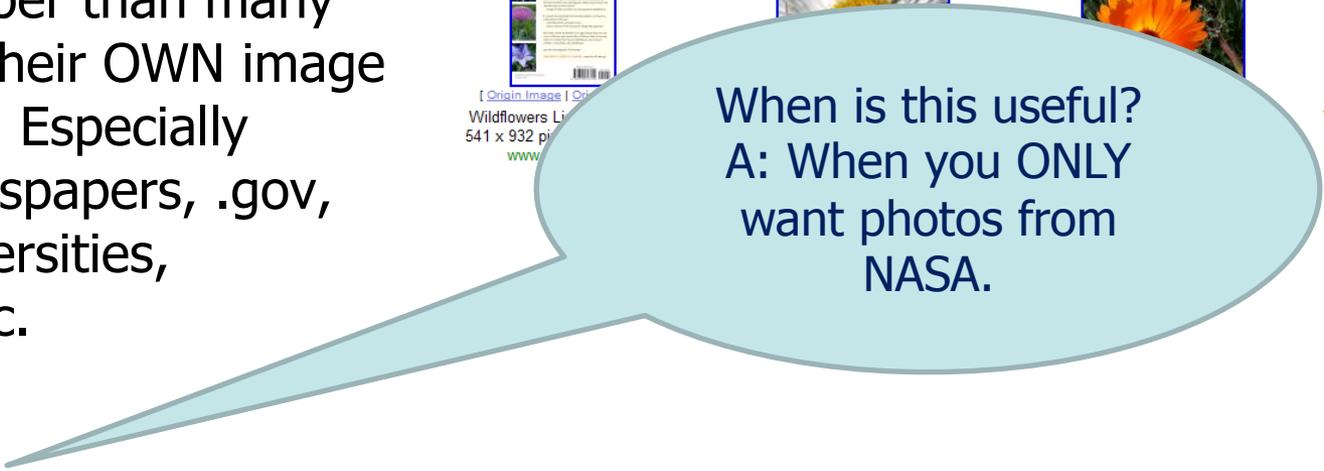


# Images

- Images.google.com
- But remember than many sites have their OWN image collections. Especially true of newspapers, .gov, NASA, universities, libraries, etc.

- Example:

- <http://www.nasa.gov/multimedia/imagegallery/index.html>
- As an alternative [ **Hubble images site:usgs.gov** ] – in image search



# Creative Commons filtering on Google



<b>Find results</b>	related to <b>all</b> of the words	<input type="text" value="jaguar"/>	<input type="button" value="Google Search"/>
	related to the <b>exact phrase</b>	<input type="text"/>	
	related to <b>any</b> of the words	<input type="text"/>	
	<b>not related</b> to the words	<input type="text"/>	
<b>Content types</b>	Return images that contain	<input checked="" type="radio"/> any content <input type="radio"/> news content <input type="radio"/> faces <input type="radio"/> photo content <input type="radio"/> clip art <input type="radio"/> line drawings	
<b>Size</b>	Return images that are	Any size <input type="button" value="v"/>	
<b>Exact size</b>	Return images exactly the size	Width: <input type="text"/> Height: <input type="text"/>	<a href="#">Use my desktop size</a>
<b>Aspect ratio</b>	Return images with an aspect ratio that is	Any aspect ratio <input type="button" value="v"/>	
<b>Filetypes</b>	Return only image files formatted as	any filetype <input type="button" value="v"/>	
<b>Coloration</b>	Return only images in	any colors <input type="button" value="v"/>	
<b>Domain</b>	Return images from the site or domain	<input type="text"/>	
<b>Usage Rights</b>	Return images that are	not filtered by license <input type="button" value="v"/> <a href="#">More info</a>	
<b>Safe Search</b>	<input type="radio"/> No filtering <input checked="" type="radio"/> Use moderate filtering <input type="radio"/> Use strict filtering		

not filtered by license

not filtered by license

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labeled for reuse with modification

labeled for commercial reuse with modification

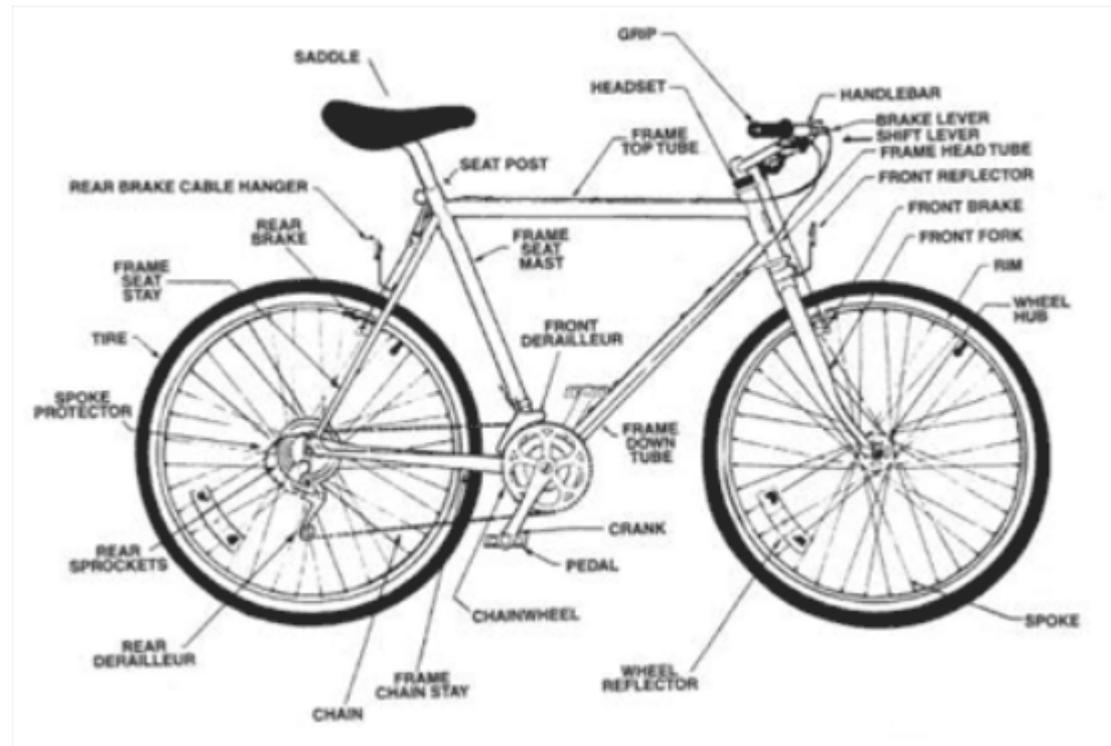
# **Tactic:** *Clever Images Trick*

- What's that part of the bike called?



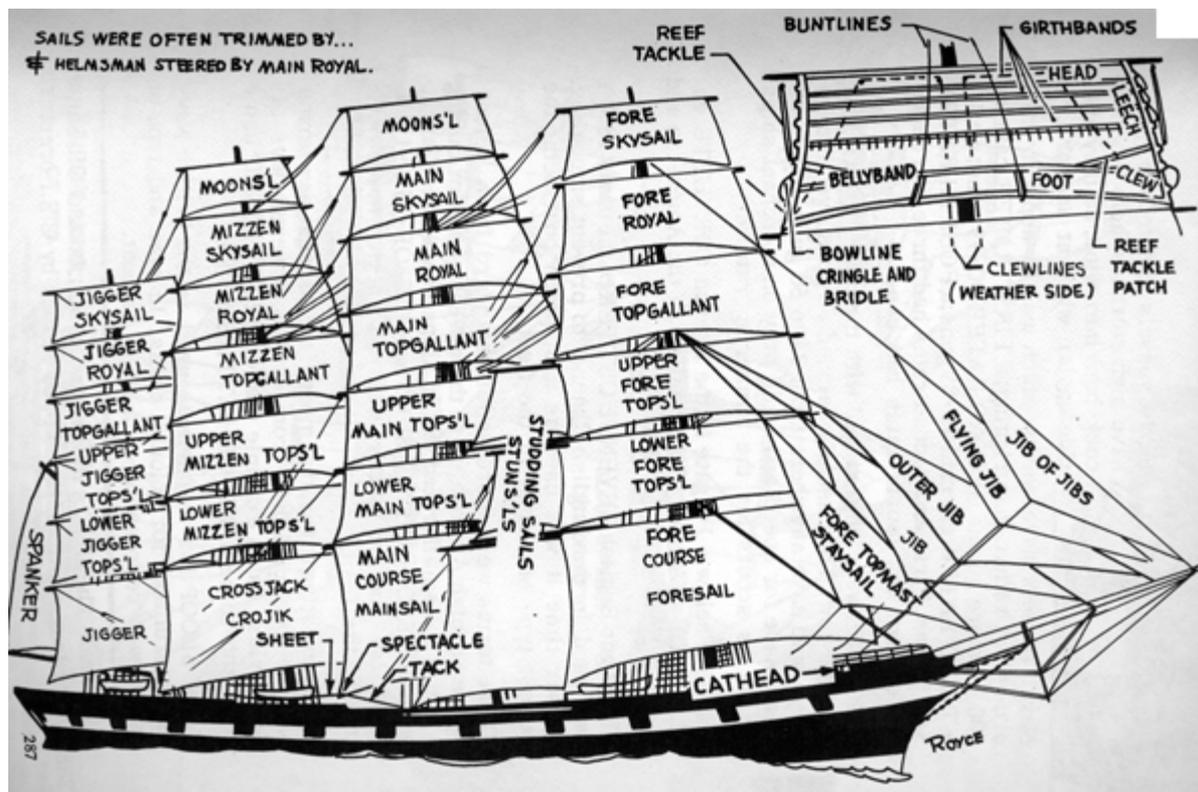
# Go to Images, search for a diagram

- [ bike diagram ]



# What's the topmost sail, first mast on a clipper ship??

- [ ship sail diagram ]



# Books



### Researching a topic?



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Result 2 of 10 in this book for manta ray - < Previous Next > - View all

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 ★★★★★  
 0 Reviews  
 Write review

**Sharks, Skates, and Rays of the Gulf of Mexico: A Field Guide**

By Glenn R. Parsons

manta ray

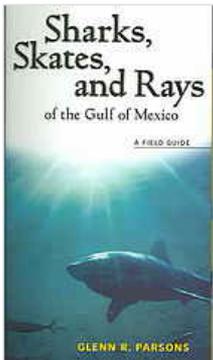
Go

About this book



**Manta ray, *Manta birostris***

**CHARACTERS:** The **manta** is the world's largest **ray**. It is readily recognized by its very large head; large, hornlike cephalic fins; a deeply concave head between the cephalic fins; a terminal mouth; a very short, slender tail usually with no spine; a disc wider than it is long; and pointed pectorals. The color is blackish, reddish, or brownish above occasionally with white shoulder patches. The ventral surface is white occasionally with gray blotches.




## Sharks, skates, and rays of the Gulf of Mexico : a field guide

Author: [Glenn R Parsons](#)

Publisher: Jackson [Miss.] : University Press of Mississippi, 2006.

Edition/Format: Book : English [View all editions and formats](#)

Summary: Features full-colour photography, complemented by line-drawings and keys that help the reader identify various species. Each group is arranged by family, with entries featuring: full-colour [Read more...](#)

Rating: ☆☆☆☆☆ (not yet rated) [0 with reviews - Be the first.](#)

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  - [Skates \(Fishes\) -- Mexico, Gulf of -- Identification.](#)
  - [Rays \(Fishes\) -- Mexico, Gulf of -- Identification.](#)
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1. <a href="#">Stanford University Libraries</a> Stanford, CA 94305 United States	<a href="#">Book</a>	2 miles <input type="button" value="MAP IT"/>	<a href="#">Library info</a> <a href="#">Add to favorites</a>

# US Patents

- [Google.com/patents](http://Google.com/patents)
- Usually want to use advanced search here

The screenshot displays the Google Patent Search interface. At the top center is the Google logo with "Patent Search" and "BETA" below it. To the left is a search input field, and to the right is a "Search Patents" button. Further right are links for "Advanced Patent Search" and "Google Patent Search Help". Below the search bar, it says "Search over 7 million patents." A grid of five patent thumbnails is shown, each with a caption below it: "Finger puppet", "GOLF CLUB", "Chicken breeding machine", "DESIGN FOR A SALOON FIXTURE", and "Egg crate". At the bottom, there are links for "Google Home", "About Google", and "About Google Patent Search", along with the copyright notice "©2008 Google".





Scholar

About 9,080 results (0.09 sec)

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Articles

Legal documents

Any time

Since 2013

Since 2012

Since 2009

Custom range...

Sort by relevance

Sort by date

 include patents include citations Create alert

### [The cost structure of sensemaking](#)

[DM Russell](#), [MJ Stefik](#), [P Pirolli](#), [SK Card](#) - ... of the INTERACT'93 and CHI' ..., 1993 - [dl.acm.org](#)

Abstract Making sense of a body of data is a common activity in any kind of analysis.

**Sensemaking** is the process of searching for a representation and encoding data in that representation to answer task-specific questions. Different operations during **sensemaking** ...

Cited by 357 [Related articles](#) [All 11 versions](#) [Cite](#)

[\[PDF\] from psu.edu](#)

### [\[PDF\] The sensemaking process and leverage points for analyst technology as identified through cognitive task analysis](#)

[P Pirolli](#), [S Card](#) - [Proceedings of International Conference on ...](#), 2005 - [vadl.cc.gatech.edu](#)

... **Russell** et al. (1993) have explicated the inner re- representational **sensemaking** process for a case in which large amounts of information had to be digested to create a curriculum for printer repairmen. ... Figure 1. Learning Loop Complex theory of **sense- making (Russell, et al. ...**

Cited by 211 [Related articles](#) [All 4 versions](#) [Cite](#) [More](#)▼

[\[PDF\] from gatech.edu](#)

### [Making sense of sensemaking](#)

[GW Furnas](#), [DM Russell](#) - [CHI'05 extended abstracts on Human factors in ...](#), 2005 - [dl.acm.org](#)

Making sense of the world is a common activity. It happens whenever you confront a new, complex problem. At work, your boss says, "Can you give a presentation next week on how wireless will affect our business?" Or perhaps, you join a new committee, and wonder " ...

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[\[PDF\] from umich.edu](#)

### [\[PDF\] Sensemaking for the rest of us](#)

[DM Russell](#), [R Jeffries](#), [L Irani](#) - [Sensemaking Workshop at CHI, 2008](#) - [comp.dit.ie](#)

ABSTRACT **Sensemaking** is simple—it's the way people go about their process of collecting, organizing and creating representations of complex information sets, all centered around some problem they need to understand. While there are a number of tools and systems to ...

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### [Supporting insight-based information exploration in intelligence analysis](#)

[J Gersh](#), [B Lewis](#), [J Montemayor](#), [C Piatko](#)... - [Communications of the ...](#), 2006 - [dl.acm.org](#)

... Christine Piatko, **Russell** Turner. ... back to top. Capturing the exploratory search process can help represent analytical insight. back to top. We are interested in the role of exploratory search in the intelligence analysis process, especially its role in **sensemaking**: how can exploring a ...

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# Scholar now contains legal opinions as well

Change type here

The screenshot shows the Google Scholar interface. At the top, the Google logo is on the left, followed by a search bar containing the text "sensemaking russell". To the right of the search bar is a blue search button with a magnifying glass icon and a "Give us feedback" link. Below the search bar, the word "Scholar" is displayed in red, followed by the text "About 85 results (0.15 sec)". On the right side of this section are three buttons: "My Citations" (with a pencil icon), an email icon, and a settings gear icon.

On the left side, there is a vertical menu with the following items: "Articles", "Legal documents" (highlighted in red), "Federal courts", "Massachusetts courts", and "Select courts" (a button). Below this menu are filters for "Any time" (with sub-options: "Since 2012", "Since 2011", "Since 2008", "Custom range...") and a checked checkbox for "include citations".

The main search results area displays three entries:

- Automation of legal sensemaking in e-discovery**  
C Hogan, RS Bauer... - *Artificial Intelligence and Law*, 2010 - Springer  
... 1 Often "sense-making". 436 C. Hogan et al. 123 Page 7. ... The central process for any legal reasoning can be seen as that of a **sensemaker** seeking to answer task-specific questions. ... 3. This 'sensemaking loop' can be formulated as a learning task (Russell et al. 1993). ...  
Cited by 4 - Related articles - All 5 versions
- Discovery-led refinement in e-discovery investigations: sensemaking, cognitive ergonomics and system design**  
S Attfield... - *Artificial Intelligence and Law*, 2010 - Springer  
... Sensemaking has been described as "the reciprocal interaction of information seeking, meaning ascription and ... Characteristically, sense-making involves a bi-directional interaction between engagement with data (ie bottom-up ... 2006, 2007; Pirolli and Card 2005; Russell et al. ...  
Cited by 3 - Related articles - All 7 versions
- Buckley v. Valeo**  
424 US 1, 96 S. Ct. 612, 46 L. Ed. 2d 659 - Supreme Court, 1976 - Google Scholar  
424 US 1 (1976). BUCKLEY ET AL. v. VALEO, SECRETARY OF THE UNITED STATES SENATE, ET AL. No. 75-436. Supreme Court of United States. Argued November 10, 1975. Decided January 30, 1976. [\*]. APPEAL FROM ...  
Cited by 14055 - How cited - Related articles - All 4 versions

At the bottom right of the results area, there is a link: "[PDF] from mdx.ac.uk".



roe v. wade



Scholar

About 33,800 results (0.16 sec)

My Citation

Articles

[Roe v. Wade](#)

410 US 113, 93 S. Ct. 705, 35 L. Ed. 2d 147 - Supreme Court, 1973 - Google Scholar

Legal documents

This Texas federal appeal and its Georgia companion, Doe v. Bolton, post, p. 179, present constitutional challenges to state criminal abortion legislation. The Texas statutes under attack here are typical of those that have been in effect in many States for approximately a century. The Georgia ...

Federal courts

Cited by 30824 - How cited - Related articles - All 4 versions

Massachusetts

courts

[Roe v. Wade](#)

314 F. Supp. 1217 - Dist. Court, ND Texas, 1970 - Google Scholar

Select courts

1220 Defendant challenges the standing of each of the plaintiffs to bring this action. However, it appears to the Court that Plaintiff **Roe** and plaintiff-intervenor Hallford occupy positions vis-a-vis the Texas Abortion Laws sufficient to differentiate them from the general public. ...

Cited by 319 - How cited - Related articles

Any time

Since 2012

Since 2011

Since 2008

Custom range...

[Maher v. Roe](#)

432 US 464, 97 S. Ct. 2376, 53 L. Ed. 2d 484 - Supreme Court, 1977 - Google Scholar

... The court found implicit in **Roe v. Wade**, 410 US 113 (1973), and Doe v. Bolton, 410 US 179 (1973), the view that "abortion and childbirth, when stripped of the sensitive moral arguments surrounding the abortion controversy, are simply two alternative medical methods of ...

Cited by 4493 - How cited - Related articles - All 4 versions

include citations

[Harris v. McRae](#)

448 US 297, 100 S. Ct. 2671, 65 L. Ed. 2d 784 - Supreme Court, 1980 - Google Scholar

... We address first the appellees' argument that the Hyde Amendment, by restricting the availability of certain medically necessary abortions under Medicaid, impinges on the "liberty" protected by the Due Process Clause as recognized in **Roe v. Wade**, 410 US 113, and its progeny ...

Cited by 1493 - How cited - Related articles - All 4 versions

# Data table search

- Can now search for data tables directly



**Tables** experimental

Results 1 - 10 of about 204,149 for connecticut. (0.16 seconds)

Web

All Tables

Fusion Tables

Web Tables

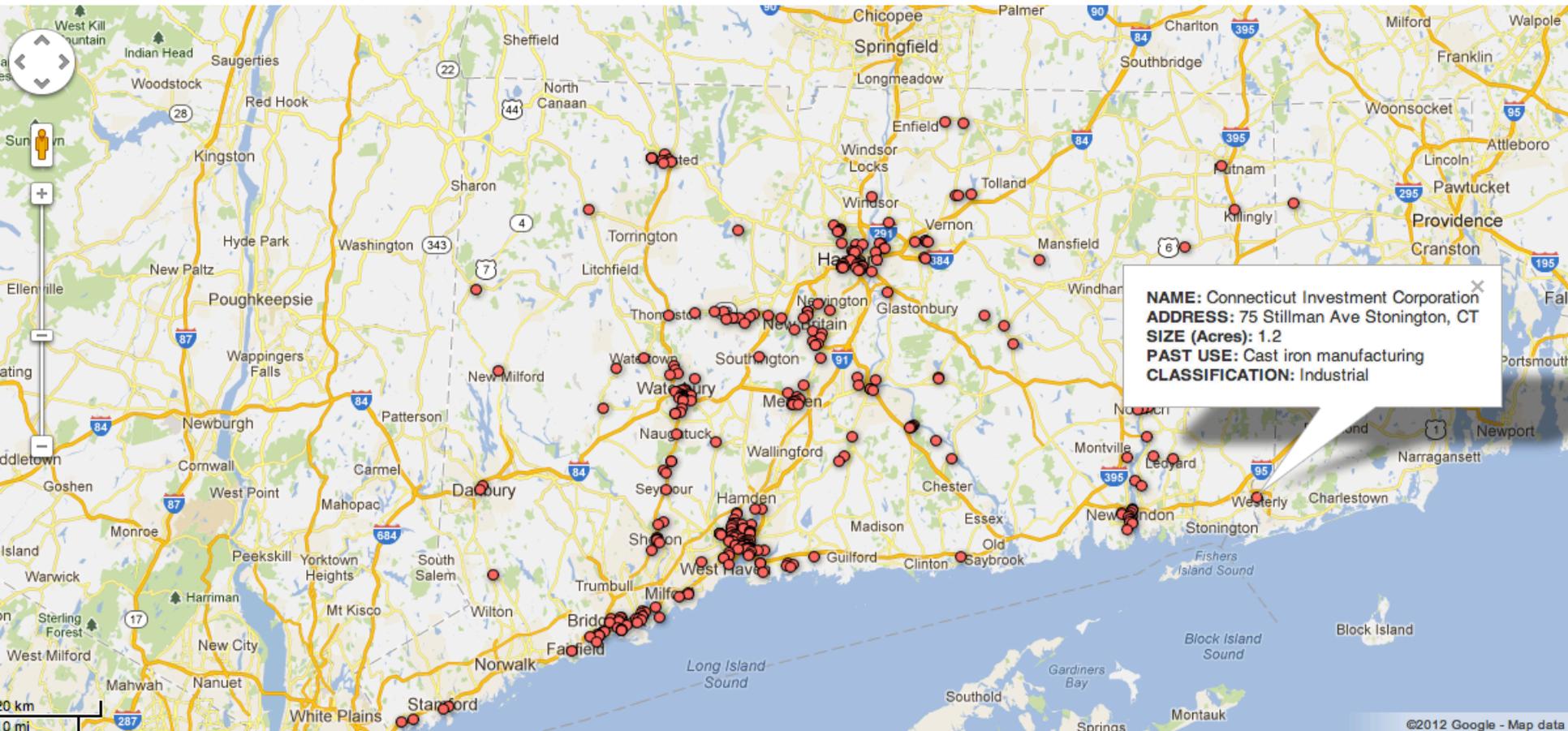
**Connecticut Brownfields**

<https://www.google.com/fusiontables/DataSource?docid...>

This is a partial map of brownfield sites in Connecticut. The actual number of brownfields is much higher, ...

**Connecticut Brownfields**

[Show more \(356 rows / 5 columns total\)](#) - Data courtesy of Dr. Maria Chrysochoou, ... - last modified: Jun 10, 2011



Tables experimental

Results 1 - 10 of about 73 for epa cleanup sites california. (0.05 seconds)

Web

All Tables

Fusion Tab

Clean

File Vi

New ta

New e

Downl

Import

Delete

Create

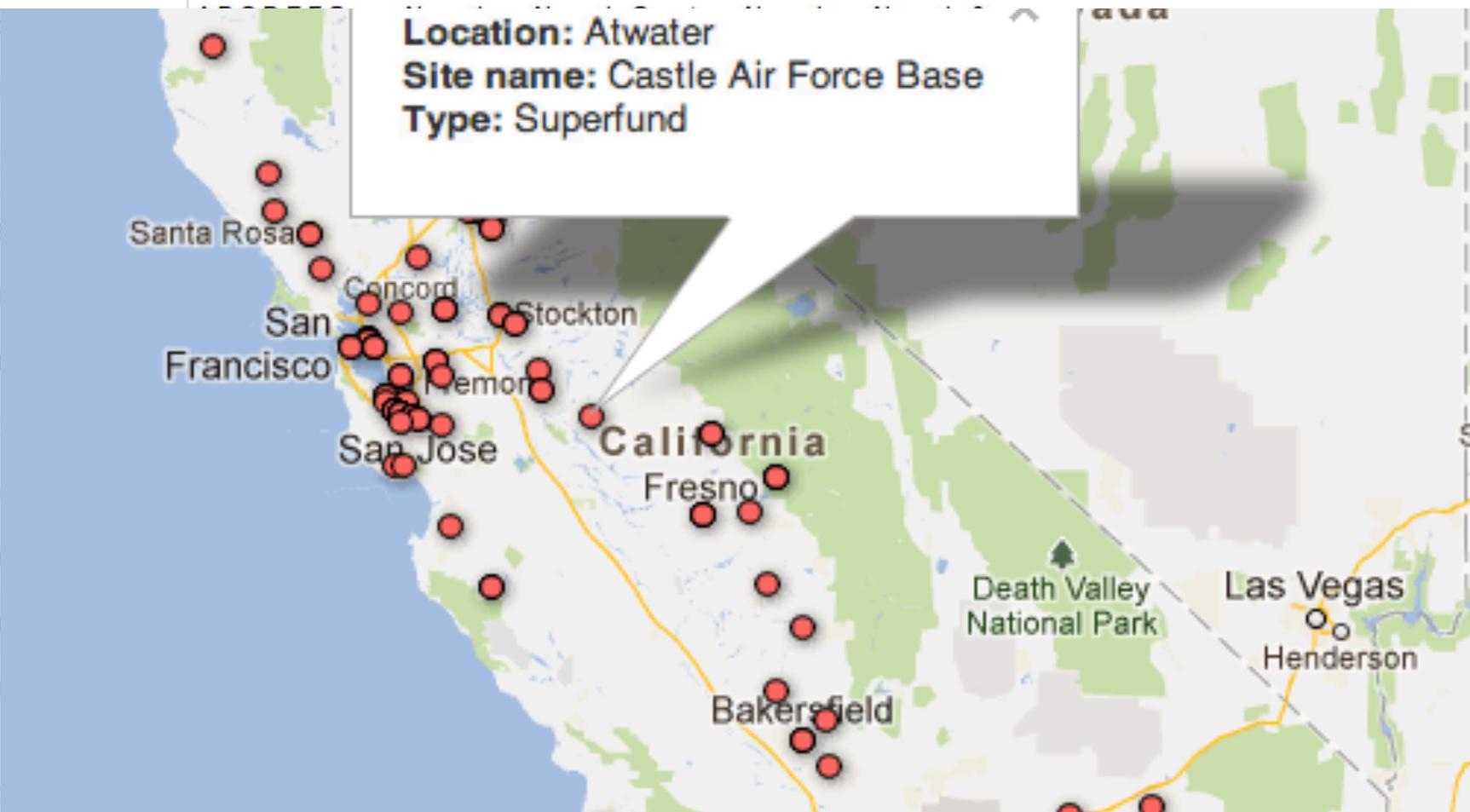
Geoco

Find p

About

[Cleanup Sites in California | Region 9: Cleanup | US EPA](http://www.epa.gov/region9/cleanup/california.html)

<http://www.epa.gov/region9/cleanup/california.html>



reactions were observed using docetaxel and were considered possibly or probably related to docetaxel. The safety profile is generally similar in patients receiving docetaxel for patients with other tumor types (See Table 3).

Table 3 - Summary of Adverse Reactions in Patients Receiving Docetaxel at 100 mg/m<sup>2</sup>

Adverse Reaction	All Tumor Types Normal LFTs* n=2045 %	All Tumor Types Elevated LFTs** n=61 %	Breast Cancer Normal LFTs* n=965 %
<b>Hematologic</b>			
<b>Neutropenia</b>			
<2000 cells/mm <sup>3</sup>	96	96	99
<500 cells/mm <sup>3</sup>	75	88	86
<b>Leukopenia</b>			
<4000 cells/mm <sup>3</sup>	96	98	99
<1000 cells/mm <sup>3</sup>	32	47	44
<b>Thrombocytopenia</b>			
<100,000 cells/mm <sup>3</sup>	8	25	9
<b>Anemia</b>			
<11g/dL	90	92	94
<8 g/dL	9	31	8
<b>Febrile Neutropenia***</b>	11	26	12
Septic Death	2	5	1
Non-Septic Death	1	7	1
<b>Infections</b>			
Any	22	33	22
Severe	6	16	6
<b>Fever in Absence of Infection</b>			
Any	31	41	35
Severe	2	8	2
<b>Hypersensitivity Reactions</b>			
Regardless of Premedication			
Any	21	20	18
Severe	4	10	3
With 3-day Premedication			
Any	n=92 15	n=3 33	n=92 15
Severe	2	0	2

<b>Neutropenia</b>			
Any <2000	98	100	95

# Search-by-image

- Suppose you have an image...  
  
... how can you figure out what it is?  
... where did it come from?  
... who has copyright?



# Google

images

demo-pic.png



test101.png



redrocks.png



fish



lobster.png



pliers.png

***You can ask impossible questions...***



# Search by Image

Google  red-rock.jpg x red rock canyon  

Search About 235 results (0.52 seconds)

- Everything
- Images**
- Maps
- Videos
- News
- Shopping
- More



Image size:  
640 × 427  
Find other sizes of this image:  
[All sizes](#) - [Small](#) - [Medium](#) - [Large](#)

Best guess for this image: [red rock canyon](#)

[Red Rock Canyon Interpretive Association](#)

[www.redrockcanyonlv.org/](http://www.redrockcanyonlv.org/)

**Red Rock Canyon**...This site is informational about **Red Rock Canyon** National Conservation Area and the Interpretive Association. 29 images

[Red Rock Canyon SP](#)

[www.parks.ca.gov/?page\\_id=631](http://www.parks.ca.gov/?page_id=631)

**Red Rock Canyon** State Park features scenic desert cliffs, buttes and spectacular rock formations. The park is located where the southernmost tip of the Sierra ...

**Search by image**  
Visually similar  
More sizes

- Any time**
- Past hour
- Past 24 hours
- Past week
- Past month
- Past year

[Visually similar images](#) - [Report images](#)



# I found this in the basement... what is it?

Google

**Search** About 21 results (0.28 seconds)

Web  
**Images**  
Maps  
Videos  
News  
Shopping  
More

**Search by image**  
Visually similar  
More sizes

Image size:  
227 × 226

Find other sizes of this image:  
[All sizes](#) - [Small](#) - [Medium](#)

Pages that include matching images

[Hand Tools - Wrenches - FireFighterWarehouse](#)  
[firefighterwarehouse.com/wrenches/](#)  
Firefighter owned and operated. For all your fire equipment needs.

120 × 120

[Foam Pail Wrench \(UFCW\)](#)  
[firefighterwarehouse.com/foam-pail-wrench/](#)  
Red Rack Mobile Double Sided with the Security Option 24". \$2028.00.  
Add To Cart - Red Rack Mobile Double Sided with the Security Option 20".  
\$1888.00 ...

440 × 440

wrench.png

# ***This isn't even the end... there are other tools...***

- Fusion Tables...
- BigQuery...
- Custom Search Engines...
- Refine...

# *Key lesson 8*

**Know how to use  
different media types.**

# Question is...

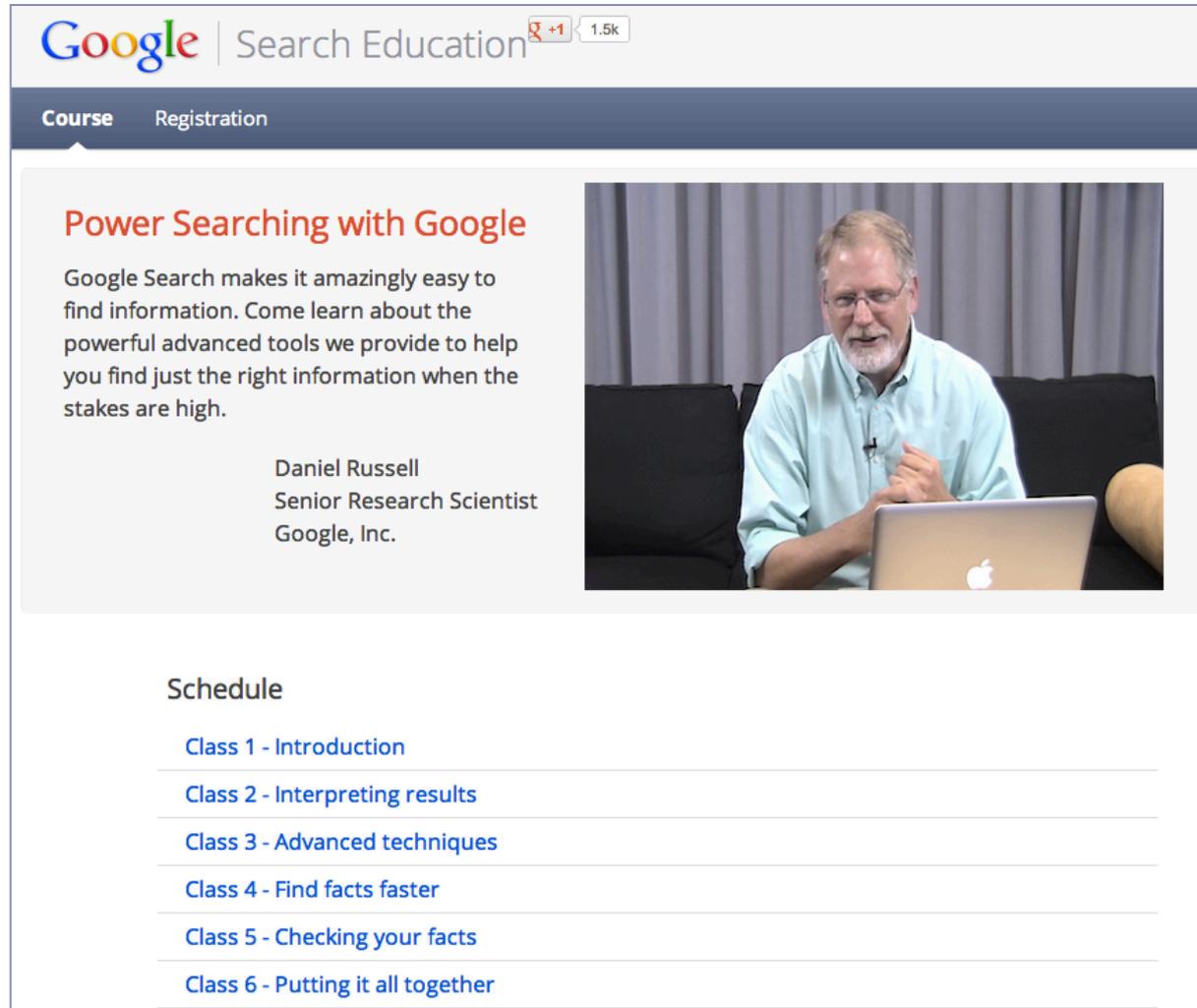
- What's indexed?
- Is all of Google's content indexed on the Google Search Engine? ?  
Universal search means... what... to the average user?
- How does a searcher know what's available, or even possible?
- Example:
  - Find an online readable copy of Popular Science magazine, Nov 1955?
  - Find a telephone directory from Rochester, NY 1920?
  - Find a list of all the universities with an office in Washington, DC?

# Summary

- **When in doubt, search it out!**
- **Your search skills will become stale quickly...**  
.... keep tracking the new features that we offer!
- **Practice deliberately.** When you get the chance, try the same search a few different ways and note the differences. Ask why!

# How to learn this stuff: MOOCS

- **July 10, 2012:**  
Power Searching with Google V1 (154K)
- **Sept 24, 2012:**  
Power Searching with Google V2 (127K)



The screenshot shows a Google Search Education course page. At the top, the Google logo is followed by 'Search Education' and a '+1' button with '1.5k' next to it. Below this is a dark blue navigation bar with 'Course' and 'Registration' tabs. The main content area has a light gray background. The title 'Power Searching with Google' is in red. Below the title is a paragraph: 'Google Search makes it amazingly easy to find information. Come learn about the powerful advanced tools we provide to help you find just the right information when the stakes are high.' To the right of this text is a video thumbnail showing a man with glasses and a light blue shirt sitting at a desk with a laptop. Below the paragraph is the name 'Daniel Russell' and his title 'Senior Research Scientist Google, Inc.' At the bottom of the page, there is a 'Schedule' section with a list of six classes: 'Class 1 - Introduction', 'Class 2 - Interpreting results', 'Class 3 - Advanced techniques', 'Class 4 - Find facts faster', 'Class 5 - Checking your facts', and 'Class 6 - Putting it all together'.

Google | Search Education +1 1.5k

Course Registration

## Power Searching with Google

Google Search makes it amazingly easy to find information. Come learn about the powerful advanced tools we provide to help you find just the right information when the stakes are high.

Daniel Russell  
Senior Research Scientist  
Google, Inc.

### Schedule

- Class 1 - Introduction
- Class 2 - Interpreting results
- Class 3 - Advanced techniques
- Class 4 - Find facts faster
- Class 5 - Checking your facts
- Class 6 - Putting it all together

## Search Education Online

Improve your Google search skills with our Power Searching and Advanced Power Searching online courses.

**July 1-12, 2013**

- Learn tips and tricks to be a more effective fact-finder with Power Searching with Google.
- Deepen your understanding of solving complex research problems using advanced Google search techniques with Advanced Power Searching with Google.
- Join a growing global community of Power Searchers.



## Join our upcoming session

Registration for Advanced Power Searching with Google is open! Sign up now, the course begins on January 23.

## Courses

Two Week Course  
Starts Jan 23, 2013

[Learn More](#)

### Advanced Power Searching

Hone your searching skills by solving complex search challenges alongside peers from around the world in this two week online class.



# Google Cheat Sheet PDF file

- <http://dmrussell.net/search-education/mousepad-cheat-sheet.pdf>



Get more tips on searching at:  
[www.google.com/basic-search-help](http://www.google.com/basic-search-help)

Advanced	What you can do with it	Google this
<b>site:</b>	search only within a specific site	<b>site:</b> www.stanford.edu
<b>filetype:</b>	find a type of file: PDF, DOC, TXT ...	<b>filetype:</b> PDF
<b>define:</b>	find definitions for a word	<b>define:</b> audacity
<b>intitle:</b>	find words in the title of the webpage	<b>intitle:</b> inspirational
<b>..</b>	get ranges of numbers, dates, or prices	presidents 1800..1900
word * word	find other combinations of words between words	creative * writing
-word	search for homer, but NOT simpson	homer -simpson
+word	find exact words—no synonyms or plurals	+peace +freedom
"set of words"	search for exact set of words, quotes or phrases	"I have a dream"

Calculator	What you can do with it	Google this
<b>+ - * /</b>	add, subtract, multiply, divide	12+68
<b>% of</b>	percentage of a number	12% of 68
<b>cos( ) sin( )</b>	trigonometry: cos, sin, tan, arcsin ...	<b>cos(68)</b>
<b>km to miles</b>	convert units: temp (C to F), weight (kg to lbs) ...	100 <b>km to miles</b>

Info	What you can do with it	Google this
<b>weather</b>	get weather for a region	<b>weather</b> honolulu
<b>movies</b>	find movies & theatres nearby (zip or city)	<b>movies</b> 94043
<b>flight status</b>	get flight status with the airline & flight number	HA 124

### Bonus

Find words on webpages, with this key combo:

(PC)

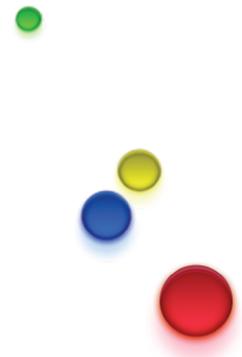


....enter your keywords

(Mac)



....enter your keywords



*end*

*Tipsheet:*

[bit.ly/Dan-IRE-Tipsheet](http://bit.ly/Dan-IRE-Tipsheet)

*G+ group to follow:*

Google Online Education

*My blog:*

[SearchResearch1.blogspot.com](http://SearchResearch1.blogspot.com)