

## CONDUCTING INTERNET RESEARCH

Use the following mini lecture notes to conduct your lecture today. Be sure to keep it to less than ten minutes, as you want to give students the majority of class time to work. Make sure students have turned on their computers and opened their web browser. At the same time, their notes should be right in front of them so they can write and work on their computer, while you lecture.

### I. Choosing a Good Search Engine

- A. A search engine is one tool you can use to find information on the World Wide Web or the Internet. (The Internet and the Web are not the same thing, but for our purposes now, you do not have to understand the difference.)
- B. A good search engine searches accurately and quickly.
- C. Although there are many search engines out there, some of the best search engines are only search engines. In other words, that is their only job. A great example of a good search engine whose only job is to search is Google. You can find Google by typing its web address directly into the location bar of your web browser (some web browsers are Netscape Navigator, AOL browser, or Internet Explorer just to name a few). In Netscape this bar is called *Location*; in Internet Explorer, it's called *Address*.
- D. Google's web address is <http://www.google.com> Type it in and hit enter now. (Bonus question – Who knows what *google* means? Hint: it's not spelled correctly.)

### II. Typing in Your Search

- A. Once you are on Google's web page, you will notice the only thing you can do is a search. Your cursor should be blinking in the search bar. If it is not, simply point your mouse directly over the blank search bar and click. Now your cursor should appear and you are ready to type in your search.
- B. Quotation marks—today you will be using quotation marks to surround your search. This narrows your search or helps to make it more accurate.
  1. Anything within quotes tells the search engine to find those words exactly as you have typed them, in the order you type them and right next to each other on a web page.
  2. The search engine looks for the chunk of text you have typed instead of individual items anywhere on a web page. Even with Google, this does not always work perfectly, but it will narrow your search considerably.
- C. Plus sign – today you will also be using the plus sign (+) to narrow and focus your search.
  1. The plus sign is used to tell the computer to look for the initial words you typed plus something else.
  2. You must type in a space between the words in quotations and the plus sign, but no space between the plus sign and the something else you want it to look for.
- D. Capitalizing Names—when you capitalize names it also helps to narrow the search because the computer will always look first for the exact way you type something.
- E. Sample Typed in Search—Everyone should type in the following using the directions given above:  
“Periodic Table”

### III. Search Results

- A. Two Different Types of Searches on Google
  1. Google Search—this takes you to the first page of search results for the search you typed in.
  2. I'm Feeling Lucky—this will bypass the list of links and take you directly to the most likely web page Google has found in its search.
  3. Try both ways to search now.
- B. Links – If you typed in your search correctly and you clicked on Google Search, you should have a list of links to web pages for your search results. You can tell they are links because the lettering will be in blue and the whole address will be underlined.
  1. Go to the first link and click. It will take you to the following web site: [www.webelements.com/](http://www.webelements.com/)
  2. The title for the site is WebElements™ Periodic Table (professional edition). Look at the page. What kind of web site is this? If the students read thoroughly, they should be able to figure out this site aims to be a high quality source of information on the WWW relating to the periodic table.. To learn more about WebElements™ Periodic Table (professional edition) students can click on



mission, awards, and about WebElements links at the bottom of the page. For this lesson, students want to get to the information on elements of the periodic table quickly. Ask them if they can find a way to do this now. They should be able to tell you that all they have to do is click on an element to learn more about it. Click on the element hydrogen (H) now. This will take you to another page that houses the initial page for hydrogen. This page contains the overall information about hydrogen. The great thing about this page is that it contains links to pages containing more in depth information about hydrogen. In this way, you can decide which page you would like to research first. How can you tell that there are links on this page? Down the left hand side there are links and on the top there are links. All of those links are relevant to the activity today. Why? Students should be able to point out that the links down the left side of the page are the content links that they need to research. The links at the top of the page will extend their research. The links at the bottom of the home page help them to identify the source/credits for this page. Tell them that they can come back to this in a minute. Move on to the next step.

3. Checking a source – To find out more about the validity of the information presented on the individual sites you visit, you will click on the link called Copyright (for this particular site). On other web sites, the source can have other titles, like About Us, Contact Us, Mission Statement, and so on. Ask students where they might find those links on a web page. Usually, on the home page. Be sure you read as much as you can in order to decide if the information presented is valid. For each site you visit today, you will need to check the source.
- IV. Using Your Own Search Method – Because you have probably searched the Internet before, you may use your own method of search after you have tried this method at least TWO times today.
- V. Logging Your Path Accurately – As you search, you must log the path you took to find your information exactly as you did it. That means that your teacher and another student in the room will be able to retrace your path to get to each of the web pages you choose to use for this assignment. So write all of the steps down, not just the final web page address.
- VI. Bibliography – As with all other times you use someone else’s words, when you copy, quote, or interpret information, you must cite not only the author and title, but where you found the information. For this class, you will use the MLA style for citing Web pages, authors, and titles. An example follows:  
Sample:

Winter, Mark. “Hydrogen” WebElements™ Periodic Table (professional edition), 12 Sep. 2003.  
<<http://www.webelements.com/>>

Gail Vine. “Hidden Inheritance.” *New Scientist*. 28 November 1998, No. 2162, pp. 27-30.  
<<http://www.anth.org/ifgene/vines.htm>>

Mae-Wan Ho. “Transgenic Transgression of Species Integrity and Species Boundaries.”  
<<http://www.anth.org/ifgene/ho.htm>>

