Grade 5 - Lesson 3

Explains anatomy of web URL (suffixes, folder hierarchy)

Initiate a discussion with students about what the Internet is. Here is the definition of the Internet found on the web site, Wikipedia:

The Internet is a global system of interconnected computer networks that interchange data by packet switching using the standardized Internet Protocol (IP) Suite. It is a "network of networks" that consists of millions of private and public, academic, business, and government networks of local to global scope that are linked by copper wires, fiber-optic cables, wireless connections, and other technologies. The Internet carries various information resources and services, such as electronic mail, online chat, file transfer and file sharing, online gaming, and the inter-linked hypertext documents and other resources of the World Wide Web (WWW).

The terms "Internet" and "World Wide Web" are often used in every-day speech without much distinction. However, the Internet and the World Wide Web are not one and the same. The Internet is the global data communications backbone, i.e., the hardware and software infrastructure, that provides connectivity between resources or services and the users of such facilities. In contrast, the Web is one of the services communicated via the Internet. It is a collection of interconnected documents and other resources, linked by symbolic hyperlinks and URLs.

There are many top level domains, though the most common is .com. For a brief background the on the inception and the system of maintaining all the domain naming systems, see the article at http://en.wikipedia.org/wiki/.com

Below are some urls that you can have students type in. Doing so, and examining the content of the web sites can help students understand how the site’s domain suffix was selected. List them on the board, use the projected computer, or provide handouts with these, (or other sites you would like students to survey), then ask them to make assessments and come to their own conclusion about why the web site has the particular suffix.
http://www.mcdonalds.com  McDonald’s Restaurants
http://www.reebok.com  Reebok Shoe Company
http://pbskids.org  PBS television for kids
http://wwf.org  World Wildlife Fund
http://www.colapublib.org  Los Angeles County Libraries
http://www.whitehouse.gov  The White House (current administration)
http://www.irs.gov  Internal Revenue Service
http://www.ucla.edu  University of California, Los Angeles (UCLA)
http://www.csun.edu  California State University, Northridge (CSUN)
http://www.army.mil  United States Army
http://www.navy.mil  United States Navy
http://www.lausd.net  Los Angeles Unified School District
http://www.lausd.k12.ca.us/Charnock_Road_EL/Welcome.html  Charnock Road Elementary School, (LAUSD)

.com typically means commercial web site, meaning that the site represents a business trying to make money. There are exceptions, however, and many organizations choose to use .com as their suffix, even if they do not represent a business. The benefit being, that when a computer user types the name of the site without the .com, the browser will still find it, because browsers often assume .com was meant to be typed. www.henryanker.com is an example of this, because it makes it easy for students to type just “henryanker”.

Other top level domains (suffixes) include:

.mil is used for military sites.
.org is used for non-profit organization sites
.k12 is used for Kindergarten through High School web sites
.gov is used for US Government-related web sites
.net is used generically, though often by companies and large entities
.edu is used by most colleges and universities
Another aspect of the way most web sites are organized is using a folder structure.

Just as a teacher might organize his or her files this way:

Alexandria Elem 2007-08 Grade 3
   Reading Language Arts
       Unit 1
           Comprehension Activities
           Comprehension Assessments
           Fluency Samples
           Spelling-Vocabulary
       Unit 2
           Comprehension Activities
           Comprehension Assessments
           Fluency Samples
           Spelling-Vocabulary
           Field Trip
               Pre-trip activities
               Post-trip activities

Web sites are often organized logically, so that the web ‘site master’, or development team, knows where files are, and where new files should be placed (uploaded).

Have students type in these urls and see if they can explain the organization of these folder structures (the slashes”/” indicate folders):

http://www.latimes.com/sports/baseball/mlb/dodgers/
Los Angeles Times → Sports → baseball → Major League Baseball → LA Dodgers

NASA → Mission Pages → Space Shuttle → Archives of Previous Shuttle Missions → Mission 124 → Summary of Mission (*Note: underscores “_” between words mimic spaces)

An extension of this exploratory activity might be to give students a mixed-up list of
categories and items and have students design their own web site, arranging them using a Thinking Map or Flow Chart. Upon completion of the hand-drawn activity, students can recreate it using a software program such as Inspiration™ or Kidspiration™. If neither of those programs is available, even MS Word™ can be used, though it will require more practice and patience. (See example in resource folder.)

Conduct a discussion with students where they are expected to explain the naming conventions used for the site, and the way the files are organized. Model this for students, where you pull up a web site, and then proceed to verbally describe the structure of the url and the way folders are embedded. Here is an example:

“Take a look at the web site that is up on the screen right now. Who can tell us what web site this is? (http://www.thehistorymakers.com) Who can tell us what they think the focus of this web site is?” (African-Americans who made contributions to various fields of endeavor).

“Why do you think the creators of this web site decided to organize the biographies this way? Do you think this was helpful to the site’s developers? Why? Is it helpful to the users of the web site, like you and me? Why?”