

Name:

Lesson 1: Using the Internet and the World Wide Web

Internet vs. World Wide Web

The internet is a very large _____ of networks.

Networks consist of _____ that store information accessed by various clients.

Essentially hardware machines and _____.

The _____ is a system of tools and services that enable us to access the information on the Internet.

Web browsers is a tool that retrieves the _____ using the Internet

_____ are a key part of the web which connects data resources together, enabling users to “browse” from page to page.

Other Services

The internet can also be used for the following services:

- _____
- Instant Messaging
- FTP (file upload or download)
- _____
- Live streaming
- Home Security (Apps)

Cloud

The advantages of the cloud are:

- Data is stored on servers accessed from any location with an _____.
- _____ are in a central location, accessible regardless of their current Internet connection.
- Enables people around the world to _____ on projects without having to travel.
- Need access rights to the _____ and a browser.
- Some common cloud storage services include _____, Dropbox, Microsoft Cloud, and Apple iCloud.

Connecting to the Internet

6 elements necessary to connect to the Internet:

- A _____ device
- An operating system — the software that enables you to _____ with your device. Windows and Apple are the most common
- TCP/IP (Transmission Control Protocol/Internet Protocol) — allows your device to _____ with other devices on the Internet – generally in place in the device when you purchase it.
- Client software — _____ on your device, such as your browser, e-mail program or an “app” on your phone or tablet
- An Internet Service Provider (ISP) — a free or fee-based service that provides the _____ between your device and the Internet.
- An Internet address — provided for your _____ by your ISP. You also need addresses for the Web site servers you want to visit.

Types of Connections

- Dial-up access - The _____ attached to the computer uses a standard telephone line to connect to the Internet.
- Cable - A cable company that provides TV service also provides _____ connection on the cable, instead of using a phone line.
- Digital Subscriber Line (DSL) - A high-speed Internet connection using regular _____ telephone lines.
- Broadband satellite - A high-speed connection to the Internet via _____.

- 3G/4G - High-speed wireless connections for _____, tablets and other devices.
- Wireless Fidelity (Wi-Fi) - A network uses _____ signals to provide Internet connections to wireless computers and devices.
- FiOS (Fiber-Optic Service) broadband - The newest type of Internet connection. It connects to the Internet using light pulses over a _____ network.

URL – DNS – IP address

_____ - www.google.com

IP Address - _____

DNS – converts IP address to a _____

Web Addresses

- Server name: name given to a server (usually “_____” can be anything that helps distinguish it from other servers on the same network)
- Domain name: the name _____ to a specific web site – usually a common name like “Google” “IBM” “Nike”
- Top level domain: the _____ of a URL that tends to identify what “type” of web site it is: edu, gov, com, etc...

All 3 parts together create a “_____” address just like a street address

Top level domains

.com - _____ organizations, businesses or company sites

.edu - _____ institutions

.org - _____; originally clubs, associations and non-profit groups

.mil - U.S. _____

.gov - U.S. civilian _____

.net - _____ sites, including ISPs

.jp - Japan

.us - United States

.uk - United Kingdom

.de - Germany

.ch - Switzerland

.ca - Canada

Key Web Technologies

- Hypertext Markup Language (HTML) — the code used to format Web pages and create _____ between documents.
- Uniform Resource Locators (URLs) — the unique _____ for resources on the Web. Also called Uniform Resource Identifiers (URIs).
- Hypertext Transfer Protocol (HTTP) — the _____ rules for sending and receiving information online.

Web Browsers

Enables your _____ to retrieve and display Web pages

Examples are: _____, Firefox, Safari, Internet Explorer, and Opera

Not all browsers render the HTML page formatting with absolute _____

Navigating the Web - Hyperlinks

Hyperlinks are _____ connections to other related Web pages, programmed into the text on the page.

They can also link:

- To another location _____ a page.

- To another _____ within the same site
- To a completely _____ site.

Identifying Hyperlinks

- Cursor changes to the shape of a hand when you _____ it over a hyperlink
- Sometimes the hyperlink text will change _____.
- _____ text is a common convention for hyperlinks on older pages
- Once clicked, the hyperlink text pointing to that page will change to a different color, indicating that the page has already been _____.

Other Uses for Links

- Download a _____ to your computer.
- Open an e-_____ client and send a message pre-addressed to a person or service department
- Access _____ from search results when you search for information.

Write the letter of the correct definition in the spaces provided next to the terms.

Term	Definition
____ 1. Dial-up access	a) Protocol software used to communicate with the Internet and built into all major operating systems
____ 2. Cable	b) Connecting to the Internet via satellite
____ 3. DSL	c) Internet service provided by a cable company
____ 4. Broadband satellite	d) Connecting to the Internet using a modem and a standard telephone line
____ 5. 3G/4G	e) A network that uses radio signals to provide Internet connections to wireless computers and devices
____ 6. Wi-Fi	f) A desktop computer, mobile phone or tablet
____ 7. Computer	g) A technology that provides high-speed Internet connections using regular copper telephone lines
____ 8. Operating system	h) A number that uniquely identifies each computer
____ 9. TCP/IP	i) Software that communicates with a computer's hardware (for example, Windows, Macintosh, Linux)
____ 10. Client software	j) A Web browser or other application used to access and display Web sites on a computer (for example, Chrome, Internet Explorer)
____ 11. Internet connection	k) Directly connecting to an Internet Service Provider (ISP)
____ 12. Internet address	l) High-speed wireless connection for smartphones and other devices
____ 13. FiOS broadband	m) Connecting to the Internet using light pulses over a fiber-optic cable network

In this activity, you will identify the components required to connect to the Internet.


Six elements are required for a computer to connect to the Internet. The user generally acquires the first three by obtaining a computer. Fill in the missing elements.

1




Computer

2



Operating System

3



TCP/IP

4

5

6

Choose the correct term to fill in the blanks 4, 5, and 6



Client Software



Printer



Internet Connection



Digital Camera



Internet Address

Mark the correct response for each question.

1. What is the main component of the Internet?

- a. Web browsers
- b. Servers
- c. Hyperlinks
- d. Software Applications

Answer Choice

2. An Internet Service Provider (ISP) is:

- a. a Web page.
- b. a Web browser.
- c. a company that provides access to the Internet.
- d. the action that happens when you click on a hyperlink.

Answer Choice

3. Which protocol do many browsers assume when entering a URL in the address field?

- a. .net
- b. .com
- c. ftp://
- d. http://

Answer Choice

4. Which technology allows both a URL and an IP address to refer to the same site?

- a. ISP
- b. GUI
- c. DNS
- d. HTML

Answer Choice

5. Which type of cable uses light pulses to send data?

- a. DSL
- b. 3G/4G
- c. Broadband
- d. Fiber-optic cable

Answer Choice

6. Which connection type is a wireless method of sending information using radio waves?

- a. Wi-Fi
- b. Cable
- c. Broadband
- d. Fiber-optic cable

Answer Choice

7. What is a Web browser?

- a. An Internet Service Provider (ISP)
- b. A language that is used to create Web pages
- c. A graphical user interface (GUI) Web page editor
- d. A software application that accesses and displays Web pages

Answer Choice

8. What type of address uses a number that uniquely identifies each computer? Answer Choice
- IP address
 - Home address
 - E-mail address
 - Computer address
9. What is an easy-to-remember address for calling a Web page? Answer Choice
- ISP
 - URL
 - DSL
 - TCP/IP
10. What uses HTML hypertext links that users can click to access different locations or information? Answer Choice
- Web page
 - Domain name
 - Client program
 - Operating system
11. Which protocol allows you to upload and download files? Answer Choice
- http://
 - mailto://
 - ftp://
 - smtp://
12. The Internet includes: Answer Choice
- The World Wide Web
 - Newsgroups
 - A protocol used for landline phones
 - All of the above
 - A and B only
13. True or false: People used to use modems to connect to the internet, but they're not used in any devices any more. Answer Choice
- True
 - False
14. Which of the following is part of a Web site address on the World Wide Web? Answer Choice
- Domain name
 - Browser window
 - Direction
 - ZIP code
15. All devices that connect to the World Wide Web require: Answer Choice
- Browsers
 - Wi-Fi capability
 - Touchscreens
 - Chat rooms