



Lesson 6: Internet -Surfing and Security - Part 1

Name - \_\_\_\_\_ CLASS / SEC- \_\_\_\_\_ Date: \_\_\_\_\_

**Network:** A network is group of two or more computer systems linked together.



**INTERNET:** It is the largest network that links millions of computers together to share information across the world.



**The Internet** has become part of our daily life. Positive use of the Internet makes our lives easy and simple. The Internet provides us useful data, information, and knowledge for personal, social, and economic development and it is up to us to utilize our time on the world wide web in a productive manner.

Let us now read about the Advantages & Disadvantages of the Internet:

## Advantages



1. We can get information on any topic using a search engine easily.
2. We can play games online.
3. We can do online shopping and online banking.
4. We can send and receive messages easily by using chat and emails.
5. We can take online classes and do video conferencing.
6. We can watch/download movies.
7. We can listen to music on the internet.

## Disadvantages



1. People have online /virtual friends but no real friends.
2. People suffer from health issues as they spend less time on outdoor activities.
3. People become victims of cyber crime.
4. The personal information can be misused on the internet.
5. People might not get 100% accurate information on the internet.



## Best Practices for Online Safety

Choose strong passwords and never store your passwords

Never share your personal information

Never open untrusted E-mail



\* \* \* \*



Always use a good **Antivirus** program to protect your computer from viruses.

Use private browsing (**Incognito mode**) in the browser

## Duties of a Responsible Digital Citizen

Protect private information for themselves and others

Respect themselves and others

Stay safe online

Stand up to Cyberbullying when they see it happening

Balance the time they spend online and using media

Respect copyright and intellectual property

Carefully manage their Digital Footprint

Activity Time

1

To be done in the book: Pg 66- Part E Q1, 4, 5

2

# Digital Citizenship - Word Search

N	R	T	U	S	E	R	N	A	M	E	I	D	P
U	A	R	F	R	C	A	R	E	F	U	L	Y	Y
C	D	E	C	T	E	T	L	E	S	T	R	W	N
T	U	E	O	E	T	S	N	N	C	N	R	O	Y
T	L	R	M	N	Y	D	P	T	A	R	E	N	L
O	T	K	P	R	R	N	S	E	P	S	T	L	H
R	F	A	U	E	I	E	E	T	C	S	T	I	E
N	D	A	T	T	U	I	E	L	A	T	T	N	H
S	U	T	E	N	D	R	W	N	R	E	I	E	T
E	Y	E	R	I	N	F	R	A	S	H	A	R	E
E	S	X	K	N	I	H	T	S	A	F	E	T	Y
K	A	T	E	T	U	E	W	C	S	E	R	S	T
U	O	T	Y	L	L	U	B	R	E	B	Y	C	R
P	A	S	S	W	O	R	D	Y	E	O	R	F	T

THINK  
 TEXT  
 COMPUTER  
 SAFETY  
 FRIENDS  
 CYBERBULLY  
 ADULT  
 INTERNET  
 RESPECT  
 PASSWORD  
 USERNAME  
 SHARE  
 ONLINE  
 CAREFUL

Please check the following YouTube link for more information:

<https://www.youtube.com/watch?v=UXsominDkntI>

Please note: The following topics are **not** in the syllabus:

History of Internet, Requirements for the Internet, Starting Microsoft Edge, Microsoft Edge Window and Displaying a specific web page



# 6 » Internet - Surfing & Security

## Topics Covered

•Internet •Search Engine •Web Browser •Microsoft Edge •Best Practice for Online Safety •Responsibilities of a Digital Citizen

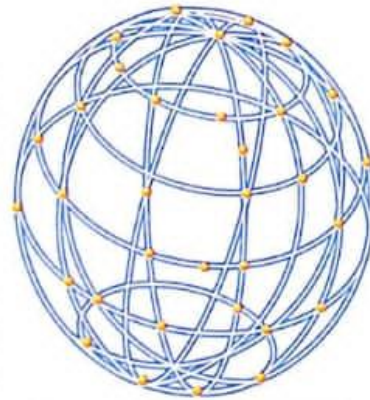
Hey friends! Internet provides abundance of goods, services, and information access to the people in every nook and corner of the world. Let us know more about it.



## Internet

A **network** is defined as a group of two or more computer systems linked together. **Internet** is the largest **network** that links millions of computers with each other to share information across the world.

The biggest advantage of the Internet is that you can access it from a computer or mobile device anywhere: at home, at office, at school, or at a restaurant.



Largest network that links the computers worldwide

## HISTORY OF INTERNET

The history of the Internet starts with the birth of the **ARPANET**, which was the first network of computers in the world. It was set up by the **Department of Defense** of the USA in 1969.

**ARPANET** stands for **Advanced Research Projects Agency NETWORK**. It was developed with the aim of sharing information on research and development in the field of science and technology. It was used only by the government officials and scientists.

Later on, it was opened for the universities to spread education and share their resources. The **network** grew bigger and bigger, and led to the present-day **Internet**. Millions of people started having access to Internet by the mid 1990s. Today, almost all the companies of the world use Internet.



## ADVANTAGES AND DISADVANTAGES

You know that Internet comes with many benefits, but unfortunately it has some drawbacks as well.

### Advantages of Internet

- You can get information on any topic of your interest easily.
- You can send and receive e-mail messages at a very fast speed.
- You can play online games and make new friends.
- You can send text messages to your friends through chatting.
- You can do video conferencing with a group of people.
- You can listen to music and watch movies on Internet.
- You can buy books, toys and other products on the Internet.



### Disadvantages of Internet

- Nowadays, people make friends and play games on Internet. So, there is no direct connection with friends and family in reality.
- All information you get on Internet is not 100% accurate.
- People spend more time on Internet, surfing irrelevant websites which may affect their work or study.
- Cybercrime is common nowadays on Internet. Your personal information can be misused on Internet.
- There are several inappropriate contents on Internet which may not be suitable for children.



## REQUIREMENTS FOR THE INTERNET

To connect to Internet, you need the following equipment:

### Computer System

To use Internet, you need a computer or a mobile device.



### Modem

Another requirement for connecting to the Internet is **modem**. A modem is a short form for **Modulator/ Demodulator**. It is a device that receives data from the Internet and sends data from your computer to the Internet. There are two main types of modem: a **dial-up modem** and a **digital modem**.





## Internet Connection

You often connect to the Internet through **dial-up** or **broadband** connection.

- A **dial-up connection** is the least expensive way to access the Internet but at slow-speed. With dial-up access, you use a computer, a dial-up modem, and a regular telephone line.
- **Broadband** is a high-speed Internet connection. With broadband access, you use a computer, a digital modem, and broadband line. With broadband, your computer is usually connected to Internet the entire time it is on.

## Internet Service Provider

The Internet connection is provided by different companies called **Internet Service Providers (ISP)**. ISPs allow you to use Internet for a monthly charge. BSNL, Airtel, Tata Indicom, Reliance, Den, etc., are some of the ISPs in India.



## Search Engine

If you want any information on any topic for which you don't know the URL or web address, you can get the information through Search Engine. **Search Engine** is a program that searches through the collection of web pages for a particular information. It allows users to enter any **keyword** for which it displays a list of websites with related information.

Many search engines use a program called **spider** to display a list of all web pages that contain the word or phrase you entered. A spider reads pages on websites in order to create a catalog or index of hits. A **hit** is any web page name that lists as a result of a search.

Some popular search engines are **Google, Bing, and Yahoo!**



Google



Bing



Yahoo!



### Update Your Knowledge

Today, users often connect to the Internet via **broadband** Internet service because of its fast data transfer speed and its always-on connection.

### Do You Know?

**Dial-up connection** is still used in remote areas, where **Broadband** facility is not available.





## Web Browser

A web browser, or simply browser, is a software program that allows you to browse the Internet and to open different websites. Mosaic was the first successful graphical web browser, developed by Marc Andreessen and Eric Bina in 1992, and released in 1993. More than one Web browser can be installed on a single computer.

### DIFFERENT TYPES OF WEB BROWSERS

**Microsoft Edge:** Edge is the new web browser in Windows 10 which enables you to browse the web with many new features.

**Microsoft Internet Explorer:** This web browser is the most widely used browser in the world. It was developed by Microsoft in 1995 as a supportive package to Microsoft Windows Operating System.

**Mozilla Firefox:** It is the second most famous browser after Internet Explorer. It can be used on several operating systems including Windows, Macintosh, and Linux.

**Google Chrome:** Google Chrome is a browser developed by Google; it is faster, safer, and easier to install.

## Microsoft Edge

Microsoft Edge is a new default web browser developed by Microsoft and is included in Windows 10.

### STARTING MICROSOFT EDGE

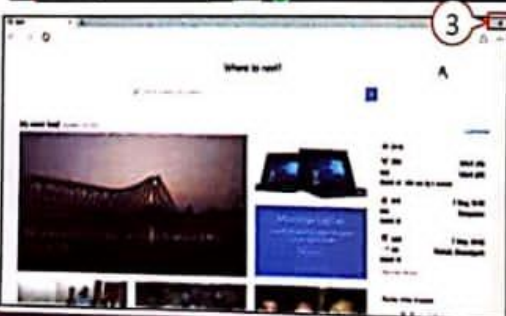
You can start Microsoft Edge to browse through the information on the web.



1. Click on **Start** button to open Start menu.
2. Click on **Microsoft Edge**.

● You can also open Microsoft Edge by clicking on its icon on the Taskbar.

Microsoft Edge window will appear.



If you are not currently connected to the Internet, a dialog box will appear that allows you to connect.

3. When you finish browsing through the information on web, click on **Close (X)** button to close the Microsoft Edge window.



# Best Practice for Online Safety

While using the Internet and working on your **personal accounts** (e-mail, social networking, banking, e-commerce, etc.), you need to be careful for unexpected things and follow these guidelines:

## CHOOSE STRONG PASSWORD

Just as you buy good quality locks for your home so that nobody can enter without a key, in the same way, you should choose strong password for your accounts like e-mail account. **Passwords** are the keys to your accounts—only the person with the key can access them.

Any unknown person may try to guess your password. So, you should make a password that is unique, strong, and not easily guessed by strangers or those close to you.



## NEVER STORE YOUR PASSWORD

Whenever you open any account, many browsers can prompt you to **save** your passwords so that you do not need to retype them each time you visit the same websites. You should never store the password. If you do, then anyone who uses your computer can easily use your account information.

## NEVER OPEN UNTRUSTED E-MAIL

You should never open an e-mail message with **attachment** or a **link** unless you are expecting it, or it is from a trusted source or a person you know. It can contain **virus** which is dangerous for your computer.



## USE ANTIVIRUS

You should install a good **antivirus** program and then scan the entire computer, so that it is free of viruses and other attacks. You should update the antivirus program regularly.



### Update Your Knowledge

**Antivirus** is a software that is used to detect and remove viruses from computers. It can also protect your computer against a wide variety of threats.

## NEVER SHARE YOUR PERSONAL INFORMATION

You should never share your personal information such as your name, address, telephone number, school name, your parents' office address or any other information with a stranger on the Internet.

## USE PRIVATE OR INCOGNITO MODE IN THE BROWSER

Always use private browsing while using the Internet at public places like Internet Cafe. By using private mode, your browser will not store passwords, temporary Internet files, and data entered by you when you exit the browser.



## Responsibilities of a Digital Citizen

If you are using the computer and the information generated by it then you are a digital citizen. Some of the responsibilities of a digital citizen while using a computer are given below:

1. You should use your computer for educational purpose only when you are at school.
2. You should keep your computer safe and secure all the time.
3. You should visit appropriate websites that promote learning and educational purpose when you use the Internet.
4. You should protect your private information.
5. You should always log out and should not share your password with anybody.
6. You should respect yourself and others by using kind words. You should make sure that these words do not harm others.
7. You should say no to misbehaviour when you are online. You should inform an adult if someone is being harmful.





## In a Nutshell

- The Internet is the largest network that connects millions of computers across the world.
- ARPANET was the first network of computers in the world.
- Search engine is used to search a particular information.
- Web browser is used to open the web pages.
- Microsoft Edge is the default web browser of Windows 10.
- Everybody should learn the best practice for online safety.
- Everybody should become a good digital citizen.

## Exercises

### A. Tick [✓] the correct answer.

- ..... is the largest network that links millions of computers.  
a. Television  b. Internet  c. Telephone
- The history of the Internet starts with the birth of .....  
a. ARPANET  b. Intranet  c. Website
- The Internet connection is provided by different companies called .....  
a. IPS  b. ISP  c. SPI
- ..... is the latest web browser of Windows 10.  
a. Google Chrome  b. Microsoft Edge  c. Mozilla Firefox
- Google Chrome is a web browser developed by .....  
a. Microsoft  b. Mosaic  c. Google

### B. Write 'T' for True and 'F' for False statements.

- A web browser is the address of a web page.
- Many search engines use a program called spider.
- Hotmail is a popular web browser.
- Always choose strong password to protect your account.
- You should open an untrusted email message with attachment.
- Never share your personal information with a stranger on Web.

**C. Fill in the blanks.**

1. .... enables us to send and receive messages at a fast speed.
2. In 1969, the Department of Defense of USA developed .....
3. .... was the first successful graphical Web browser.
4. .... is a high-speed Internet connection.
5. A ..... is any web page name that lists as a result of a search.

**D. Define the following.**

1. Spider: .....
2. Web Browser: .....
3. Search Engine: .....

**E. Answer the following questions.**

1. What are the advantages of Internet?  
.....  
.....
2. Name the different types of equipment required to connect Internet.  
.....  
.....
3. What is the function of modem?  
.....  
.....
4. Why should we choose strong passwords for our accounts?  
.....  
.....
5. Write three responsibilities of a Digital Citizen.  
.....  
.....  
.....

**F. Application Based Question.**

Shweta has to send her birthday invitation to her family and friends through e-mail. She goes to a Cyber café for sending the E-mail. Tell her the feature with which she can use Internet in public area securely.

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