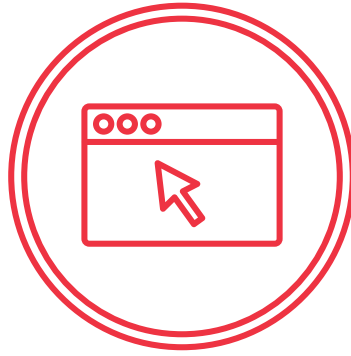


Internet Concepts



LESSON PLAN

| | Time | Slide |
|--|--------|-------|
| <p>Learning objectives</p> <ul style="list-style-type: none"> • An understanding of the services available through the Internet • An understanding of the technology underlying Internet security • An understanding of the risks associated with different manners of connecting to the Internet | — : — | 0 |
| 1. What the Internet is used for | 2 : 00 | 1 |
| The Internet connects people and information through services such as email, games, social media, banking, entertainment and video chat. | — : — | |
| DO use the Internet to enrich your life by gaining better access to information and an additional way to communicate. | | |
| <p>Notes:</p> <hr/> <hr/> <hr/> <hr/> | | |



| | Time | Slide |
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| 2. There are risks on the Internet | 2 : 00 | 2 |
| The risks on the Internet relate mainly to the difficulty of keeping information private on a technology designed for sharing, knowing whom or what to trust, and proving you are who you say you are. | _ : _ | |
| DO be aware of dangers online and learn to minimize risk. | | |
| Notes: _____ _____ _____ _____ | | |
| 3. The Internet is made up of connected computers | 1 : 00 | 3 |
| The Internet is made up of millions of computers linked together to allow information to flow freely between them. The technology used is very trusting. Security is not built into the Internet and should never be assumed. | _ : _ | |
| DO check for security features such as encryption, before sending or receiving valuable information. | | |
| Notes: _____ _____ _____ _____ | | |



| | Time | Slide |
|---|--------|-------|
| 4. What is an ISP (Internet Service Provider)? | 2 : 00 | 4 |
| An ISP provides a connection to the Internet. ISPs can provide service to a fixed point, like a home, or to a mobile point, like a cellular telephone. | — : — | |
| <p>DO know how to contact your ISP.</p> <p>DO look for a 3G, 4G or LTE symbol on your phone before using the Internet to ensure a safer connection.</p> | | |
| <p>Notes:</p> <hr/> <hr/> <hr/> <hr/> <hr/> | | |
| 5. The Internet at home | 2 : 00 | 5 |
| Broadband Internet connections allow home networks to access the Internet. Wireless home networks (Wi-Fi) should be used with the security features turned on. | — : — | |
| <p>DO ensure your home Wi-Fi network is secured with WPA or WP2 as the secure type and a unique and strong password.</p> | | |
| <p>Notes:</p> <hr/> <hr/> <hr/> <hr/> <hr/> | | |



| | Time | Slide |
|---|--------|-------|
| 6. The Internet outside of home | 2 : 00 | 6 |
| Networks outside the home can be less secure than a home network because more people use them. Take extra care when sharing information if you connect to these networks. | _ : _ | |
| <p>DO be careful what information you share when connecting to public networks; avoid sensitive transactions.</p> <p>DO use your 3G or 4G connection if you have to send or receive private information outside the home.</p> | | |
| <p>Notes:</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | | |

Practice

Discussion Questions:

- > Do you use the Internet? What do you normally use it for?
- > Do you have a little home network?
- > Who is your ISP?
- > Do you use the Internet outside the home?
- > Does your use of the Internet change based on how you are connected to it?
- > Do you know anyone that has had a problem because of the Internet?



Exercises:

Note: these exercises require participants to have a smartphone.

- > Can you find the 3G, 4G, LTE symbol on your smart phone?
- > Find a person in the class with a different phone from you and compare the location of the symbol.
- > Can you turn Wi-Fi off on your phone?
- > Who can turn Wi-Fi off the quickest? Everyone start with their phones on the desk with a blank screen. First to pickup and turn off their Wi-Fi wins the game.

Glossary of Terms

| | |
|-----------------------|--|
| 3G | The 3rd Generation Mobile telephone standard, capable of supporting telephony, internet access video calls and TV. |
| 4G | The 4th Generation Mobile telephone standard, capable of supporting web access, gaming, HD TV, video conferencing and other services. |
| ADSL | Asynchronous Digital Subscriber Line is a set of technologies that allow for high-speed computer communications over a telephone wire at the same time as a telephone service. |
| Co-axial Cable | Co-axial Cable is a shielded communications cable that allows for the transfer of electric signals over a copper conductor. |
| Crowd-sourced | A system of making use of a large group of people to make decisions or perform work through solicited contributions rather than by using traditional employees or suppliers. |
| Digitization | The conversation of information to a digital form. |
| DSL | Digital Subscriber Line is a set of technologies that allow for high-speed computer communications over telephone wire. |
| Email | Electronic Mail. |
| Fibre Optic | Flexible, transparent glass or plastic cable that can transfer light from one end of the cable to the other. |



Glossary of Terms (continued)

| | |
|--------------------------------------|---|
| Fixed Wireless | High speed wireless. |
| Internet Protocol | The protocol that regulates the transmission of data packets across the Internet. |
| Internet Service Provider | A company that provides access to the Internet as a service to subscribers. |
| LTE | Long Term Evolution is a protocol that allows for the provision of 4th generation mobile telephone services with greater efficiency. |
| Protocol | A set of rules and conventions for the transfer of information between devices. |
| Router | A device that manages the routing of information between computers and networks. |
| Social Media | A service designed to provide tools for socialising with others across the Internet. |
| Transmission Control Protocol | The protocol that regulates the formation and assemble of data packets for transfer across the Internet. |
| Video Chat | An Internet services that allows persons to chat while seeing each other with simultaneous bidirectional, real-time video feed. |
| Wi-Fi | A set of wireless computer networking technologies that allow for small networks. |
| Wi-Fi base station | A device that provides for a Wi-Fi network and often allows connection to a wired network. |
| Wireless | Sending and receiving electronic signals by using radio waves. |
| WPA, WPA2 | Wi-Fi Protected Access and Wi-Fi Protected Access 2 are two security protocols designed to protect Wi-Fi networks. These protocols were developed to resolve issues in the earlier 'Wired Equivalent Privacy'(WEP) security protocol. |