Year 11 ICT Timetable

Topic 1. Personal digital devices

- Mobile phones
- Personal computers (portable, desktop)
- Cameras and camcorders
- Games consoles
- Home entertainment systems
- Media players
- Navigation aids

Questions to be able to answer:

- Who would use these devices? (target audience)
- How are these devices used? (learning, money, leisure, shopping, banking, health)
- Features of device (portable, performance, storage, interface, media, games)
- Can you pick a device that would suit a particular person and their needs? (age, gender, disability)
- What peripherals can you use with these devices? (Headphones, remotes, controllers..)
- What health and safety issues are there?

Topic 2. Connectivity

- Digital communications
  - device to device (cable, wireless)
  - broadcast (TV, radio, GPS)
- Digital data
  - Information
  - communication (email, voice, video)
  - applications (gaming, peripheral connections)

Questions to be able to answer:

- What equipment would you need for devices that connect to a network?
- What is good / bad about using wired and wireless networks?
- What methods of connecting two devices together are there?
- What networks are commonly used? (Ethernet, wireless, GSM)
- What is bandwidth and latency? How do they impact a network?
- Can you describe different protocols? (VoIP, POP, IMAP, SMTP, HTTP/S)
- What security risks are there when connecting?
- How can you reduce risks? (firewalls, encryption, authentication, digital certificates

Topic 3. Operating Online

- Worldwide web
- Identification and authentication

- Online accounts
- Personal spaces
- Profiling (public and private)
- Data protection

Questions to be able to answer:

- What is the internet?
- Who can use the internet?
- What factors might stop people using the internet?
- What security measures can you use whilst on the internet? (usernames, passwords, challenge response, security questions)
- What laws link to being safe on the internet?

Topic 4. Online goods and services

Online 'shops'/physical goods

- Booking systems for travel, leisure and entertainment
- Banking and other financial services
- Education and training
- Gaming
- News and other information services
- Auctions
- 'On demand'/streaming entertainment services

Questions to be able to answer:

- What are the pros / cons of shopping online?
- How can shopping online impact on behaviour/lifestyle?
- Why do businesses choose to operate online?
- What is transactional data? Why is it used?
- What differnet payment systems can you use online?
- What protection do you have as a user?
- Advantages/disadvantages of hosted application?
- Advantages/disadvantages of saving data online (globally) or on a PC (locally)?

Topic 5. Online Communities

- Social networking
- Online work spaces
- Virtual learning environments
- User-generated reference sites and social book marking

Questions to be able to answer:

- What features can you find on social media / virtual learning environments / banking?
- How has ICT changed online in regards to online communities?
- How should a user behave online?
- How can you use ICT to communicate globally?