

Year 9 Revision Checklist for January Recall Test 2022

Homework task – produce a revision mind map to cover these topics (use BBC Bitesize and Teach-ICT)



Year 9

Topic 1- E- safety

Sexting definition and legalities. <https://tinyurl.com/hpdkr6e2>

Age ratings <https://pegi.info/>

Selfies- dangers <https://tinyurl.com/nbpt9afe>

Pornographic images (legalities) <https://tinyurl.com/jwwt6ky6>

Gaming <https://tinyurl.com/3f9wu4fm>

Online Gambling <https://tinyurl.com/5d5a45ej>

Topic 2- Multimedia- need to change

Compression: lossy and lossless <https://tinyurl.com/2ecyhdaw>

File types (image, sound, video) and their suitability for different applications (considering quality, storage and impact on download speed)

Images- tinyurl.com/w2ecwubj tinyurl.com/2kn3kezm

Video- tinyurl.com/4vfxxxze, tinyurl.com/2fmfs229

Sound tinyurl.com/rvr6e8

Laws when sourcing assets. <https://tinyurl.com/3ptkftz2>

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Year 8 Topics

1) Computer Security

- Describe the difference between a grey, black and white hacker. <https://tinyurl.com/xstrt58>
- Describe network attacks e.g. DDoS, Brute Force <https://tinyurl.com/57wzat5j>
- Identify and apply the four offences of the Computer Misuse Act. <https://tinyurl.com/fa23y4n2>
- Understand what Copyright law protects against. <https://tinyurl.com/cxdx3fw>
- Identify an e-mail scam <https://tinyurl.com/9fhct655>

2) Computer Networks

- Describe the difference between the internet and world wide web <https://tinyurl.com/hmcdsmk5>
- Describe the term 'transmission media' using examples e.g. twisted pair, ethernet, fibre optic tinyurl.com/y6l5ka4n
- Describe the purpose of network hardware e.g. hub, switch, router, nic, server, bridge tinyurl.com/aqe58ex
tinyurl.com/y2y5ua36 (server only)
- Compare a LAN and a WAN <https://tinyurl.com/2wan4ctd>
- Explain the advantages and disadvantages of a star, bus and ring network. <https://tinyurl.com/hrxyxax5>

3) Computer programming with Python

- Define an algorithm and give an example e.g. pseudocode or flowchart. <https://tinyurl.com/4th4rz7z>
- Create and debug python code to output a string e.g. `print("Hello")` or carry out calculations e.g. `print(2*2)` multiplies, `print(4/2)` divides, variables e.g. `name = "Mr Nicholls"`, selection e.g. IF/ELSE

Year 8 Revision Checklist for January Recall Test 2022



Year 7 Topics

- 1) **E-Safety:** tinyurl.com/3swwmnnny
 - Online grooming, cyberbullying, safe searching
 - Threats to computers e.g. malware & prevention

- 2) **Computer Systems:** tinyurl.com/s8k4j22w
 - Types of computer: desktop, laptop, embedded etc
 - Internal parts of a computer and their purpose: CPU, motherboard, hard disk, graphics card.
 - Input and output devices tinyurl.com/6skt9ds
 - RAM, ROM, Virtual Memory tinyurl.com/vssfzrns
 - Secondary storage: characteristics (capacity, speed, reliability, durability) tinyurl.com/3xl86q3

- 3) **Data Representation:** tinyurl.com/9amkriap
 - Why computers use binary
 - Binary to decimal conversion
 - Decimal to binary conversion

- 4) **Spreadsheets:** tinyurl.com/5hsar5
 - Purpose of spreadsheets
 - Formatting techniques
 - Cell references and the use of formulae (+ * - /)
 - Functions (sum, counta, max and min)

