Year 11 Autumn Mock – GCSE Computer Science

Revision List

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| **Topic** | **Revision resources** | **Description** |
| Number systems | [Binary processing](https://www.youtube.com/watch?v=T5gIiz0VeyI&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=13)  [Conversions](https://www.youtube.com/watch?v=pCIUh20mNlA&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=15)  [Binary addition](https://www.youtube.com/watch?v=3K_Nw_pDzUQ&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=16) | Converting between binary, denary and hexadecimal.  Binary arithmetic  Binary shifts |
| Units of scale | [Units](https://www.youtube.com/watch?v=jBXWZbHPLWI&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=12)  [Storage calculations](https://www.youtube.com/watch?v=KzgbVfnJ7I4&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=14) | Understanding the measurements of speed (bits) and size (bytes).  Converting between all units of scale (giga, mega, kilo) |
| Network protocols | [Common protocols](https://www.youtube.com/watch?v=ncGIs1Wnxn8&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=33) | Understanding which network protocols are suitable for particular actions on a network. |
| Network layers | [layers](https://www.youtube.com/watch?v=S6Kwx5ZJpxg&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=34) | Describing the purpose of individual network layers |
| LAN and WAN | [Types of network](https://www.youtube.com/watch?v=KeN3H8_Jhbc&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=23)  [Network hardware](https://www.youtube.com/watch?v=0VZz19fBOUQ&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=26)  [Client server & p2p](https://www.youtube.com/watch?v=w_LyIDAh_bY&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=25) | Network equipment  Network characteristics  Wireless networks  Client/server relationships |
| Data representation | [characters](https://www.youtube.com/watch?v=9oYV4JvSsok&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=19)  [images](https://www.youtube.com/watch?v=6EfxuAOKZKc&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=20)  [compression](https://www.youtube.com/watch?v=kOFA8FPL5kE&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=22) | Character sets  Storing images as binary  Compression |
| Security | [Forms of attack](https://www.youtube.com/watch?v=4f05t8ppJfk&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=35)  [Network threats](https://www.youtube.com/watch?v=jlvvek8n5g8&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=36) | Viruses and malware |
| Storage | [Primary](https://www.youtube.com/watch?v=dhQOkkZXu5w&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=6)  [RAM and ROM](https://www.youtube.com/watch?v=Q2pzT6oYPWg&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=7)  [Virtual Memory](https://www.youtube.com/watch?v=M31SS70Od08&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=8)  [Secondary](https://www.youtube.com/watch?v=FNwA-h_tfPo&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=9) | Primary storage  Secondary storage  Virtual memory |
| Software | [Open source vs proprietary](https://www.youtube.com/watch?v=49IVvPiiGP4&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=48) | Open source  Proprietary |
| Legal, ethical, environmental | [Legal issues](https://www.youtube.com/watch?v=fT_jls9bsoI&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=47)  [Privacy issues](https://www.youtube.com/watch?v=6zTOHgTT9qw&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=43)  [Ethical issues](https://www.youtube.com/watch?v=fHOHOqIdhh8&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=44)  [Environmental issues](https://www.youtube.com/watch?v=g91-xCNv8-E&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF&index=45) | Legal issues (including names of legislation)  Privacy issues  Ethical issues  Environmental issues |