

Weekly CNAT ICT Revision Plan OCR

W/c		Revise	Practice
15	08.01	<p>features and purposes of computing devices, i.e.: desktop and portable devices, i.e. laptops, netbooks, tablets, smartphones</p> <p>input devices, i.e. mice, keyboard, microphone, sensors, pads, specialist keyboards, touch pad, microphones, remote controls, scanners, digital cameras, webcams, touch screens, readers for barcodes, magnetic stripes and chip and pin, MIDI instruments.</p> <p>output devices, i.e. monitor/screens, printers, speakers, head/earphones, digital projectors, data projectors, plotters, actuators</p>	<p>Write explanation of following: Desktop, laptop, netbook, tablet, smartphone, input device, output device.</p> <p>GCSEpod: Computer Systems, Hardware, Input Devices, Output Devices</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/zgg9q6f/revision</p> <p>Complete Activity Sheet: 1.01 Desktop PC 1.02 Laptop 1.03 Tablets 1.04 Smartphones 1.06 Input and Output Devices 1.07 Input and Output Devices</p> <p>Videos (http://folders.axevalley.devon.sch.uk/html/ict/videos/index-old.htm): Input devices and Output devices</p>
14	15.01	<p>software, i.e.:</p> <ul style="list-style-type: none"> –operating systems (e.g. Windows, OS X, Android, iOS) –utility software (e.g. computer security) –applications software, i.e. word processors, desktop publishing software, spreadsheets, database management software, multimedia software, slideshow software, video-editing software, graphics manipulation software, communications software (e.g. social networking software, chat, instant messaging, file transfer and email clients), presentation software, gaming software, web browsers, apps for portable devices 	<p>Create revision cards for: Operating system, utility software, application software</p> <p>GCSEPod: Software, Systems Software, Applications software</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/z8vrd2p/revision https://www.bbc.co.uk/education/guides/zjg9q6f/revision https://www.bbc.co.uk/education/guides/zqrk7ty/revision https://www.bbc.co.uk/education/guides/z7c82hv/revision</p> <p>Complete Activity Sheet: 1.05 Operating systems 1.08 Utility Software 1.11 Application Software</p>
Thursday Period 5 Practice paper 1			
13	22.01	<p>storage and connectivity devices, i.e.:</p> <ul style="list-style-type: none"> –optical disks (e.g. CD and DVD for data storage) –magnetic media (e.g. internal and external hard disk drives (HDD), tape) –Solid State Drives (SSD) –Memory cards, i.e. flash memory devices –network devices (e.g. routers, modems) –cloud storage 	<p>Create storage mind map with following nodes: Optical disk, Hard disk, Solid state drive, memory cards, cloud storage.</p> <p>Add an advantage and disadvantage of each type of storage.</p> <p>GCSEpod: Primary Storage, Secondary Storage</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/z7rk7ty/revision</p> <p>Complete Activity Sheet: 1.12 Storage devices and Media 1.13 Solid-state storage devices 1.14 Magnetic Storage Devices</p> <p>Videos: Storage</p>

12	29.01	<p>configurations, i.e.:</p> <ul style="list-style-type: none"> – typical office configurations – customised systems for specified needs, i.e.: physical impairment, i.e. sight, hearing, movement remote working (e.g. travelling, hotel or home) <p>how the following factors can affect the choice of system: cost, availability, user needs, data security</p>	<p>Write explanation of following: Remote working, data security. Make list of input and output devices that can assist with physical impairment</p> <p>Complete Activity Sheet: 1.16 Customising Systems</p> <p>Videos: Robotics help the disabled and technology provides job hopes for disabled.</p>
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Thursday Period 5 Practice paper 2

11	05.02	<p>how peripherals can be connected to a computer device, i.e.:</p> <ul style="list-style-type: none"> wired methods (e.g. USB, firewire) wireless methods (e.g. wifi, Bluetooth, infra-red) <p>how to connect a computing device to an existing wireless network, i.e.:</p> <ul style="list-style-type: none"> network name, i.e. Service Set Identifier (SSID) the use of security keys appropriate firewall settings for public and private networks <p>how organisations can monitor employees, i.e. GPS location tracking, monitoring internet use, monitoring communications.</p>	<p>Write explanation of following: Wired connection, wireless, Bluetooth, wifi, SSID, firewall, GPS</p> <p>Create instruction sheet with picture to explain how to connect to wireless network.</p> <p>GCSEpod: Security, Access and Online security</p> <p>Complete Activity Sheet: 1.15 Network devices 1.17 Wired and Wireless Connections 1.18 Using Bluetooth 1.19 Connecting to wireless Networks 1.20 How organisations monitor employees</p>
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10	10.02	<p>data capture methods, i.e.: online and paper-based forms automated data capture systems, i.e. control system sensors, barcode readers, Radio Frequency Identification Device (RFID), Near Field Communication (NFC)</p> <p>how the following factors can affect the choice of data capture method:</p> <ul style="list-style-type: none"> nature of information to be collected (e.g. environmental conditions, location of information) cost availability ease of use data security <p>how to design data capture forms to obtain specified information how to code information for use in a spreadsheet or database data validation methods</p>	<p>Create revision poster on the following: NFC, RFID, Barcode, QR code.</p> <p>Create 4 revision cards for validation methods with explanation for each</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/z8yg87h/revision https://www.bbc.co.uk/education/guides/zw3cwmn/revision https://www.bbc.co.uk/education/guides/zdvr2p/revision</p> <p>Complete Activity Sheet: 2.02 Automatic Data Capture 2.05 Data Validation 2.07 Data Security – Software Methods 2.08 Data Security – Physical Methods</p> <p>Videos: RFID tags and RFID tags in Airport</p>
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Thursday Period 5 Practice paper 3

9	26.02	<p>file formats for storing data, i.e.:</p> <ul style="list-style-type: none"> proprietary formats, i.e. .doc, .xls, .ppt, .fla, .wma, .aac open formats, i.e. .rtf, .pdf, .csv, .exe, .txt, .mp3, .wav <p>data storage technologies, i.e.:</p> <ul style="list-style-type: none"> local and removable media remote storage (e.g. offsite location, cloud storage) <p>security measures to be used when storing data, i.e. network/computer security, i.e.:</p> <ul style="list-style-type: none"> – usernames/passwords – access rights/permissions document security, i.e.: – passwords – other ways to restrict access to or editing of content – how and why data is encrypted <p>physical security to prevent loss of data/devices (e.g. locked doors)</p>	<p>Create file formats Mind map detailing two file formats for each of the following Word-processed document, spreadsheet, image, video file, sound file, presentation.</p> <p>Write explanation of following: Access rights, encryption, removable media.</p> <p>GCSEpod: Security</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/zjb4jxs/revision</p> <p>Complete Activity Sheet: 2.03 File Formats 2.04 Open Source vs Proprietary File Formats</p>
8	05.03	<p>data transferring technologies, i.e.:</p> <ul style="list-style-type: none"> wired and wireless methods mobile data transmission (e.g. 3g, 4g) remote methods (e.g. email, internet/cloud, peer to peer file sharing) <p>security methods, i.e. data encryption</p> <p>how the following factors can affect the choice of data transfer method: file size, transfer speed, future-proofing, data security, user needs</p> <p>factors affecting data transfer speed (e.g. bandwidth, router technology)</p> <p>the factors affecting the appropriate optimisation of electronic files (e.g. download speeds, quality of product)</p> <p>how to use back-up and recovery systems, i.e.:</p> <ul style="list-style-type: none"> data storage media (e.g. removable devices, remote storage) back-up frequency archiving automated versus manual systems <p>how the following factors can affect the choice of back-up method: cost, availability, ease of use, data security.</p>	<p>Create revision cards for following: Encryption, optimisation, back-up, archiving</p> <p>Complete Activity Sheet: 2.09 Data Transferring Methods 2.10 Mobile Data 2.11 Data Transfer Speeds 2.12 Optimising Electronic Files 2.13 Backup and Recovery 2.14 Factors Affecting Backup Methods</p> <p>Videos: Backup</p>
Thursday Period 5 Practice paper 4			

7	12.03	<p>how businesses can communicate with employees and others working remotely, i.e. voice telephones, SMS, instant messaging, e-mail, chat rooms, forums, bulletin boards, Voice-over-IP (VoIP), video conferencing, webcams, blogs, social networking appropriate use of remote communication tools, i.e. for email appropriate use of subject, cc/bcc, attachments and email etiquette the benefits and drawbacks of these communication methods.</p> <p>how diary management software can be used to organise work schedules, i.e.:</p> <ul style="list-style-type: none"> creating appointments/meetings inviting participants creating tasks creating to-do lists setting reminders <p>how documents can be created and edited collaboratively, i.e.:</p> <ul style="list-style-type: none"> documents in shared access locations, i.e.: <ul style="list-style-type: none"> – network shared areas (e.g. read/write access) – cloud-based services (e.g. providing open or restricted access to services enabling the creating/editing of documents online) inserting comments into an existing draft editing drafts, tracking changes made reviewing facilities: accepting or rejecting changes made. 	<p>List features of diary management system. Make a list of ways in which you can communicate electronically.</p> <p>GCSEpod: Social Networking</p> <p>Complete Activity Sheet:</p> <ul style="list-style-type: none"> 3.01 Business Communication 3.02 Communication Methods 3.03 Cloud Based Services 3.04 Document Editing and Review <p>Videos:</p> <p>Teleworking – Is it suitable for all? and Teleworking – Using ICT to work from home.</p>
6	19.03	<p>how legislation affects business computer users, i.e.:</p> <ul style="list-style-type: none"> health and safety data protection copyright computer misuse <p>how moral and ethical issues affect business computer users, i.e.: the use and abuse of personal and private data</p>	<p>Create revision cards for 8 principles of data protection Make a list of 3 levels of computer misuse. Make revision poster for 4 health issues related to use of ICT Explain copyright law, identify 3 actions you must do to use copyrighted material.</p> <p>GCSEpod: Health and Safety Issues, Data Protection, Copyright and Computer Misuse Act</p> <p>BBCbitesize test:</p> <ul style="list-style-type: none"> https://www.bbc.co.uk/education/guides/z6kj6sg/revision https://www.bbc.co.uk/education/guides/zt8qtfr/revision https://www.bbc.co.uk/education/guides/zhd7hyc/revision https://www.bbc.co.uk/education/guides/zkyg87h/revision <p>Complete Activity Sheet:</p> <ul style="list-style-type: none"> 4.01 Legislation 4.02 Data Protection Act 4.03 Copyright Designs and Patents Act 4.04 Health and Safety Legislation 4.05 Computer Misuse Act 4.06 Ethical issues <p>Videos:</p> <p>Barrys Bad Data Day, Introduction to Copyright, RSI, Stress and Using computers safely</p>

5	26.03	<p>cyberbullying monitoring of individuals by organisations through the use of:</p> <ul style="list-style-type: none"> – worker monitoring/logging, – cookies, – key logging, – worker call monitoring/recording, – electronic consumer surveillance, – mobile phone triangulation <p>the implications and consequences for organisations of data loss, corruption and theft, i.e.:</p> <p>legal implications (e.g. action from the Information Commissioner)</p> <p>impact on customers (e.g. reduced confidence in business, increased risk of personal identity theft)</p> <p>impact on employees (e.g. disciplinary action for not following company procedures)</p> <p>impact on organisation (e.g. increased costs in resolving problems caused, loss of income if customers lose confidence)</p>	<p>Write explanation of following: Key logging, call monitoring, surveillance</p> <p>GCSEpod: Online Safety, E-Safety</p> <p>Complete Activity Sheet: 4.07 Cyberbullying 4.08 Monitoring of individuals by organisations 4.09 Impact and Consequences to Organisations</p>
4	16.04	<p>the main threats to data security and how to deal with them, threats to data security, i.e.:</p> <ul style="list-style-type: none"> –computer viruses –trojans –worms –phishing –spyware –adware –hacking –Denial of Service (DoS) attacks –physical threats (e.g. loss/theft of devices) <p>actions to minimise risks, i.e.:</p> <ul style="list-style-type: none"> –act online in ways which reduce the risk of identity theft and protect personal security –use of protection software, i.e. firewall, anti-virus, anti-spam, data encryption to store and transfer data <p>using automatic and manual updating facilities for operating systems and security software</p>	<p>Write explanation of following: computer viruses, Trojans, worms, phishing, spyware, adware, hacking, Denial of Service (DoS) attacks, Identity theft.</p> <p>BBCbitesize test: https://www.bbc.co.uk/education/guides/zrpycdm/revision</p> <p>Complete Activity Sheet: 4.10 Threats to Data Security 4.11 Automatic and Manual Software Updates</p> <p>Videos: Credit Card Fraud, Email Scams, Hacking, Identity theft 1, Identity theft 2, Phising, Post MyDoom Virus, Spam, Viruses, Virus Demonstration, Virus Explanation, Virus Writers and Zombie PC</p>
Thursday Period 5 Practice paper 6			
3	23.04	Case Study Preparatory Tasks (TBC once released)	Create mindmap of Scenario One annotate all keywords identified. Research businesses like one mentioned in scenario one
2	30.04	Case Study Preparatory Tasks (TBC once released)	Create mindmap of Scenario Two annotate all keywords identified. Research businesses like one mentioned in scenario two.
Thursday Period 5 Practice paper 7			
1	07.05	Case Study Preparatory Tasks (TBC once released)	

14th May 2018 am Unit R001: Understanding Computer Systems (Written Paper – 1 hour, 60 marks, 25%)

Learning Outcome 1: Understand how ICT can be used to meet business needs	Learning Outcome 2: Know how to work with information and data to meet specified business needs
Learning Outcome 3: Know how ICT can be used to support business working practices	Learning Outcome 4: Understand how legal, ethical, safety and security issues affect how computers should be used
Case Study Preparatory Tasks	