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| **Online Services** | **Online advertising** | **Online Documents** |
| **Real-time information**Information which is updated all the time (24/7)**Commerce** Buying and selling online**Government**Online applications, tax, voting, etc.**Virtual learning environment (VLE)**Online access to school work, marking, grades, communication. Allows students to collaborate. **Download services**Getting something from a website and saving it on to your device**Business** Online banking, office workers, etc.**Entertainment**Gaming, music, video, film, on demand TV**Communication**Social media, email, video calling, etc. | **Pay-per-click**Every time a customer clicks on the advert the advertiser is charged**Search engine advertising**The advertiser pays for the advert to appear at the top of the results page. **Email marketing**Emails sent to a target audience**Pop-up** Advert appears in the middle of the screen over the top of a website**Web banner**Advert appears on the top or down the side of a website**In-line advert**Advert is linked to a word or piece of text and appears when the user clicks on it.**Host website**A website which allows another advertiser to appear on it, e.g. as a banner**Affiliate website**Another name for a host website | **File compression**Using an algorithm to make files smaller**Index**The information (code) need to expand a file**Algorithm**A set of instructions **Winzip**The software used expand a compressed file**Expansion**Returning the compressed file back to its original size**Locally installed**Saved on the computer**Standalone software**Software installed (saved) on the computer**Online software**Software stored on a webserver and accessed over the Internet**Software as a Service**Another name for online software**Online storage**Files stored on an external server and accessed over the Internet**Cloud computing**Storing documents online | **Host**The name given to the online server where files are stored**Collaboration**Sharing documents and working together online**Ubiquitous computing**The idea that computers are everywhere**The Internet of Things**The idea that the Internet is a network of things that contain a processor, e.g. computer, fridge and people**RFID chip**A chip can be used to identify and track someone or something**File permissions**Restricts access to documents for some users – full control, read/write, read only**Levels of access** Some users can access documents using a password**Version control** Every time the document is saved it is given a number or code to show which is the most recent version**Back up** Saving a second copy of a document in case the original is deleted or corrupted |
| **Online Communication** | **The WWW** | **The Internet** |
| **VoIP**Free voice or video calls over the internet**Social networking**An online community**Network of Friends** Another name for social networking**Netiquette**How to behave appropriately online**Profile**Personal information on a social networking site**Virtual community**A community which only exists online**Real time communication**Messages are sent in real time, e.g. VoIP, instant messaging**Podcast**audio or video files which can be downloaded from the internet**Wiki**online information which can be edited by anyone**Newsgroup**a chat room or forum where people talk about a particular topic | **World Wide Web**Billions of webpages linked together**Hyperlink** A link to another webpage**Web server**Online server where webpages are stored **Web browser**A program which allows the user to view a website, e.g. Internet Explorer or Safari**URL (Uniform Resource Locator)**A webpage address made up of 3 parts: 1. Protocol2. Domain name3. Path **http (Hypertext Transfer Protocol)**Protocol for requesting and viewing webpages**HTML (Hypertext Transfer Language)**Computer language used to create webpages**Search engine**User can search for information on websites using key words**Index**The name of the search engines database**Crawler, spider or bot**Look for new data on websites and store the data in the search engines database | **Internet**The world’s largest network connecting every device in the world.**Network**2 or more computers connected together**Connecting backbone** The main cable connecting large networks on the internet to smaller LANs**Wireless** Connecting to the internet without using cables (Wi-Fi)**Broadband** A wired connection to an ISP, through an Ethernet cable**Dial-up** A wired connection via a conventional telephone line, which needs a modem to convert the analogue signal to digital**Bandwidth**How much data a network can transmit in a second (Speed of data transfer)**Points of Presence (POP)**The point where the client connects to the ISP | **Network access point (NAP)**Where 2 ISPs connect to each other, e.g. BT and Virgin**Protocol**A rule for doing something**Transmission control protocol (TCP)**Takes the files from the client and breaks them down into packets. Passes the packets to the IP. **Internet protocol (IP)**The protocol used to transmit packets on the Internet**File transmission protocol (FTP)**Used to download programs from a server to a computer or upload webpages to the host webserver**Internet service provider (ISP)**The company who provide access to the internet, e.g. BT, Sky**Server**A computer or program that gives clients access to files / network**Client**Computer which access the data on the server**Router**The router sends the data to the correct destination. |
| **Email** | **Databases** | **Data Transfer** |
| **Email client**email program that runs on your device (e.g.POP3)**Webmail**Web based email accounts (e.g. IMAP)**Application**Computer program / software**SMTP**Protocol used to send emails**POP3**The server downloads the email to the computer and it can be read offline**IMAP**The email is saved on the server and can only be read with an internet connection**Store and Forward**The email s stored on the email server and is only downloaded to the client when the user opens it**cc**Copying the message to another person**bcc**Sending a copy of the message to another person without the receiver knowing | **Database**A collection of data**Record** A row of information about a single item**Field**A column of information about one category**Table**Data is stored in a table**Relational Database**Made up of multiple tables**Primary Key**A unique reference number used to identify one record**Foreign Key**A field in one table that is linked to the primary key in another table**Relationship**The primary and foreign keys create a relationship between tables**Database Management System (DMS)**Software that allows you to create and manage your own database**Structured Query Language (SQL)**Language used to create databases**Data Definition Language (DDL)** Defines the structure of the database**Data Manipulation Language (DML)**Adds, deletes and changes data. Can also run queries | **Data**Text, image, sound, video**Device**Computers, peripheral devices, mobile phones, etc.**Peripheral**Anything that can be plugged in to a computer, e.g. monitor, mouse, keyboard, printer, headphones, etc**Data exchange**How data is sent from one device to another**Packet switching**Breaking data in to packets and sending them over the internetPackets are made up of a header, payload and trailer. **CODEC**Program used for VoIP. Converts the analogue signal to digital, breaks it into packets and sends the packets to the destination. Will also put the packets back together. **Analogue / digital**Different types of signal – Phone uses analogue. Computer uses digital**Transmission mode**The way devices transfer data with each other | **Simplex**Signals can only travel in one direction at a time**Full-duplex**Signals go in both directions at the same time**Half-duplex**Signals go in both directions but only one device can send a signal**Serial**Data moves on one wire – 8 bits on 1 wire – but can only send one bit at a time**Parallel**Each bit has it’s own wire – 1 bit on 1 wire – a byte (8 bits) can be sent at once**USB**A type of serial transmission**Client-side processing**Data from a webpage is processed on the client**Server-side processing**Data from a webpage is processed on the server |

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| **HTML Tag** | **Meaning** |
| <a href> | hyperlink |
| <b>  | bold |
| <body> | Body of the text |
| <font> | Font type and size |
| <html> | Start of the program |
| </html> | End of the program |
| <img=> | Image  |
| <i> | Italic |
| <li> | List  |
| <p> | Paragraph |
| <ul> | Bullet |
| <tr> | Adds a row in a table  |
| <td> | Adds a cell in a table  |

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| **Threats and Precautions** |
| **Opportunity**Stealing the device, using your device when you are not there**Virus**A program which stops your computer from working properly. Will spread to every computer on the network. Can get them from email attachments and file sharing websites**Malware**Trojans, worms, adware, spyware, virus**Phishing**An email which is trying to get your personal / banking information**Damage**Flood, fire or dropping your device!**Hackers**People who try to ‘break in’ to your machine | **Keypad, CCTV, burglar alarms, turning off your computer****Strong passwords****Levels of access** (page 6)**Anti-virus software****Install a firewall**Uses the IP address to stop unauthorised users from accessing a network.**Encryption****Backup and recovery****Privacy settings on social media Think before you post!****Only use secure websites** |
| **Data Protection Act**A company has to keep all the data it holds about its customers safe. Customers have a right to ask for the data to not be used |
| **Computer Misuse Act**Hackers or those who upload viruses, spyware etc. will be prosecuted |
| **Copyright, Designs and Patents Act**Have to ask for permission before using an asset from the internet, or acknowledge the source |
| **Freedom of Information Act**You have a right to see what date companies hold about you.  |