Lesson 1

BTEC IT Induction

Unit (number and title)	Unit size (GLH)		Extended Certificate (360 GLH)
1 Information Technology Systems	120		M
2 Creating Systems to Manage Information	90		M
3 Using Social Media in Business	90		M
5 Data Modelling	60		O
			O

Components

- Unit 1 – Information Technology Systems **33%**
  - 2.5 Hr Externally Set Exam Paper. Mostly long answer questions of 6 to 12 marks

- Unit 2 – Creating Systems to Manage Information **25%**
  - 10 Hr Externally Set Database exam. Sat over 5 x 2 hr sessions over the period of a week. Have to use data given by the exam board to create a working database

- Unit 3 – Using Social Media in Business **25%**
  - Internally assessed. 2 written assignments researching into social media and how businesses use it and then designing and running a social media campaign of your own

- Unit 5 – Data Modelling **17%**
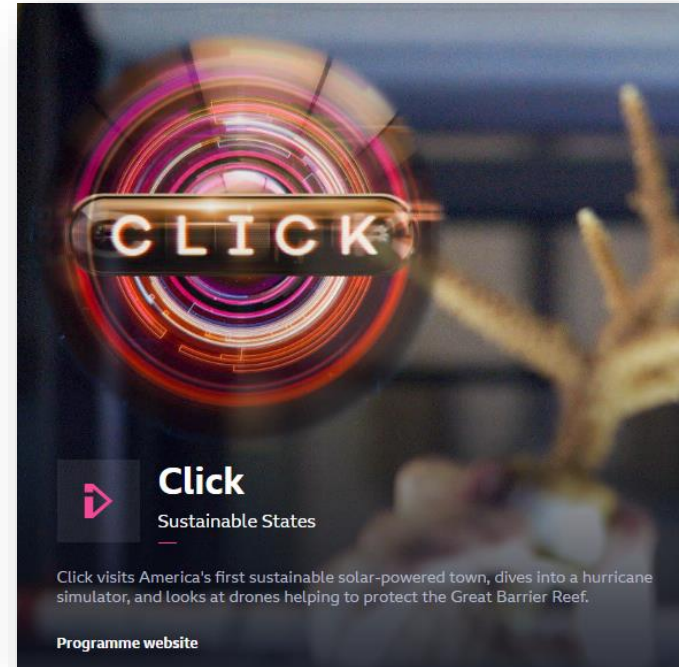 - Internally assessed. 2 written assignments. Analysing and processing data in Excel

- BTECs are for stupid people who can't do A-level?
  - NO. There is more extended writing than A-level by a LONG way. Discussion skills, building an argument, analysing data are all key skills you will need to develop

- We can just keep working on stuff until we get distinction?
  - No. For the assignments you will have deadlines which are expected to meet. Assignments will be handed in twice and then that's it.

- A pass is the equivalent of a grade E at A-level?
  - Correct. A Merit is a C, an Distinction is an A and a Distinction* is an A*

- Watch BBC click (the full version) each week over the summer *this is only 6 or 7 episodes...*

- For EACH episode, answer the following:
  - What were the main points of the episode?
  - Taking **ONE** of the stories from each show, **DISCUSS** the positives and negatives of that story in relation to modern society. (this should be about half a side of A4 for each episode)

Click

Sustainable States

Click visits America's first sustainable solar-powered town, dives into a hurricane simulator, and looks at drones helping to protect the Great Barrier Reef.

Programme website

- Go outside from time to time and get some vitamin D

- *Life isn't all about just being in front of a computer!*

- Do you care about who knows about your data / digital footprint?

- Is there anything you do online which you would prefer others didn't know about?

- EVERY WEBSITE you visit will be logged and data kept for up to a year
  - *The website you visit will be logged, not the specific page, but that is logged by your ISP anyway so it doesn't really matter that the government isn't logging it*
- Connections are logged against your IP address and your username so the government knows exactly who is doing what
- Connections from your phone are logged against IP address and phone number

WHAT IMPACT?

- Incognito only ever reduced your parents knowing what you are doing – your ISP and the snooper charter still logs even when you are incognito

Does this affect Apps on my phone?

- EVERY data connection your phone makes is logged against your phone number

What might Internet Connection Records look like

Date	Time	Mobile No.	Source IP	Source Port	Dest. IP	Dest.		Service / Domain
07/10/15	09:17:26	07771 966917	234:96:17:113	2237				ds Bank
07/10/15	09:18:37	07771 966917					SW1H OBG	Easyjet
07/10/15	09:19		8987		238.226.19.35	5222	SW1H OBG	WhatsApp
07/10/15	09:19:5	771 966917	234:96:17:119	1592	50.31.0.12	80	SW1H OBG	Maplin Electronics
07/10/15	09:22:19	07771 966917	234:96:17:102	26559	144.76.194.9	80	SW1H OBG	HarleyStreet Clinic
07/10/15	09:31:16	07771 966917	234:96:17:102	1227	94.245.104.73	80	SW1H OBG	Hotmail

WHAT IMPACT?

WhatsApp is encrypted

(5)   The obligations that may be specified in regulations under this section include, among other things—   20

    (a)   obligations to provide facilities or services of a specified description;

    (b)   obligations relating to apparatus owned or operated by a relevant operator;

    (c)   obligations relating to the removal by a relevant operator of electronic protection applied by or on behalf of that operator to any communications or data;   25

    (d)   obligations relating to the security of any postal or telecommunications services provided by a relevant operator;

    (e)   obligations relating to the handling or disclosure of any information.

I can get around it with VPNs / TOR

- How do you know who is running the VPN?

- VPN Providers have to keep logs for technical support purposes so they are NOT completely anonymous

- TOR browsers use the dark web to route traffic – do you really want to go there?

- VPN's have generally log user details for testing and monitoring performance of use

- What if the current ruling changes? A job interview in the future, where they can look over your complete browsing history..?
  - This already happens with Twitter and Facebook
- When, not if, this huge cache of data gets hacked?

WHAT IMPACT?

(ii) Hardeep's company has a password policy that must be followed to increase the security of passwords.

One rule of the policy requires users to change their passwords every three months.

Explain **two** other rules that would increase the security of passwords.

(4)

- What are the command words in this question
- How would you go about answering this?