

RIVERS TRANSITION CHALLENGE 2024 SUBJECT- IT:

Course details: OCR

Qualification: Cambridge TECHNICALS LEVEL 3 Introductory Diploma in IT

Minimum entry requirement is: Grade 4 in Maths, English and Science

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YOUR CHALLENGES:

Challenge 1:

Research and report challenge:

You will need to carry out research on the following storage types:

- 1. Solid state
- 2. Flash
- 3. Optical
- 4. Cloud

Included in your research you will need to include which categories they belong to from:

Internal, external and/or removable storage.

For each type you will need to investigate common uses, their main characteristics with detailed information explaining how data is saved on each device and how this influences how and when they are used. This will be in the form of a report.

How this links to the specification: Fundamentals of IT Unit 1 (exam unit)

Time guide: 3hrs

EXEMPLARS: You will be tested on your research ability and your presentation skills, as well as accurate content knowledge. You can use any means of presentation for this task (paper, Word, PowerPoint, video, posters, this list is not exhaustive). For this reason, I will not be providing an exemplar as I wish to see your current level of ability and the level at which you will be putting effort into the work. If you require guidance, please email.

SUPPORT:

Research using the internet

Teach- ICT website:

http://teach-ict.com/2016/GCSE_Computing/OCR_J276/1_3%20storage/secondary/miniweb/index.php

Login details are: CM08QB and binary 7

https://cambridgegcsecomputing.org/ You will need to sign up (free)

https://www.youtube.com/watch?v=TQCr9RV7twk&list=PL8dPuuaLjXtNlUrzyH5r6jN9ullgZBpdo&t=0s

Challenge 2:

Produce a leaflet

Explain why policies, procedures and agreements are required and also describe how effective they are in your school environment.

Every organisation that uses any form of IT should have a AUP (Acceptable Use Policy), for this challenge I want you to produce a professional information leaflet to inform employers about procedures etc. You are the company Director so you have decided that the leaflet will not only inform them, but will explain the possible dangers and the preventions that need to be put in place to try and stop Cyber Security attacks.

Background: Your company sells Alloy Wheels, you sell to companies abroad ,you can take orders via a website. You have employees that can work from home if they want, you have 20 employees of which there are 2 managers.

You will need to try and cover every eventuality as you could be held responsible for data breaches as the Company Director!

Research into AUP's first (there is one in your planner) you will need to understand why these are so important. If using images, ensure they are not copyrighted

How this links to the specification: Unit 2 -Global Information (Exam Unit)

Time guide: 3 hrs

EXEMPLARS:

https://www.getsafeonline.org/themes/site_themes/getsafeonline/download_centre/Sample_Acceptable_ Usage_Policy.pdf

Do not copy this and remember you explaining why and how to prevent. It also needs to directly reflect the needs of your company.

SUPPORT: Google how to use Publisher

HOW DO I HAND IN:

Your work bring your work to your first IT lesson in September so that it can be assessed and marked accordingly.

HOW AM I MARKED?

You are graded using Pass, Merit and Distinction, Distinction *. The tasks are tricky because it's Sixth Form and KS5 study and there is a big jump. You will need to spend significant time learning the concepts and techniques and how to complete a piece of research with references (these are extremely important)

We would expect new students to any course to be sitting at the bottom of the grading structure towards the beginning of Year 12 but there are certain activities that you will be familiar with and will do better with even though it's just the start of the course. Please don't worry if you receive U grades or Pass grades on your first assignment. Where there is major concern, we will ring your parents and carers throughout the year to be able to speak to them and you about how to provide support or the suitability of the course.

WHAT IF I GET STUCK?

Then email me, my email is in the title of this sheet, we know some things are tricky and are here to help!

WHAT IF I MISS A DEADLINE OR DON'T HAVE I.T?

You must speak to us in advance if you are going to miss a deadline. We know people are sick, and sometimes we have other commitments but usually work that isn't complete is down to students waiting until the last minute and then not having enough time to understand or complete the task.

If you email us in advance, we can support you. If you just miss the deadline, you are risking your course offer as you may not be suitable for the course. It is a big jump from Key Stage 4 to 5, but we also don't want to sign a student up for a two year course if they aren't going to be successful.

Wider Reading

Books:

White, R. and Downs, T.E. (2014) How Computers Work A definitive illustrated guide to the world of PCs and technology (unit 1)

My Revision Notes: Cambridge Technicals Level 3 IT Maureen Everett (Units 1 and 2)

Victoria Ellis, Graham Manson, Saundra Middleton (editor: Mo Everett) (2016) Cambridge Technicals

Level 3 IT ISBN:9781471874918 Publisher: Hodder Education All units)

Magazines/Journals:

https://journals.sagepub.com/home/jin

https://www.computing.co.uk/

https://www.journals.elsevier.com/international-journal-of-information-management

Websites:

Unit 1

http://www.teach-ict.com/gcse_new/networks/hardware/miniweb/index.htm

http://www.teach-ict.com/gcse_new/networks/hardware/resources/NWB_SIM.swf

http://www.computerhope.com/jargon/c/communication-devices.htm

http://www.t1shopper.com/tools/calculate/

http://code.tutsplus.com/articles/number-systems-an-introduction-to-binary-hexadecimal-and-more-active-10848

http://www.workplace-communication.com/types-electronic-communication.html

http://www.unit-conversion.info/computer.html

http://www.gcflearnfree.org/computerbasics/15/print

http://www.computerhope.com/jargon/s/software.htm

http://www.comptechdoc.org/independent/networking/protocol/protnet.html

Unit 2:

https://www.csnewbs.com/ctech-unit-2-globalinformation

https://hbr.org/2018/01/how-the-data-that-internet-companies-collect-can-be-used-for-the-public-

good

https://www.teach-ict.com/gcse_new/computer%20systems/storage_devices/

home_storage_devices.htm

https://www.hns-berks.co.uk/blogs/internet-connections-used-in-the-uk

https://www.bbc.co.uk/bitesize/topics/zkcqn39/articles/z2nbgk7

SUPPORTING MATERIAL

https://www.open.ac.uk/library/referencing-and-plagiarism/quick-guide-to-harvard-referencing-cite-them-right