

Level 3 IT

Transition Booklet

“Failure is simply the opportunity to begin again, this time more intelligently” - *Henry Ford*



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Welcome to Level 3 IT at SJBC.

Cambridge Technical in IT Level 3 (CTECH) are aimed at young people aged 16 to 19 who have completed Key Stage 4 of their education and want to study in a more practical, work-related way.

The Cambridge Technicals in IT take an in-depth look at IT that's all around us, providing students with a theoretical background reinforced with skills that transfer into the modern workplace.

What Will I Learn on This Course?

Learners will take five units, made up of three mandatory and two optional units.

All learners will study the following two mandatory units; (Unit 1) Fundamentals of IT and (Unit 2) Global information. These units provide learners with an insight into the IT sector, as they investigate the pace of technological change, IT infrastructure, and the flow of information on a global scale, as well as the important legal and security considerations.

In addition, learners are required to complete three further units, one of which must be the designated mandatory unit for their chosen pathway, thereby ensuring that they are specialising in a specific area as part of their study programme.

Achievement of this qualification can support progression to go on and study in a Higher Education institution either on relevant IT degrees such as, Computing and Technology or Business IT or support progression on to other degree courses.

A Level vs Cambridge Technicals Tariff Points

Grading – Pass, Merit, Distinction, Distinction*

A Level		Cambridge Technicals	
Grade	Tariff points	Grade	Tariff Points
A*	56	D*	56
A	48	D	48
B	40	M	32
C	32		
D	24	P	16
E	16		

UCAS tariff points are not subject to qualifications being on 16-18 performance tables. Centres are advised to check with university admissions on the acceptance of qualifications if not already specified by HEIs.

Course Textbook: <https://www.amazon.co.uk/Cambridge-Technicals-Level-2016/dp/1471874915>

Essential Revision Guide: <https://www.amazon.co.uk/My-Revision-Notes-Cambridge-Technicals/dp/1510442316>

Essential Summer Watching:

Guide to the Cambridge Technical IT Qualification: <https://www.youtube.com/watch?v=Yr11rrbtADc>

Introduction to IBM's Smarter planet: <https://www.youtube.com/watch?v=9wfZH6ZWxmk>
<https://www.youtube.com/watch?v=QZ0o7avcvv4>

Social Media Marketing:

<https://www.youtube.com/watch?v=usKMKq977iA>

<https://www.youtube.com/watch?v=0W6Jz44L1wU>

Preparation material:

Spending time over the summer to prepare for your course is time well spent. Here are some links to resources and other tasks that will help you to get off to a great start in your studies.

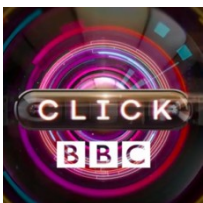


Unit 1 Fundamentals of IT Exam Content

This resource is free for students. Some of the content covered in the exam unit 'Fundamentals of IT' is directly from Computer Science topics. The following free resource teaches some of the key topics which is useful as a refresher or to learn new knowledge if you have not done GCSE Computing.

Curriculum resources by Craig 'n' Dave:

Craig Sargent and David Hillyard are two classroom teachers with a degree in computer science, and many years of teaching experience. Their video series helps you learn the theory for EVERY bullet point of your course specification.
<https://student.craigndave.org/gcse-videos>



Current Technology and Developments in IT

Many of the coursework units on this course require you to investigate existing technology as well as come up with your own ideas linked to IT. To ensure that you keep up to date about the latest technology developments and to help you develop your own ideas regularly watch videos from the BBC Click website.

<https://www.youtube.com/user/ClickBBC/videos>

TASK 1: Use <https://www.teach-ict.com/glossary/A.htm> or other sources to fill in the table below in your own words.
 (The first one has been done for you as an example.)

Computer Hardware	Uses	Benefits	Limitations
Input Devices			
Keyboard	<p>To input and edit text, numbers and characters into a computer device.</p> <p>Can be used to move around the computer screen if mouse is disabled.</p> <p>Can be used to access BIOS during computer boot sequence.</p> <p>Can also be used to control computer games. To perform system functions such as Print screen, volume or brightness control as well as display functions to external displays.</p>	<p>Easy to learn techniques such as touch typing to enable quick text entry.</p> <p>Can be ergonomic or braille for disabled users.</p> <p>Versatile and simple to use for beginners.</p>	<p>Small keyboards could be difficult to use, especially for disabled users.</p> <p>Characters in other languages can be difficult to access.</p> <p>UK and US keyboards are fixed and unable to be adapted to base country/language.</p> <p>Some features are not easy to access or know about.</p>
Mouse			

Scanner			
Sensors			
Microphone			

Graphics Tablet			
Visual Display			
Barcode Reader			

<i>Output devices</i>			
Plotters			
Speakers and headphones			
Braille Terminal			

<i>Communications Devices</i>			
Modem			
Network Card			
Terminal Adapter			

Wireless Router			
Wireless Network cards			
Hub			

Task 2: Complete the vocabulary activities on the following pages.

Name: _____

Complete the Sentence

Use the words in the list below to complete the sentence

Created on TheTeachersCorner.net [Fill-in-the-Blank Maker](#)

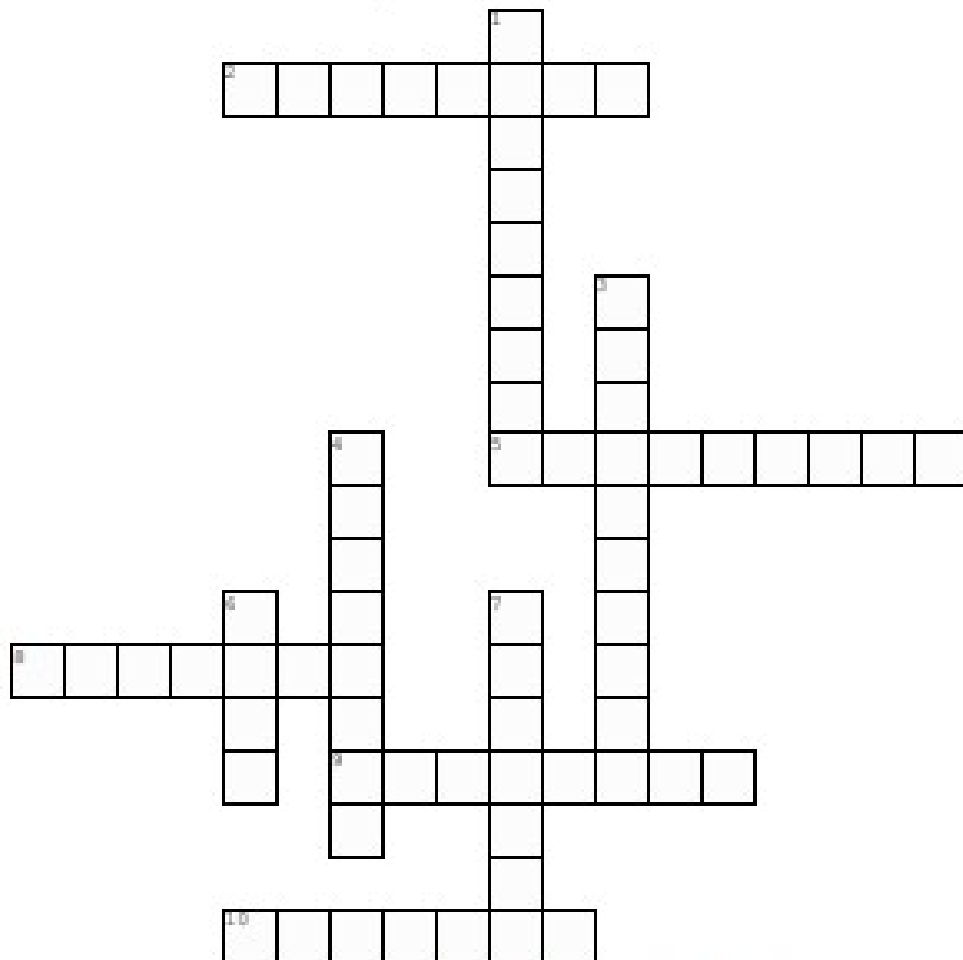
1. LAN - Local _____ Network.
2. WAN - Wide Area _____
3. _____ - Wireless Local Area Network.
4. MAN - _____ Area Network.
5. SAN - _____ Area Network
6. The _____ is the largest WAN
7. MAN - larger than a _____ but smaller than a _____
8. LAN - connects network devices over a _____ distance
9. VPN - Virtual _____ Network
10. _____ - Often found in networks

Router short Internet Area WAN Network LAN Metropolitan
Private WLAN Storage

Name: _____

Ready for Work

Complete the crossword



Created with [TheTeachersCorner.net Crossword Puzzle Generator](http://TheTeachersCorner.net/Crossword-Puzzle-Generator)

Qualified	Diligent	Team	Attitude	Groomed	Respect	Punctual	Dresscode
Hygiene		Appearance					

Across

2. On time, all the time
5. This defines what to wear at work
8. Listens to the manager, shows _____
9. Hard working and conscientious
10. Nice hair! Well _____

Down

1. Have the certificates to do the job.
3. Smart, tidy, not shabby
4. Can do! Will do! Responsive.
6. Works well in a _____ with others
7. Washed and clean. Personal _____

Name: _____

Business Systems

Write the letter of the correct match next to each problem.

Created on TheTeachersCorner.net [Match-up Maker](#)

1.	MIS	a. A system that provides managers with the tools to organize, evaluate and efficiently manage an organization.
2.	CRM	b. A course or principle of action adopted or proposed by an organisation
3.	SOP	c. An established or official way of doing something
4.	Helpdesk	d. Enables support agents to track, prioritize, and solve customer support tickets
5.	Policy	e. A set of step-by-step instructions compiled by an organization to help workers carry out complex routine operations
6.	Procedure	f. A business process in which client relationships, customer loyalty and brand value are built through marketing strategies and activities



Name: _____

Technology Device Vocabulary

Write the letter of the correct match next to each problem.

Created on TheTeachersCorner.net Match-up Maker

1.	<u> </u> Animation	a. restore compressed data back to its original size
		b. examples include ASCII, CAD, BMP, EPS, JIFF, PC Paintbrush, PIC, TIFF, GF, JPG, AU, and DOC.
2.	<u> </u> Audio card	c. a file containing musical data encoded according to Musical Instrument Digital Interface specifications
		d. final copy of a document or artwork used by commercial printers to make the plate form printing multiple copies
3.	<u> </u> Audio Files	e. a card that converts analog sound to digital data for use or storage inside a computer
		f. files that add music or voice sounds to a presentation
4.	<u> </u> Bitmap Image	g. a program that links a device, such as a mouse, printer, CD-ROM player, etc., to the operating system
		h. a special, extra part of RAM where frequently accessed information is stored
5.	<u> </u> Cache	i. a utility that can play video clips, animation, or sound files
	<u> </u> Camera	j. makeup of a computer system; choose from a variety of options such as a specific monitor, printer, etc.
6.	<u> </u> ready	k. data encoded so it takes up less storage space
		l. the process of adding movement to a graphic
7.	<u> </u> CD-ROM	m. a method of recording information in binary pulses so it can be stored in computers
		n. a medium that holds text, graphics, and sound
8.	<u> </u> Compress	o. images created in paint programs or through scanners
9.	<u> </u> Configuration	
10.	<u> </u> Decompress	
11.	<u> </u> Digitize	
12.	<u> </u> Device driver	
13.	<u> </u> File formats	
14.	<u> </u> Media player	
15.	<u> </u> MIDI	

Name: _____

Hardware

Please unscramble the words below

Created on TheTeachersCorner.net [Word Scramble Maker](#)

1. suoMe Rodent

2. osrsPoerc Intel inside?

3. darKyeob Tap, tap, tap

4. orotMni Watching?

5. diarboamm It's a mother!

6. eamrsc Barcode or paper

7. picGhsra GPU

8. BUS Port Serial bus?

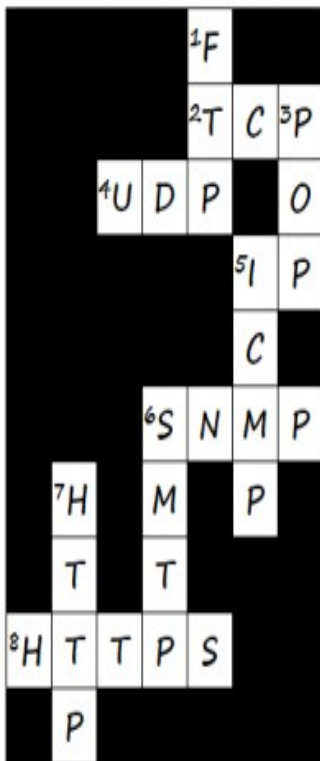
9. mrcdo Not DVD

10. rtinpre Paper device?

11. srotage Type of device

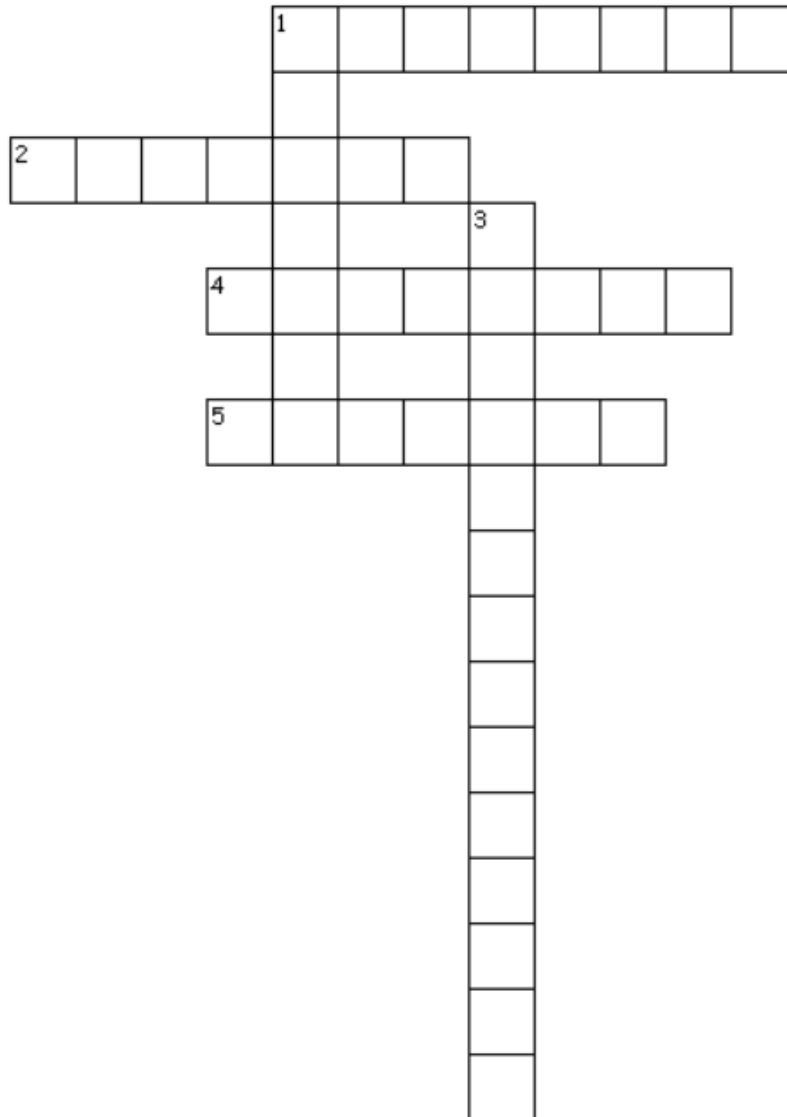
Protocols

Add your own clues...



Across	Meaning	Clue
2		
4		
5		
6		
8		

Down	Meaning	Clue
1		
3		
5		
6		
7		



Across

1. Separates applications from the hardware
2. Virtualisation designed to split bandwidth
4. You can partition a single physical computer into several virtual _____
5. Virtualising the individual computer

Down

1. Combines several repositories into one larger space
3. A simulated computing environment

File types

<http://bit.ly/2zMwqJj>

<http://bit.ly/2k89bSQ>

File type	Bitmap/vector	Compressed/ uncompressed	Main uses	Advantages	Disadvantages
JPG					
PNG					
GIF					
BMP					
TIFF					
RAW					
MP3					
MP4					

AVI					
MOV					
DOC/RTF					
PDF					
XLS					
MDB/ACCDB					