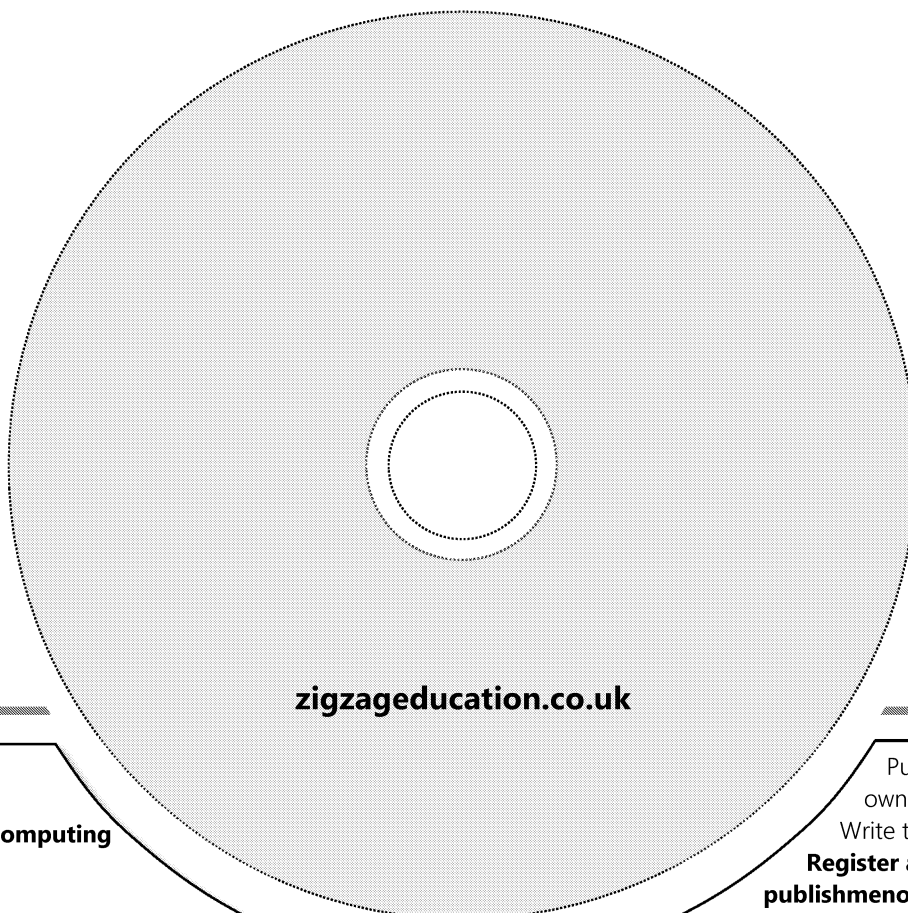




BTEC LEVEL 3 IN IT

Keyword Activities

Unit 1: Information Technology Systems



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11527**

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Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **BTEC Nationals in IT (2016)** specification for **Unit 1: Information Technology Systems**. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the learning aims for the topic:

- *A1: Digital devices, their functions and use*
- *A2: Peripheral devices and media*
- *A3a: OS and UI*
- *A3b: Computer software and file types*
- *A4: Emerging technologies*
- *A5: Choosing IT systems*
- *B1: Connectivity and B2: Networks*
- *B3: Issues relating to the transmission of data*
- *C1: Online systems and C2: Online communities*
- *D1: Threats to data, information and systems*
- *D2: Protecting data*
- *E1: Online services and E2: Impact on organisations*
- *E3: Using and manipulating data*
- *F1: Moral and ethical issues*
- *F2: Legal Issues*

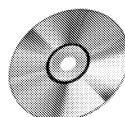
For each set, there are a number of different keyword activities on CD designed to give you a range of different options for classroom use, homework and revision. This variety enables you to take a different approach to different topics – such as using the Crosswords as homework for one topic, and the Match-up as a starter for another.

Alternatively, differentiate the activity for a given topic; for example, you might want to give your stronger students the **Crosswords** early on while you start weaker learners on the **Match-up** (where terms and definitions are both available). **Domino** and **Bingo** activities add an element of fun and reinforcement, as well as the potential for pair and group work. Finally, the **Flash Cards** come into their own for revision and the **Table-fill** and **Write Your Own Glossary** allow students to test their understanding by correctly filling in keywords or definitions.

For more information about the different activities included, see overleaf. →

Digital Format!

All of the activities are provided electronically on the accompanying CD. To use on a school network, the entire contents of the CD need to be copied and pasted into an accessible location.



Providing easy access to the activities are two HTML menus:

1. Access All Menu



Location: <index.html>

This menu, designed primarily for teacher use, includes links to everything provided on the CD – allowing you to easily select what you need when preparing your lessons.

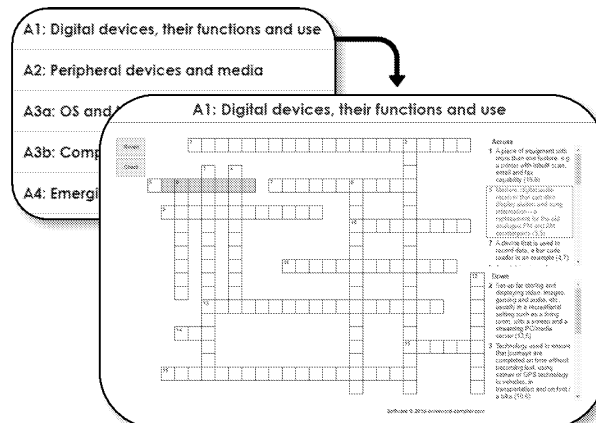
If you intend to give learners access to this menu, then be aware that it does include links to the solutions.

2. Interactive Crossword Menu



Location: <interactive-crosswords/index.html>

This menu, which can be accessed via the Access All Menu, is included to allow learner access to just the interactive crosswords (without the answers).



Activity Types

All activities are provided as PDF files, allowing for easy printing and sharing on your school's internal network or VLE. In addition, each of the single-page activities (*Crosswords*, *Match-up* and *Table-fill*), as well as the solutions, are provided on paper too.

The activities included in this resource are as follows:

Bingo

Each student is given a different bingo card containing a selection of words from the set. The teacher reads the definitions using the Keyword Answers, and the student must match the definition to the words on their card to complete rows, columns, and the full bingo card. The bingo activity is available for sets with 12 or more words.

✓ PDF

Crosswords

These traditional keyword activities are equally effective as lesson or homework activities – and are also an excellent way of easing students into their revision programme.

✓ PDF ✓ PAPER



INTERACTIVE

In addition to the photocopiable worksheets and PDF, the crosswords are provided in interactive format on the accompanying CD-ROM. These are web-based (HTML5) and will run straight from your Internet browser.

Dominoes / Loop Cards

This is essentially another match-up activity, but this one is designed to be used in a more active way to engage students. It is recommended that students work in pairs or small groups.

✓ PDF

Half of each card contains a keyword, and the other half contains a description. To complete the activity, students must align all the cards in the correct order. There is a 'Start' and a 'Finish', meaning that if any cards are left outside the chain, then students have gone wrong somewhere.

Match-up

Students match descriptions to their keywords by drawing lines between them. Because there are similar descriptions and keywords, students are likely to make the odd mistake while completing the activity, so it is recommended that they use a pencil to start with! By eliminating the keywords that they are familiar with, students can then think about and learn the ones that they are less confident with.

✓ PDF ✓ PAPER

Flash Cards

These are a helpful revision tool. To make the cards, fold the page in half, then cut out each card and stick them together so the keyword is on one side and the definition the other. In addition, students could use these to play a game of pairs. Cut each card in two and place them all face down on the table. Students will then take it in turns to turn over two cards with the aim of matching a keyword to its definition. Matched-up cards are removed, and the game is finished when all the cards have been matched.

✓ PDF

Glossary Builders

Table-fill

Nothing fancy – students simply write the keyword which is being described, without any other help. Because this activity tests the students' own knowledge, it is best used as a homework activity at the end of each topic or during revision. This then acts as a check that they have grasped the key terminology for each topic. Alternatively, the tables could be given to students at the beginning of the topic, to see what they already know.

✓ PDF ✓ PAPER

Write Your Own Glossary

Like the Table-fill, this activity can be used to test students before learning a topic, or as a revision tool after learning a topic. Students are given a list of the keywords and need to produce their own definitions. Using Table-fill and Write Your Own Glossary, lessons can be differentiated for all levels of learner.

✓ PDF

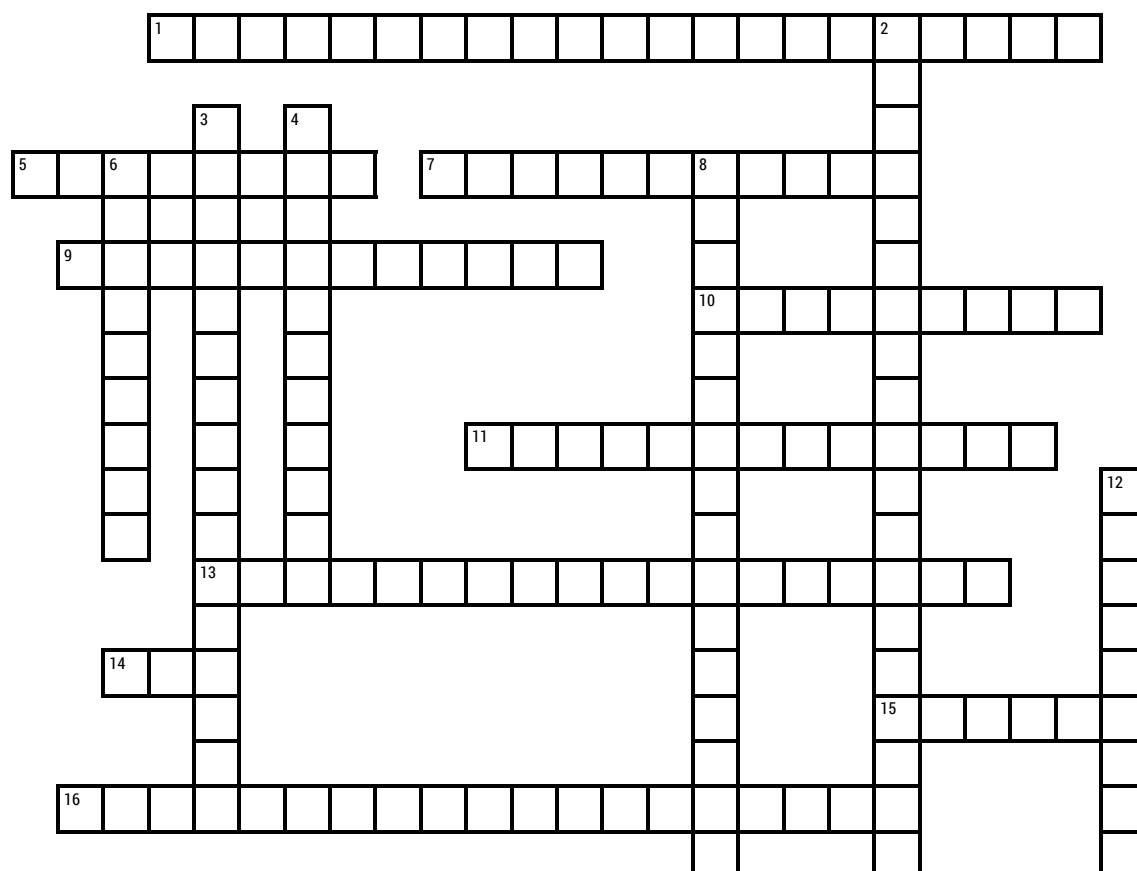
Selected Activities and Completed Glossary Page

This sample shows one example of several activities.

The whole resource contains approximately 110 activities –
6 or 7 activities for each of the 15 topics.

The resource covers 262 key terms.

A1: Digital devices, their functions and use



Across

- 1 A piece of equipment with more than one feature, e.g. a printer with inbuilt scan, email and fax capability (15,6)
- 5 Modern, digital audio receiver that can also display station and song information – a replacement for the old analogue FM and AM counterparts (3,5)
- 7 A device that is used to record data; a bar code reader is an example (4,7)
- 9 A portable piece of communications and display equipment, such as a smartphone or tablet (6,6)
- 10 High-end camera using a mirror and prism combination (3,6)
- 11 Portable device capable of capturing still images of its surroundings usually on a memory card in JPEG and/or RAW format (7,6)
- 13 A PC that does not rely on network services – e.g. can perform its required tasks offline (but may be connected to a network) (5-5,8)
- 14 A handheld receiver that accurately displays its location on Earth's surface by calculating its location using satellites (3)
- 15 Always-on device at the heart of a network, allowing bulk data storage and retrieval; facilitates user logins and printing, and also serves web content (6)
- 16 Equipment or a series of equipment that allows data to be retrieved and transmitted – for example, over a wired or wireless network, fibre optic cable, or satellite (13,6)

Down

- 2 Set-up for storing and displaying video, images, gaming and audio, etc., usually in a recreational setting such as a living room, with a screen and a streaming PC/media server (13,6)
- 3 Technology used to ensure that journeys are completed on time without becoming lost, using satnav or GPS technology in vehicles, in transportation and on foot / a bike (10,6)
- 4 Portable device capable of capturing moving images, available for both personal use (consumer market) and professional use, including TV and film studios (5,6)
- 6 Fast access to the Web and other online services using phone lines (ADSL) and, more recently, fibre – common in homes and businesses (9)
- 8 Coined in 1981 by IBM, a desktop which allows one person at once to access its functionality (8,8)
- 12 Massive, powerful computers that are used by large businesses for bulk processing (9)

A1: Digital devices, their functions and use *(Table Fill)*

Fast access to the Web and other online services using phone lines (ADSL) and, more recently, fibre – common in homes and businesses	
Equipment or a series of equipment that allows data to be retrieved and transmitted – for example, over a wired or wireless network, fibre optic cable, or satellite	
Modern, digital audio receiver that can also display station and song information – a replacement for the old analogue FM and AM counterparts	
A device that is used to record data; a bar code reader is an example	
Portable device capable of capturing still images of its surroundings usually on a memory card in JPEG and/or RAW format	
Set-up for storing and displaying video, images, gaming and audio, etc., usually in a recreational setting such as a living room, with a screen and a streaming PC/media server	
A handheld receiver that accurately displays its location on Earth's surface by calculating its location using satellites	
Massive, powerful computers that are used by large businesses for bulk processing	
A portable piece of communications and display equipment, such as a smartphone or tablet	
A piece of equipment with more than one feature, e.g. a printer with inbuilt scan, email and fax capability	
Technology used to ensure that journeys are completed on time without becoming lost, using satnav or GPS technology in vehicles, in transportation and on foot / a bike	
Coined in 1981 by IBM, a desktop which allows one person at once to access its functionality	
Always-on device at the heart of a network, allowing bulk data storage and retrieval; facilitates user logins and printing, and also serves web content	
High-end camera using a mirror and prism combination	
A PC that does not rely on network services – e.g. can perform its required tasks offline (but may be connected to a network)	
Portable device capable of capturing moving images, available for both personal use (consumer market) and professional use, including TV and film studios	

A1: Digital devices, their functions and use (Match Up)

1	A device that is used to record data; a bar code reader is an example
2	A handheld receiver that accurately displays its location on Earth's surface by calculating its location using satellites
3	A PC that does not rely on network services – e.g. can perform its required tasks offline (but may be connected to a network)
4	A piece of equipment with more than one feature, e.g. a printer with inbuilt scan, email and fax capability
5	A portable piece of communications and display equipment, such as a smartphone or tablet
6	Always-on device at the heart of a network, allowing bulk data storage and retrieval; facilitates user logins and printing, and also serves web content
7	Coined in 1981 by IBM, a desktop which allows one person at once to access its functionality
8	Equipment or a series of equipment that allows data to be retrieved and transmitted – for example, over a wired or wireless network, fibre optic cable, or satellite
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15	Set-up for storing and displaying video, images, gaming and audio, etc., usually in a recreational setting such as a living room, with a screen and a streaming PC/media server
16	Technology used to ensure that journeys are completed on time without becoming lost, using satnav or GPS technology in vehicles, in transportation and on foot / a bike

BROADBAND	
COMMUNICATION DEVICE	
DAB RADIO	
DATA CAPTURE	
DIGITAL CAMERA	
ENTERTAINMENT SYSTEM	
GPS	
MAINFRAME	
MOBILE DEVICE	
MULTIFUNCTIONAL DEVICE	
NAVIGATION SYSTEM	
PERSONAL COMPUTER	
SERVER	
SLR CAMERA	
STAND-ALONE COMPUTER	
VIDEO CAMERA	

A1: Digital devices, their functions and use

