Retired Onscreen Test Version 1 Unit 1: The Online World

BTEC Firsts Level 1/2 Information and Creative Technology

Introduction

This retired onscreen test has been made available to centres to help you prepare your learners for their BTEC Firsts Level 1/2 external assessments.

We recommend that you use this test as a written assessment which is then either teacher marked or peer assessed.

This retired test should be used in conjunction with the Mark Scheme and the Lead Examiner's Report to clearly identify the assessment requirements. These documents are available at:

http://www.edexcel.com/quals/firsts2012/information-and-creative-technology/Pages/default.aspx

Retired Test Development

We are currently working towards a simulation test where mock onscreen tests can be taken in a real environment. However as this is being developed, we have temporarily created these PowerPoint based tests to support you.

PEARSON

FAQs

How can I view the videos in the test?

This document has been produced using screen captures of the retired onscreen test. As such, videos are not available in this PowerPoint document. This document should be used in conjunction with the retired onscreen test which is available on the website: http://www.edexcel.com/quals/firsts2012/information-and-creative-technology/Pages/default.aspx

How can I see the drop down menus in the test?

Where a drop down menu may obscure information the learner requires to answer a question, we have instead supplied a text box containing the options from the drop down menu. To view drop down menus please use the retired onscreen test.
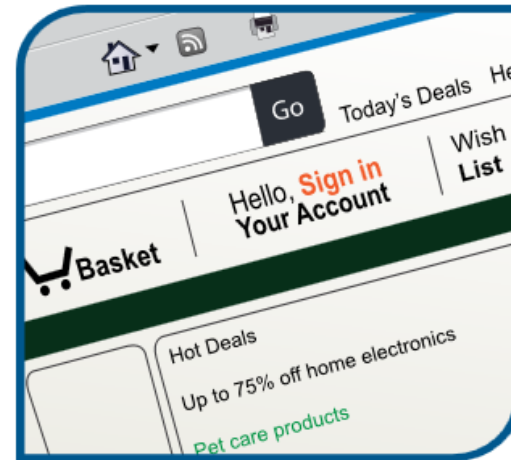
BTEC

The image shows an example of an online shopping website.

Online shopping is an example of which of the following?	(1)

Click on **one** of the boxes.

☐ Pay-per-click

☐ Entertainment

☐ Instant messaging

☐ Commerce

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HyperText Markup Language (HTML) is used to create web pages.
It uses tags to affect the appearance and function of objects and words, such as <h1> for heading.

Match the HTML tags with their correct function.   (2)

Click on each HTML tag and then on the correct function.

Function

Bold

HTML Tag

Underline

<a href=>

Hyperlink

Paragraph

Line Break

BTEC

(a) Give the main use of VoIP technology. (1)

Type your answer in the box.

Reduced cost is one benefit of using VoIP technology.

(b) Identify **one** other benefit of using VoIP technology. (1)

Type your answer in the box.

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Isayas lives with his family.
They all have tablet computers and want to be able to connect to the internet and share files from different rooms.

(a) What would be the most appropriate connection method for Isayas's family?   (1)

Click on **one** of the boxes.

☐ Wireless   ☐ Fibre Optic

☐ Fixed Cable   ☐ Dial-up

When using a shared network it is often necessary to protect certain files.
Passwords are a good way of ensuring data is kept secure.

(b) Which **one** of the following passwords is the strongest?   (1)

Click on **one** of the boxes.

☐ p13fd5h#   ☐ Pifdshy
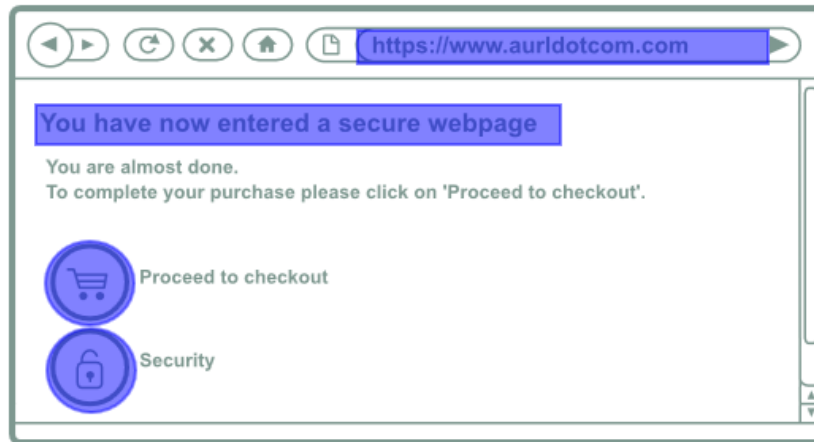
☐ P13fd5h7   ☐ P13fD5h#

Naomi enjoys online shopping but is concerned about identity theft.

(a) Identify how Naomi knows that this web page is secure. (1)

Click on the correct feature in the image.

Customer data sent to a website needs to be kept secure.

(b) Identify the method that will keep the data secure. (1)

Click on **one** of the boxes.

Encrypting   Encoding   Masking   Scrambling

File compression is used when transferring files.

| Identify **two** reasons for compressing files. | (2) |

Click on the **two** correct reasons.

To achieve faster file downloads

To ensure files do not contain a virus

To reduce storage space required

To ensure files are not corrupted

To increase file security

Email is used for business and personal use.
Emails can be sent 24 hours a day, 7 days a week from any internet enabled device.

(a) Identify **two** other advantages of using email.   (2)

Type your answers in the boxes.

Advantage one

Advantage two

(b) Outline **two** reasons why using email can cause problems for businesses.   (2)

Type your answer in the box.

Data exchange is the passing of data between computers in a network, including the internet.

Which of the following processes is used to send data over the internet? (1)

Click on **one** of the boxes.

- [ ] Circuit Switching

- [ ] Serial Transmission

- [ ] Parallel Transmission

- [ ] Packet Switching

Jim and Laura use online software to work collaboratively to produce a joint presentation.

Explain **one** advantage to Jim and Laura of using online software for collaborative working. (2)

Type your answer in the box.

Wharfbridge Health Centre keeps confidential patient records electronically and backs up these records daily. There are several types of media which could be used for storing the backup files.

Identify **two** secure media that Wharfbridge Health Centre should use for storing its backup files. (2)

Click on **two** correct media.

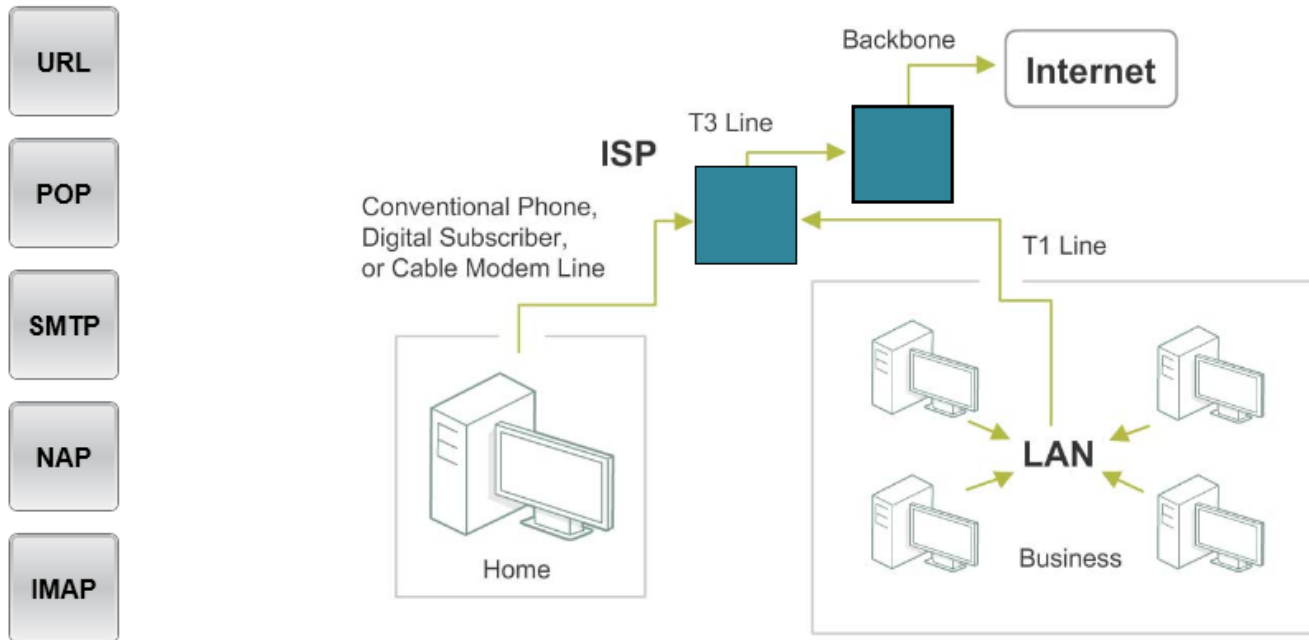External Hard Disk

CD-ROM

Solid State Drive

USB Key

Cloud Storage

Label the **two** missing components of this internet infrastructure diagram. (2)

Drag and drop the correct labels onto the diagram.

URL

POP

SMTP

NAP

IMAP

Backbone

Internet

T3 Line

ISP

Conventional Phone,
Digital Subscriber,
or Cable Modem Line

T1 Line

Home

LAN

Business

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Businesses may use ubiquitous computing for stock control purposes.

Explain **two** reasons why a business might use ubiquitous computing to aid stock control. (4)

Type your answer in the box.

BTEC

Search engines must stay up to date with internet content.

(a) Identify the component that collects information on web page updates for the search engine. (1)

Click on **one** of the boxes.

	Web Browser		Web Server
	Web Address		Web Crawler

Searches can be refined by using operators.

(b) Identify the operator that would require an exact match from the search engine. (1)

Click on the **one** correct operator.

| * | and | or | " " |

PEARSON

File Transfer Protocol (FTP) and HyperText Transfer Protocol (HTTP) are examples of application layer internet protocols. They can both be used for downloading files.

Explain **two** advantages of using HTTP over FTP for downloading files.   (4)

Type your answer in the box.

Cloud computing involves delivering hosted services over the internet.

(a) Explain **one** reason why the use of cloud computing will decrease demands on in-house hardware. (2)

Type your answer in the box.

(b) Explain **one** advantage of the 'Software as a Service' model of cloud computing. (2)

Type your answer in the box.

Displaying active web pages to a visitor requires both server-side and client-side processing.
Input may be carried out client-side and data analysis carried out server-side.
Search engines use server-side processing to carry out searches.

(a) Explain the search process carried out by a search engine.   (2)

Type your answer in the box.

(b) Explain **one** reason why the search is not carried out as a client-side process.   (2)

Type your answer in the box.

Online retailers need to store large quantities of data.
This data is frequently updated.

Explain **one** reason why a relational database is necessary for online retailers. (2)

Type your answer in the box.

A local council has a number of vehicles in its fleet.
The council is keen to install tracking devices in the vehicles to help monitor their movements.

Discuss this proposal considering the impact of the technology on the council and its staff. (8)

Type your answer in the box.