

OCR Cambridge National IT



Purpose of this session

- To help you understand what the IT course involves
- To discuss why this course might be applicable to you
- To help you make an informed decision about your GCSE options

What's the difference?



What is the OCR Cambridge Nationals?

- Vocationally-related qualification that takes an engaging, practical and inspiring approach to learning and assessment
- Equips learners with a range of skills and provide opportunities to develop, transferable skills such as research, planning, and review, working with others and communicating creative concepts effectively.
- The hands on approach has strong relevance to the way young people use the technology required in the world of IT



IT and the workplace...



How the course works:

Split into 3 different units

Year 10



R060 – Data manipulation using Spreadsheets

- Coursework unit
- Planning and Spreadsheet skills covered



R070 – Augmented reality

- Coursework unit
- Designing an augmented reality product for a client

Year 11

R050 - IT in the digital world (exam unit)

- Design tools
- Importance of IT in society
- Hardware and it's uses
- Data vs information
- Cyber security

60% controlled assessment – Completed in the classroom

40% exam – Completed at the end of year 11

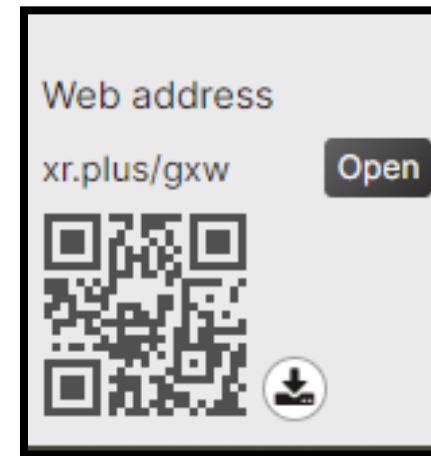
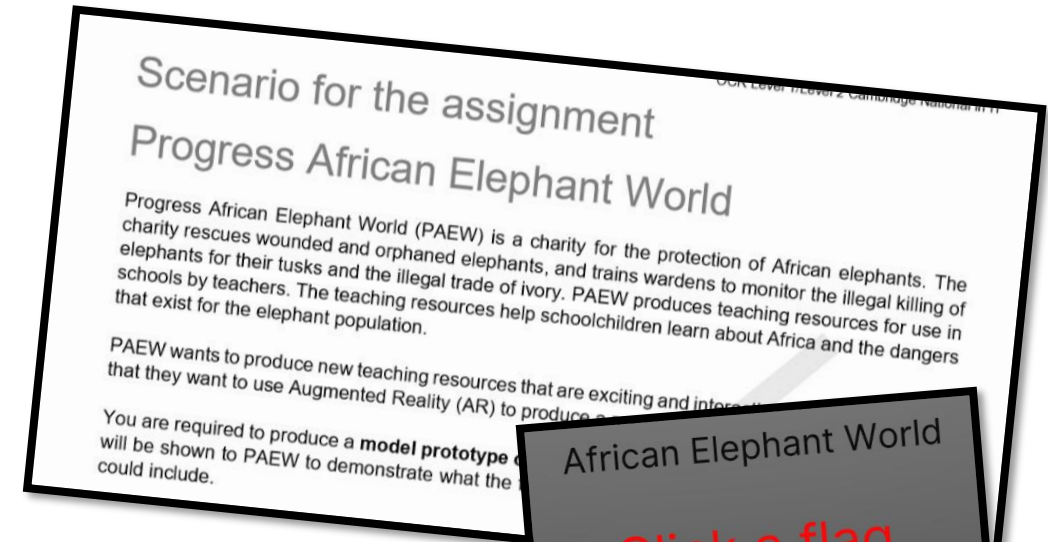
The units – R060 – Using Spreadsheets

- The aim of this unit is to equip learners with the skills they would need to use Spreadsheets in the workplace and wider world
- Skills includes:
 - *Planning and designing a Spreadsheet model*
 - *Creating the Spreadsheet model using a variety of tools (formulas, functions, charts/graphs, formatting, security measures)*
 - *Creating a user interface for the solution (e.g. buttons, hyperlinks)*
 - *Testing the solution and it's suitability for the client*



The units – R070 – Augmented reality

- The aim of this unit is learn the purpose of AR and allow pupils to have a practical understanding of how an AR prototype can be designed and created
- Skills include:
 - Learning about what AR is and how it is used in the real world
 - How to design and plan an AR product
 - How to create a prototype AR product
 - Testing and evaluating the solution



The units – R050 – IT in the digital world

- This unit is designed to give pupils a wide understanding of a variety of IT related topics current to our digital world
- The exam is sat at the end of Year 11 and includes the following topics:
 - Types of design tools
 - Human computer interfaces in everyday life
 - Hardware, software and input/output devices
 - Data and information
 - Threats to a computer system and legislation
 - Digital communication
 - The Internet of everything (IOE)



Example questions – section A

- 1 A connecting line is a component of a flowchart.
Identify **two other** components of a flowchart.

1

2

- 4 Which of these is **not** a secondary research source?
(Tick (✓) the correct box)

A Book

☐

B Interview

☐

C Magazine

☐

D Website

☐

[1]

- 8 Draw a line to link the type of social engineering to the correct description.
You will only use two types of social engineering to complete the task.

Type of social engineering

Baiting

Phishing

Scareware

Description

Criminals promise goods to get the information they need

Criminals use computer programs designed to trick a user into buying and downloading unnecessary and dangerous software

[2]

Example questions – section B

Monty Bella restaurant has a takeaway service. All meals on the menu can be ordered by customers to takeaway. Customers telephone the restaurant to order their meals. The total cost of the order is calculated by the restaurant. Customers pay for the order using a debit card.

When they order, customers are given an order number and a time when the order will be ready for collection.

19 Monty Bella restaurant uses a smart device connected to the Internet of Everything (IoE).

Discuss the advantages and disadvantages to the **restaurant** of using a smart device connected to the Internet of Everything.

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(ii) Customers of Monty Bella could use the HCI using the keyboard interaction method.

Explain **one** advantage and **one** disadvantage to the **customers** of using a keyboard to interact with the HCI.

Advantage

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Disadvantage

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[4]

(c) Create a mind map to plan the content for the homepage of Monty Bella's new takeaway website.

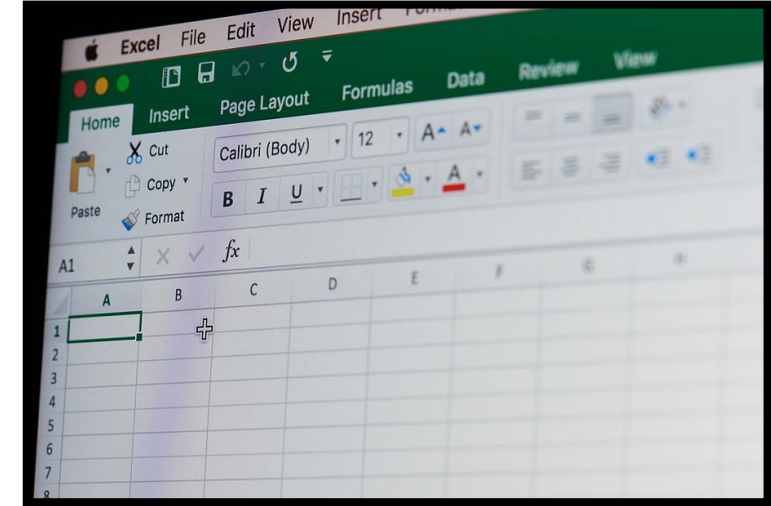
Marks will be awarded for:

- Content
- Layout



Course Facts:

- Worth the equivalent of one GCSE
- **60%** controlled assessment, **40%** exam
- All controlled assessment completed within classroom, no work completed at home
- A great course for pupils who want less emphasis on exams on more on work completed within lessons
- Work is independent of pupils, teachers can advice but cannot tell you what to do - ***This will require motivational and time keeping qualities***
- A GCSE that goes well with all subjects and looks great on a CV for all areas of work



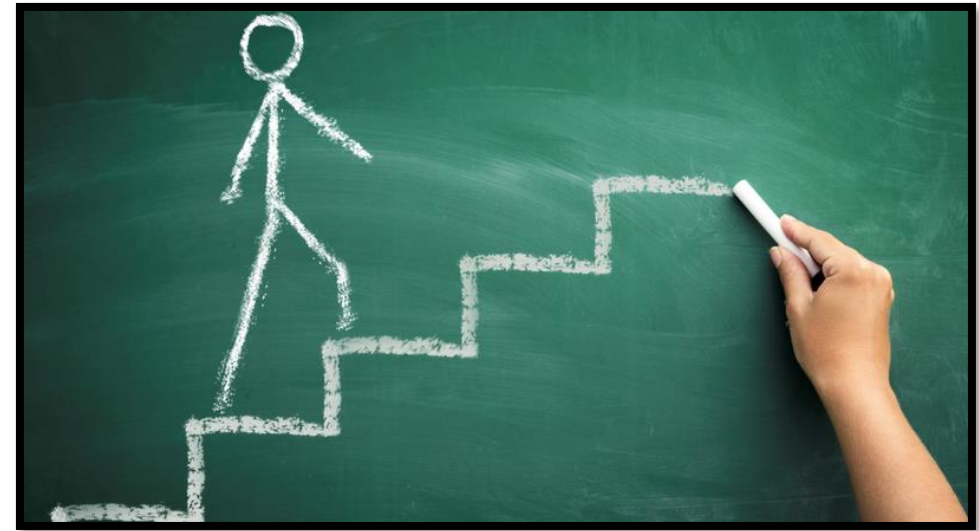
Personal Qualities:

- Creative
- Hard working
- Independent
- Motivated
- Reflective



Next steps...

- At Hardenhuish we are also offering the **Cambridge Technical Level 3 qualification**
- This is an advanced continuation of the Cambridge Nationals where students can build on the knowledge and skills learnt in KS4
- Also a great qualification to have when applying for a variety of ICT related college courses
- **Note** – *We also offer Computer Science at A-level. Taking Cambridge Nationals will not prevent you from applying for this course in the future.*



You need to ensure that your GCSE subjects are right for you now, and that you will enjoy them for the next 2 years!

Summary:

- A hands on, independent GCSE
- 60% coursework – gives more control
- A chance to be creative and learn skills which could be applied to many future professions
- Compatible with all GCSE combinations
- A chance to learn new skills while applying knowledge from KS3
- Suitable course at A-level
- **Suitable for all abilities and learners**



Any Questions:

