COMPUTING SUMMER SCHOOL KEYSTAGE 4

JULY 2014

Thursday, 3 July 14

WELCOME!

Mark Clarkson

Teacher Head of Department Hub Leader Master Teacher Board Member Dogsbody



Agenda

- 09:30 Introduction
- 10:00 Binary Representation
- 11:00 Hardware & Logic
- 12:00 Lunch
- 12:45 Software & Databases
- 14:00 Networks & The Internet
- 15:00 Plenary

ONE LINK

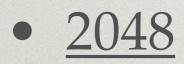
pi.mwclarkson.co.uk

GCSE SPECIFICATIONS

OCR	AQA	Edexcel	WJEC
1 Programming 1 Investigation	2 Programming	1 Programming	1 Programming
Total 40 hours 60% of grade	Total 50 hours 60% of grade	Total 15 hours 25% of grade	Total 15 hours 30% of grade
1 written exam	1 written exam	1 written exam	1 written exam 1 on-screen exam

BINARY

- Bits, Bytes and Nibbles
- How Computers Count
- Binary Games:
 - <u>Cisco Binary Game</u>



HEXADECIMAL

- HTML & Colour Codes
- Representation of Text
- Representation of Images
- Representation of Sound

LOGIC GATES

- Binary Logic
- Types of Gate
- Logic Questions

HARDWARE

- You Say, We Pay
- RAM, ROM & Socrative
- Caches, RAM & VM
- Clocks, Caches & Cores
- Little Man Computer

NETWORKS

- Topologies
- IP, MAC & DNS
- Client-Server vs Peer-Peer

SOFTWARE

- Classification
- Off-the-shelf vs Bespoke
- Proprietary vs Open-Source

DATABASES

- Terminology
- Validation & Verification
- Relationships & Redundancy
- SQL (<u>Zoo?</u>)

CONTROLLED ÅSSESSMENT & DELIVERY

FREE RESOURCES & ADVICE

- CAS Community Site
- Various Facebook groups
- TES Forums
- Barefoot Computing
- CS4fn / CSUnplugged
- Hub Meetings
- pi.mwclarkson.co.uk

PAID RESOURCES & CPD

- CAS Master Teacher sessions
- Teach-ICT
- Hodder Compute-IT*
- PGOnline*
- Boardworks*

* Full disclosure: I have a working relationship with these organisations