6th Form Preparation work for ICT

BTEC ICT Specification - *Familiarise yourself with the specification.*

Read the introductory information about IT systems, there are 6 small section. It will give you background information about how all computer systems work.

Computer Systems - Hardware and Software
Teach-ICT
Time: 0.5 hr

Listen to this podcast about Information Technology. Can you decide whether the information technology revolution has radically altered society by empowering the individual, or damage family life, the work-place and even democracy?

Information Technology
BBC In Our Time podcast
Time: 1hr

Listen to this podcast exploring the 20th century shift from industrial to information society. What has been the cause of this shift and how will we recover the social cohesion that preceded it?

The Great Disruption
BBC In Our Time podcast
Time: 1hr

Watch the series of videos explaining the mechanics of computers. This is a Computer Science channel but the information is about IT systems.

Mechanics of Computers
Crash Course Computer Science - YouTube
Time: 2hr

Listen to this podcast episode. Hannah Fry travels back to the 1940s to hear the incredible story of the creation, in Britain, of computer memory.

Digital Brains
Computing Britain podcast
Time: 0.5 hr

Complete a profile of the following pieces of Hardware:
The CPU,
Memory – RAM and ROM,
Storage – Technologies like magnetic HDD, SSD, Optical.
Create a table with a description of each in detail.

Time: 2hrs

Watch the TED talk. In this wide-ranging, thought-provoking talk, Kevin Kelly muses on what technology means in our lives -- from its impact at the personal level to its place in the cosmos.

Technologies Epic Story
TED Talks – Kevin Kelly
Time: 0.5hr

Complete a mind map on the specification (give link) and reduce the topics that you will cover in year 1 into a mind map. Focus on Unit 2 & 6

For extension, you could branch out your mind map and start to add topic details using prior knowledge. BTEC ICT Specification

Time: 2 hours

Read these sections on types of computer systems. There are 9 types.
Create notes on each type of computer system and their uses. This is information about how computer systems are used in all areas of society.

Types of Computer Systems
Teach ICT
Time: 2hrs

Listen to this podcast episode. Hannah Fry explores ERNIE, a machine made by wartime code-breakers which became an unlikely celebrity.

ERNIE picks prizes
Computing Britain podcast
Time: 0.5 hr

Read this article and answer this question:

Does a USB drive get heavier as you store more files on it?

Does a USB drive get heavier - article
Science Focus
Time: 1hrs