

Computing

Lesson 1: Computer Systems and System Software

Computer Systems

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Materials from the Teach Computing Curriculum created by the National Centre for Computing Education



Task 1 - Spot the embedded systems

This room is full of computer systems.

Find as many devices as you can and sort them into 2 lists;

1. General purpose
2. Embedded systems



The startup sequence - Part 1

The CPU

Contains all the basic code for controlling your computer hardware (such as the keyboard, mouse and monitor)

RAM

Read-Only Memory

ROM

A large chip inside the computer. The brains of the computer: it controls everything.

Hard drive

Random Access Memory

BIOS

The main storage device in your computer.



The startup sequence - Part 2

1	The boot sequence begins
2	
3	
4	
5	
6	
7	
8	The BIOS hands control over to the Operating system

Operating system is fetched from secondary storage
Instructions from BIOS are loaded into RAM
BIOS starts up the monitor and keyboard

Operating system is loaded into RAM

BIOS checks the computer is working

CPU starts up and fetches the BIOS from ROM



Operating systems

What is an Operating system?

Operating system

Device

