

# Y10 Computing Learning Journey

AP2

## Computer Systems

In this AP we will be looking at the different types of computer systems which are used by individuals, organisations and business. We also look at the different types of memory in a computer system and compare the difference between memory and storage devices. There is also a review and comparison of the different types of storage devices.

AP1

## Data Representation

In this unit of work we look at the way in which data is represented in a computer system. This involves understanding binary, binary addition and understanding hexadecimal. Students will also study the way in which text, sound and images are represented.

AP3

## Algorithms

Students develop a firm understanding of algorithms. We also compare pseudo code and flow chart.

AP4

## Networks

In this unit of work we will study the importance of computer networks. We look at network devices, security and dangers. We also compare LAN, WAN and PAN.

AP5

## Network Typologies

In this unit of work we follow on from AP4 and discuss the way networks are structured. We look at a range of different topologies as well as factors which effect a networks performance.

AP6

## Cyber Security

In this unit we look at a range of different cyber security threats which could attack a business, individual or organisation. We also look at a range of different malware and vulnerabilities.

**Intent** - Through out Y10 Computing the intent is to ensure that all students understand the principles of computational thinking. They develop the skills to decompose complex problems and solve them in a structured way along with understanding how to stay safe online.