

KS4 Computing

Week 2

Week commencing - 07/09/20



Meadow Park
Patience, Guidance and Determination

Teacher instructions

You will find a series of four computing lessons for each year group from Year 10-11. Every lesson includes a short video showing you clearly and simply how to help your child to complete the activity successfully. Simply write the questions and answers in a book or on pieces of paper.

- 1- Click on the set of lessons for your child's year group.
- 2- Complete short quiz to test prior knowledge
- 3- Watch the video with your child.
- 4- Find a suitable space for your child to work. Try to allow opportunities for your child to complete these questions independently.

If your child is finding the work difficult, please select the year below to practise some of their skills.

Lesson 1

WEBSITE/LINK	TOPIC/THEME
Year 10- https://classroom.thenational.academy/lessons/how-does-technology-impact-us-crrp4d	In this lesson, you will be introduced to the five broad areas of impact (i.e. privacy, legal, ethical, environmental, and cultural). You will identify and discuss the impact areas through genuine examples. Finally, you will begin to understand the legal impact of technology specifically, and work through an example relating to the Data Protection Act (1998).
Year 11- https://classroom.thenational.academy/lessons/computer-systems-and-system-software-cmuk4r	In this lesson, you will discover two types of computer systems: general purpose and embedded. Following this, you will explore the need for system software to facilitate communication between software and hardware in computer systems. You will explain the role of an operating system in controlling a computer while it is running.

Lesson 2

WEBSITE/LINK	TOPIC/THEME
Year 10- https://classroom.thenational.academy/lessons/the-law-data-protection-and-copyright-61hkcd	In this lesson, you will further exercise your knowledge about data protection and clarify the definition of the word 'stakeholder' and examples of impact that a specific technology has had on them. You will then learn about the relationship between data protection, General Data Protection Regulation (GDPR), and the right to be forgotten. Finally, you will learn about copyright, Creative Commons licensing and comparing open source and proprietary software.
Year 11- https://classroom.thenational.academy/lessons/introduction-to-the-cpu-6hhkjd	In this lesson, you will be introduced to the CPU and von Neumann architecture. You will learn about the individual components of the CPU and their roles in computation, along the way finding out about von Neumann and his theories that form the basis of modern computer architecture.

Week 3

Week commencing- 14/09/20

Teacher instructions	
<p>You will find a series of four computing lessons for each year group from Year 10-11. Every lesson includes a short video showing you clearly and simply how to help your child to complete the activity successfully. Simply write the questions and answers in a book or on pieces of paper.</p> <p>1- Click on the set of lessons for your child's year group. 2- Complete short quiz to test prior knowledge 3- Watch the video with your child. 4- Find a suitable space for your child to work. Try to allow opportunities for your child to complete these questions independently.</p> <p>If your child is finding the work difficult, please select the year below to practise some of their skills.</p>	
Lesson 1	
WEBSITE/LINK	TOPIC/THEME
Year 10- https://classroom.thenational.academy/lessons/freedom-of-information-and-computer-misuse-crt36d	In this lesson, you will be introduced to the Freedom of Information Act, and given the opportunity to study genuine examples. You will also learn about the Computer Misuse Act and categorise case studies by the different levels of offence.
Year 11- https://classroom.thenational.academy/lessons/the-fde-cycle-68w3ct	In this lesson, your knowledge of the components that make up the CPU will be furthered with the introduction of the fetch-decode-execute cycle (FDE). You will observe a program running and will connect the parts of the CPU to their role in executing instructions.
Lesson 2	
WEBSITE/LINK	TOPIC/THEME
Year 10- https://classroom.thenational.academy/lessons/cultural-impacts-cmtk2c	In this lesson, you will understand what the term 'cultural impact' means. You will learn about downtime and its effect on businesses and individuals and examine the concept of 'digital divide' and work through examples of its impact. Finally, you will analyse the cultural implications of the growing use of mobile technology and the responsibility of stakeholders in mitigating any risks explore globalisation.
Year 11- https://classroom.thenational.academy/lessons/main-memory-cthkjd	In this lesson, you will be introduced to main memory, RAM and ROM, as well as cache. This lesson builds on the core knowledge from the previous lesson about CPU components.