



# HP Byte Wise

## Keeping parents in the loop one Byte at a time

What are KS3 students learning this half term?

### **Year 7 - Computer fundamentals**

This unit will introduce your child to the computers at School and shares important information on how they can keep safe whilst using the computer.

### **Year 8 - Media, vector graphics**

In this unit your child will learn about graphics that are scalable such as logos and icons. It will teach them skills in software called Inkscape so they can create their own graphics.

### **Year 9 - Cyber security**

In this unit your child will learn about the threats there are to computer networks and gives them handy tips on how they can prevent these threats from taking place.

What are GCSE students learning this half term?

### **Year 10 Computer Science**

#### Systems architecture

Your child will learn about how the CPU fetches, decodes and executes instructions. Additionally, they will learn what will affect the performance of the CPU.

#### Introduction to programming

You child will recap the knowledge previously taught at KS3 on the Python programming language, revisiting input, output, variables & subroutines whilst enhancing their problem solving skills.

#### Primary & secondary storage

Students will learn about main memory (RAM, ROM & Cache) and secondary storage devices (long term storage devices).

### **Year 11 Computer Science**

#### Python Programming

Your child started learning about how to program in Python during year 10. We will be continuing to build upon their programming skills.

#### Introduction to relational databases

Your child will learn about why relational databases are used and how they can access data from a database using structured query language (SQL).

#### Component 1 Revision

It's so important that your child recaps the knowledge they have learned in year 10. Every alternative week we will concentrate on a previous topic. This half term it will be systems architecture; primary storage & secondary storage.

### **Year 10 iMedia**

Your child will be learning the theory required for their next piece of coursework. They will be exploring business visual identities and how they are used within a variety of digital media products.

In preparation for their coursework they will be learning graphic editing skills using [www.photopea.com](http://www.photopea.com) this is a web browser based resource that replaces Adobe Photoshop

### **Year 11 iMedia**

Your child is going to start the term by completing their next coursework required for their course.

This coursework requires them to create a digital games loading screen so please encourage them to take notice of the loading screens they see when they play their games!

## Introduction

We are thrilled to present our first edition of HP Byte Wise, a half termly newsletter dedicated to keeping you, the parents, informed about the incredible journey your children are embarking on in the realm of technology.

We believe in empowering young minds with the knowledge and skills necessary to thrive in the digital age. With each passing term, your children dive deeper into the fascinating world of computing. Through our carefully crafted curriculum, we aim for your child to be confident at using technology and equipped with computational thinking skills enabling them to be problem solvers, innovators and creators.

In this newsletter, you can expect a glimpse into the upcoming term's curriculum, highlighting the exciting topics and projects your children will be engaged in. Together, we can build a strong foundation for their success in Computer Science and beyond.

We invite you to join us on this thrilling adventure as we explore the endless possibilities of technology.

Happy reading!

Mrs Foster  
Director of Computing



## Useful Resources



Inkscape  
Year 8s will be using this software in lessons. You can download it for free by scanning this QR code.



Thonny  
When teaching Python Programming we use this software. This is free to download by scanning this QR code.



Photopea  
A free browser based replica of Photoshop. iMedia students will be using this for their next coursework so it would be great if they could practice their skills!

### How can you support at home?

#### Encourage Exploration

Create a supportive environment at home that encourages your child to explore Computer Science concepts. Provide them with resources such as coding platforms where they can learn and practice coding skills.

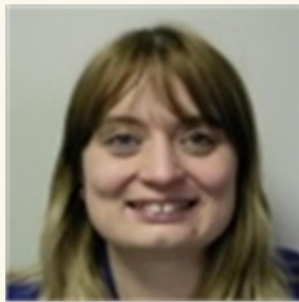
#### Set aside dedicated study time

Help your child establish a regular study routine for computing. Set aside specific times for them to work on their coding projects, revise, and complete homework.

#### Engage in discussions

Take an interest in what your child is learning in Computer Science and engage in discussions about their projects and assignments. Ask open-ended questions to encourage critical thinking and problem-solving skills.

### Meet the teachers



Victoria Foster  
Director of Computing for Lionheart Educational Trust



Callum Foster  
Teacher of Computer Science & iMedia

### Linked Careers

Your child has a Unifrog account with School. When signed in they can access the following websites to explore our recommended careers!



Cyber Security Analyst



Graphic Designer

## Extra Curricular Clubs & Revision

|                     | Monday                 | Tuesday | Wednesday                     | Thursday   | Friday |
|---------------------|------------------------|---------|-------------------------------|--|--------|
| <b>Lunch</b>        | HP Podcast Club<br>R41 |         | Computational thinkers<br>R33 | Digital Leaders<br>R33                                       |        |
| <b>After School</b> |                        |         |                               | GCSE Computer<br>Science Revision R33<br>iMedia Catch up R41 |        |

### Important Dates to Consider

Year 11 iMedia R094 Coursework task 1 deadline: Friday 15th September 2023

Year 11 iMedia R094 Coursework task 2 deadline: Friday 29th September 2023

Year 11 iMedia R094 Coursework task 3 deadline: Friday 13th October 2023

