



ICT - YEAR 8

How computers work

If you have ever wondered how a computer works you will love this unit! In this unit we will look at how computers represent data and the different forms it takes. We will then learn how to convert binary to denary and vice versa. Following this we will push learn how to add together binary numbers and you will be able to wow everyone at home with your skills! In the final part of this topic, we will look at what is inside the computer and how the different components work together.

Graphic Design

In this unit we will design and create a magazine for a teenage audience. You will be able to choose the topic of your magazine from the following categories: fashion, sport, music or gadgets. We will develop your graphic design skills and create a front cover and back cover with appropriate content. We will then research and create an article to go inside the magazine which fits in with your chosen topic. You will add a further article which advises your audience how to stay safe online.

Computer Programming

During this unit we will look at the different ways a computer takes inputs. Ever wondered how the street lights turn on automatically? Why the car beeps when you don't have your seat belt on? How the air con in your classroom works? Well, this unit will answer those questions. You will learn how to use flow charts to construct algorithms and mimic some real-life scenarios using these. Finally, you will get chance to programme using Python – a real life programming language used by companies such as NASA.

Managing Data

In this unit will learn how computers can be used to manage data. Ever wondered how the school keeps track of all the students? In this unit we look at how information can be sorted as records in tables using different fields to allow it to be sorted effectively. We also look at how we can extract data for a specific task. For example, sending a letter home to all Year 8 students who are going on a trip. We will then learn how to present this data in a user-friendly way.

Artificial Intelligence

Will Robots take over the world!? In this unit we will look at the origin and uses of Artificial Intelligence. This will include looking at the ethical issues surrounding the use of AI, how jobs can be affected, what machine learning is. We will also look at how bias can be introduced in AI. We will look at how facial recognition, how intelligence can be measured in humans and computers, what the Turing test is and how to program a chatbot!

Microsoft Office

In this mini unit you will develop your Microsoft word skills.

