



# ICT - YEAR 8

## Unit 1: 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.

## Unit 2: Microbits

In this unit you will further develop your programming skills by using a microbit. This will give you the opportunity to explore the concepts of selection, sequencing and iteration. You will also programme your microbit using Python.

## Unit 4: 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.

## Unit 3: 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 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.

## Unit 6: Image Editing

In this unit we will develop your image editing skills using an online platform similar to Photoshop. You will use these skills to create a game cover for a teenage audience. You will need to collect and edit the images to create the final product.

## Notes:

