CompuTech Club
IMAGINE, CREATE, EVALUATE

UNIT 3: Year 5-6 (Ages: 8-10 years)

This unit begins with a brief review of concepts previously taught in units 1 and 2. It is designed to suit 5th - 6th year primary school students. Students will;

- ✓ Examine components of digital systems and explore how the digital systems form networks
- ✓ Understand how digital systems store, process and transmit information in digital form
- ✓ Identify the key features of selected software and choose a suitable software and file types to develop and combine digital content
- ✓ Develop or improve typing skills: Mavis Beacon, typing games, type assignments and stories/poems
- ✓ Use Hopscotch as a tool to express understanding of literary concepts
- ✓ Understand that digital devices store data using just two states represented by binary digits (bits).
- ✓ Learn graphics design: brochures, flyers, cards, newspaper, articles, and user interface for a digital interface
- ✓ Implement and evaluate creative digital solutions to meet societal needs
- ✓ Examine intellectual property issues (copyright and patents) relating to digital systems
- ✓ Follow and modify algorithms to create simple programs involving sequences of steps
- ✓ Explore use of robotics and computer games to learn coding and core programming concepts
- ✓ Collaborate in team work to design projects and use information management tools to create digital content

Progress outcomes and standards

At the end of unit one, pupils should be able to;

- know the constituent parts of digital systems and explain the basics of digital system components (hardware, software and networks)
- describe how computing systems are connected to form networks
- define the number system used to represent data in digital systems
- develop algorithms to solve problems and design solutions using building blocks of programming
- type at an intermediate or advanced level and design graphics

- employ information on privacy, cybersafety and understand protocols to use online
- follow a multi-step procedure to complete a task
- use different software applications to manage, interpret and visualise data
- demonstrate increasingly critical, problem solving reflective and creative thinking and use data management tools to create an outcome.