CompuTech Club
IMAGINE, CREATE, EVALUATE

UNIT 4: Year 7-8 (Ages: 10-12 years)

This unit is designed to suit 7th - 8th year primary and intermediate school students. It begins with a brief review of concepts previously taught in units 1 and 2. Students will;

- ✓ Explore how to maintain computers, networks and systems to ensure security and efficiency
- ✓ Recognise the role of operating systems in managing digital devices, security, and application software
- ✓ Examine data from different sources and use of online spreadsheet or database to create a large database of information
- ✓ Derive meaningful information from raw data, predict trends in data, make inferences and suggest solutions/make recommendations based on data available.
- ✓ Decompose problems into algorithms and use these algorithms to create programs
- ✓ Enhance typing skills using Mavis Beacon and other educative computer software
- ✓ Use appropriate coding and programming languages to design, develop and test digital content to address a given problem
- ✓ Evaluate digital solutions and product outcomes in relation to fitness for purpose, quality of design, impact and influence on communities
- ✓ Examine the use of safe and ethical practices to protect students and others in the event of online interactions for learning and communicating.
- ✓ Define problems and develop their design skills for carrying out instructions

Progress outcomes and standards

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

- understand the role and application of computer systems, cyber security and application software in society
- explore inputs and outputs using a circuit board, electronic kit or programmable board.
- follow a predetermined process to design, store, test data to address a given issue
- scrutinize and evaluate data from different sources to model and create solutions

- represent and preset image, text and audio data securely in digital systems
- design algorithms employing sequencing and repetitions, and test, modify and implement digital solutions
- type at an intermediate or advanced level and design graphics
- evaluate digital systems and their solutions in terms of societal needs, innovation and sustainability
- use appropriate protocols when communicating and collaborating online