

INFORMATION TECHNOLOGY

GRADE 9

Topic: Health and Safety

OBJECTIVES

Students will:

1. Investigate and resolve basic computer hardware problems
2. Explain how Government Agencies with responsibility for Health and Safety Acts carry out their mandate in relation to ICT/IT industry
3. Discuss the impact of the use of computer usage on health, safety and environment
4. Revise judgments and change behaviour in light of health and safety practices when using computer system

Topic: Foundations of Hardware and Software

OBJECTIVES

Students will:

1. Define the terms 'file' and 'file management'
2. Categorize files based on their file extensions
3. Solve the path to a file, with the tree directory structure
4. Perform file management related tasks in a directory folder
5. Discuss the role of drivers in device management
6. Examine the use of a Spreadsheet software
7. Define key terms associated with spreadsheets
8. Investigate the different sections in the layout of a spreadsheet software
9. Demonstrate the use of spreadsheet software by entering data, applying formatting features, using simple formulae and functions and creating simple charts in a spreadsheet
10. Demonstrate the use of spreadsheet software by sorting data and applying formatting features to numeric values

11. Explain the importance of importing and exporting data between software applications
12. Demonstrate copying sections of data created in a spreadsheet document to a word processing document.
13. Modify the layout of cells by adding borders and colour

Topic: Data Communication, Networking and Internet

OBJECTIVES

Students will:

1. Identify at least five communication devices used with computer networks today's society
2. Describe correctly at least three communication software that are used in computer networks
3. Compare at least four uses of communication technologies in different types of computer networks
4. Propose a modification to an existing computer network, for future expansion
5. Describe the purpose of each component within a web address
6. Explain how a web browser retrieves a desired web page
7. Identify some characteristics of at least five distinct types of websites
8. Justify the use of two or more Internet services in an organization's department

Topic: Computer Binary

OBJECTIVES

Students will:

1. Perform simple binary operations such as addition and subtraction

Topic: Computer ethics and Research

OBJECTIVES

Students will:

1. Describe accurately at least six threats to a computer network
2. Identify correctly whether a computer network threat has compromised the availability, integrity, or confidentiality of a company's resources and services
3. Determine appropriately which security measure(s) is applicable for a given situation

4. Cite whether a computer network security measures is either physical or Logical
5. Define terms related to unethical behaviours such as ‘trolling’, ‘cyberbullying’ “cyberstalking”, and software piracy
6. Describe the possible results of unethical practices using online resources
7. Appropriately present information sourced from offline (such as CDs) and online (such as text, graphics, video, audio among others) resources
8. Restate a search text/phrase, for an efficient search on the Internet
9. Construct accurately a search text with two or more operators to refine the search result
10. Specify correctly two or more search criteria for narrowing a search result

Topic: Computing Careers

OBJECTIVES

Students will:

1. Identify accurately at least four IT skills needed for a non- IT Specialist
2. Describe accurately at least three job functions for new and emerging careers in Computer Science and Information Technology
3. Explain concisely four benefits from obtaining certification in computer related studies
4. State appropriately the salary range for a professional in the field of Computer Science and/or Information Technology
5. Give correctly three differences among two or more certifications in the field of computing
6. List correctly at least one required certification, each, for at least five careers in the field of computing
7. Recommend academic path for obtaining IT professional qualification
8. Identify relevant professionals who are needed for completing computing related projects in society
9. Design a resume for a profession in the field of Information Technology/Computer Science

Topic: Multimedia Authoring

OBJECTIVES

Students will:

1. Define terms related to website design
2. Analyze website to determine domain names
3. Examine steps to be followed when creating webpages
4. Understand the website development process
5. Create a storyboard for a webpage
6. Design a website using HTML syntax and tags
7. Identify various web authoring tools
8. Create a website using online or offline web authoring Software
9. Analyze the design characteristics that makes a good website design