



COMMONWEALTH OF THE BAHAMAS

**THE MINISTRY OF EDUCATION AND TECHNICAL AND
VOCATIONAL TRAINING**

COMPUTER STUDIES

CURRICULUM GUIDELINES

GRADES 7 – 9
2021

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PREFACE

What are the competencies and skills required for young people which will enable them to benefit from and make a valuable contribution to a rapidly changing world?

The Organization for Economic Co-operation and Development (OECD) has identified some of the skills which the 21st century individual should possess in order to have the ability to perform tasks and solve problems. They include critical thinking, responsibility, decision making, flexibility¹, creativity, assessing information, problem solving, teamwork, effective communication (oral and written), analyzing information and entrepreneurialism.

The digital age which has been ignited by changes in technology, from the use of a Typewriter to a Word Processing Program; the landline telephone to mobile smartphones; from the model T¹ car to the Tesla (driverless cars) have required new skills to gain access to, evaluate and integrate information.

This Computer Science curriculum document for Grades 7 – 9 has been designed to address the needs of the 21st century and beyond student. At the end of this program, students will be able to create, produce and perform tasks or skills that are transferrable for home use, for skills required for their various careers and as a tool used in their own entrepreneurial business.

¹ Laura M. Greenstein, Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning

ACKNOWLEDGEMENTS

“Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution.”
— Albert Einstein

In today's world, the concept of “*Life imitating Art*” is displayed all around us. 21st century technology has far surpassed what its forefathers such as Charles Babbage, Alan Turning, Bill Gates and Steve Jobs would have ever predicted or imagined.

Computers Science has evolved so rapidly that cloud storage, data protection, social media and artificial intelligence are synonymous terms used in our daily lives. Developing APPs for consumers to utilize for e-commerce and e-learning have shifted how data and information are delivered and used.

It is now vital more than ever, that students are equipped with the required tools and information to be able to manipulate various technological devices that will assist in whatever career(s) undertaken.

To this end, revisions to the Computer Science curriculum was undertaken. However, we give recognition to our predecessors who had the foreknowledge to develop the curriculum. These persons include Mrs. Faye Bascom, Mrs. Keyshan Bastian, and Mrs. Gwendolyn Johnson.

In 2019, under the guidance of Education Officer for Junior High Business Studies, Ms. Aldeka Colebrooke, a revised curriculum was drafted specifically for the Junior High School.

A team of dedicated and knowledgeable teachers in Computer Science from New Providence as well as the Family Islands was formed. Appreciation and thanks are extended to Ms. Ginger Pickstock (Team Leader), Mrs. Patrilee Hield, Ms. Jewel Munnings, Ms. De'Andra Rolle, Mrs. Nerissa Williamson and Mrs. Natasha Sweeting-Uriz, for their selfless commitment and collaborative efforts that made this curriculum come to fruition.

Appreciation and thanks are also extended to the teachers and Subject Coordinators of the Business Studies section, the Department of Education, local Bahamian and international consultants. Sincerest gratitude is extended to all other stakeholders who may have in some way contributed to the completion of this document to ensure that students are competent confident and ready to embrace life after their high school experience.



MINISTRY OF EDUCATION VISION, MISSION AND BELIEF STATEMENTS

VISION

Our vision is for a Bahamian education system that will foster academic excellence and equip students with multiple literacies that will enable them to make meaningful contributions as nation builders who are globally competitive.

MISSION STATEMENT

The mission of the Department and Ministry of Education is to provide all persons in The Bahamas an opportunity to receive a quality education that will equip them with the necessary beliefs, knowledge, attitudes, and skills required for life, both in a democratic society guided by Christian values and in an inter-dependent changing world.

PHILOSOPHY

Education in the Commonwealth of The Bahamas is the principle vehicle for promoting the development of individuals and the nation as a whole. It is essential to enhancing the quality of life of our people. It reflects our nation's ideals, values, beliefs and customs. It affirms that all human beings have an undeniable right to an education, one that will enable them to understand their privileges and responsibilities in the community. Its specific focus is to prepare the youth to become active citizens, caring and compassionate people, and life-long learners who will continue to improve the quality of life for themselves and others.

BELIEF STATEMENT

We believe that:

1. The learning environment should be student centered;
2. At each grade level students should acquire specific skills to prepare them for the succeeding grade level;
3. All students should have equal opportunity to learn based on their needs, interests and abilities;
4. Students should have opportunities to question, analyze, reason and make decisions as well as to develop self-confidence and greater freedom of expression;
5. All students should acquire essential survival skills enabling them to function well in society;
6. Technology should be integrated into content and instruction;
7. Content should be culturally relevant while still allowing a global perspective;
8. The methods used for assessing achievement should reflect the teaching and learning strategies employed in the curriculum;
9. Student success is integrally linked to parental involvement and community support;
10. Students will be equipped with the computer skills that will enable them to be qualified for an entry level position;
11. Students should be cognizant of the evolving technical world and be able to assimilate to the changes in technology.
12. Students will be able to integrate their computer skills across curriculum.

PROFILE OF THE IDEAL GRADUATE: The principal objective of the Bahamian education system is to develop productive citizens capable of caring for themselves and contributing positively to the national development process. Based on its consultation with stakeholders, the Ministry of Education has developed a profile for the ideal graduate. Among other qualities, the ideal graduate should:

- Possess relevant knowledge in core disciplines/learning areas to be functionally literate;
- Think critically, be an innovative problem solver and show initiative;
- Demonstrate creativity and innovation;
- Communicate effectively and collaborate willingly;
- Demonstrate flexibility and adaptability;
- Utilize social skills effectively;
- Appreciate Bahamian culture and utilize the appropriate cultural skills;
- Work productively and diligently with high level competency;
- Guide and inspire others to do their best;
- Have an appropriate awareness of the forces that shape and influence his/her life and surroundings;
- Exhibit civic responsibility and display behaviours that benefit the wider community;
- Appreciate his/her role in and responsibility to the local community, The Bahamas, the Caribbean region, the commonwealth of nations and the world;
- Demonstrate integrity and ethical behaviour at all times;
- Possess digital literacy, appreciate the role of technology and innovation in national development;
- Display skills and competencies that reflect career and college readiness;
- Possess ability to work effectively in teams and
- Embrace his/her role as an environmental steward.

Adapted from: The Ministry of Education's *Shared Vision for Education 2030*

RATIONALE

Computer Studies serves to address a primary need to ensure that students are exposed the knowledge, skills, current trends and attitudes that will enable them to achieve success in secondary school, the workplace, posts-secondary education, vocational training, community and in daily living.

As technology changes, our students should be well abled to embrace the challenges of 21st century and beyond. Through this curriculum, students will have acquired the knowledge and skills needed to meet the demands in an evolving technological world.

This course of study will expose students to fundamental computer studies concepts and practices that should adequately prepare them for tertiary studies or entry level employment opportunities, thereby fulfilling the Sustainable Development Goal 4 - *SDG4: Ensure Inclusive & Quality Education for all & Promote Lifelong Learning²*

DEFINITION OF TERMS

This document comprises several components: Below is a brief description of each;

Overarching Goal:	defines the ultimate outcome of learning and outlines the intended purpose of the curriculum document.
Sub-Goals:	form the major contextual framework for instruction.
Standards:	show what students should be able to do at the end of schooling at a particular grade level.
Benchmarks:	show the level of progression for students at each grade level upon the completion of the year of instruction.
Scope and Sequence	shows the content to be covered for each grade level and the order in which it should be covered. It also provides an indication of the level of proficiency at which students should be performing for each grade level.

²

[https://sustainabledevelopment.un.org/content/documents/19874VNR_document_03.07.18_master_document.p
df](https://sustainabledevelopment.un.org/content/documents/19874VNR_document_03.07.18_master_document.pdf)

Pacing Guide	shows the sequence of topics and estimated length of time that should be spent on each topic.
Scope of Work:	provides the basic content that should be included in lessons along with suggested activities, assessments and resources.

OVERARCHING GOALS AND SUB-GOALS

OVERARCHING GOALS

1. Demonstrate and practice safe, responsible and legal use of technology.
2. Analyze a document and determine the best software to complete the work.
3. Create and produce professional and engaging documents/presentations based on the parameters needed and using the appropriate software.
4. Create a professional profile that can nurture their online professional identity in a competitive market.
5. Create an awareness of job opportunities and careers available to them in a STEM program.
6. Demonstrate basic trouble shooting skills that can equip them with proper maintenance procedures, technical deduction and minimize problem duration.
7. Design and produce a spreadsheet and charts used for personal and business finances.
8. Make strategic decisions based on analyzing data from spreadsheet and charts.
9. Demonstrate knowledge of the computer/Information Technology (IT) environment – computer hardware, software application and networking systems – that is a fundamental part of modern society.
10. Develop critical thinking strategies using many resources such as computers, information, algorithms and programming languages as innovative tools for solving problems of all kinds in the modern world.
11. Create an awareness for the complex and evolving interaction between technology, individuals, institutions and culture.
12. Develop skills such as critical thinking skills, knowledge skills required for research, skills to communicate findings accurately and ethics.
13. Apply the knowledge, skills and attitudes acquired through the study of computer studies to a variety of learning tasks and relate them to computer advancement on the local, national, regional and global levels

SUB-GOALS

The sub-goals/strands that this document will be addresses as it relates to Computer Science include:

STANDARDS AND BENCHMARKS

Sub-Goal	Standard	Benchmark		
		Grade 7	Grade 8	Grade 9
Identify the various types of hardware/ software that can be found in the modern workplace.	Dialogue regarding the types of hardware/ software that exist in the business world and state the type of how they may be used in the modern workplace.	Research various hardware and software devices. Apply various hardware and software devices to create a variety of documents. Score a C or above on Unit Test and or Final Examination.	Research various hardware and software devices. Apply various hardware and software devices to create a variety of documents. Score a C or above on Unit Test and or Final Examination.	Research various hardware and software devices. Apply various hardware and software devices to create a variety of documents. Score a C or above on Unit Test and or Final Examination.
Develop lifelong learning habits and soft skills (communications, problems solving, critical thinking, willingness to learn, teamwork, adaptability, dependability) that will enable them to be in readiness of the modern workplace.	Utilize skills and knowledge across the curriculum, in the development of soft skills. Use communication and social skills to interact effectively with others.	Individual or Group Discussions, Role playing scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work.	Individual or Group Discussions, Role playing scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work.	Individual or Group Discussions, Role playing scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work.

Apply proficiency in using various online platforms.	Effectively manipulate various educational online platform. Eg. BLMS, Google classroom and Edmodo.	Manipulate various online tools and tab on various online learning management systems. Eg. BLMS, Google classroom, Microsoft Office Teams and Edmodo.	Manipulate various online tools and tab on various online learning management systems. Eg. BLMS, Google classroom, Microsoft Office Teams and Edmodo.	Manipulate various online tools and tab on various online learning management systems. Eg. BLMS, Google classroom, Microsoft Office Teams and Edmodo.
To expose students to various career paths in Career and Technical Education.	Develop and awareness of computer usage and or technology in a variety of careers.	Score a C or above on a project research various computers careers or how computers are used in private and public industries. Score a C or above on Unit Test and or Final Examination.	Score a C or above on a research topic based on ergonomic technologies. Score a C or above on Unit Test and or Final Examination.	Score a C or above on a research project on various STEM/CTE OR STEAM programs offered at local or international universities. Score a C or above on Unit Test and or Final Examination.
Demonstrate basic trouble shooting skills that can equip them with proper maintenance procedures, technical deduction and minimize problem duration.	Identify basic trouble shooting skills and proper maintenance procedures for common hardware devices and software issues.	Apply knowledge to a case study to determine the solution(s) to a hardware or software issue. Score a C or above on Unit Test and or Final Examination.	Apply knowledge to a case study to determine the solution(s) to a hardware or software issue. Score a C or above on Unit Test and or Final Examination.	Apply knowledge to a case study to determine the solution(s) to a hardware or software issue. Score a C or above on Unit Test and or Final Examination.
Use age-appropriate technologies to research	Research various topics using appropriate	Individual or Group Discussions, Role playing	Individual or Group Discussions, Role playing	Individual or Group Discussions, Role playing

information from a variety of sources for specific purposes, and citing sources	websites and other printed media.	scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work or individual project. E.g. surveys, questionnaires, video or other multimedia presentations.	scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work or individual project. E.g. surveys, questionnaires, video or other multimedia presentations.	scenarios in which students interact with each other in an oral or written format with their peers. Individual or Group projects in which students are engage in cooperative work or individual project. E.g. surveys, questionnaires, video or other multimedia presentations.
To connect past technology with innovative technology as it relates to the modern workplace.	Bridging past and present computer hardware devices and the impact of technology in the modern workplace.	Score a C or above on a project by creating a timeline on the History of computers or using other multimedia to produce related topics Score a C or above on Unit Test and or Final Examination.	Score a C or above on a project by comparing the typewriter to a word processor or using other multimedia to produce related topics. Score a C or above on Unit Test and or Final Examination.	Score a C or above on a Research Paper on types of modern workplaces. Eg. from brick and mortar (physical building) to Hoteling or using other multimedia to produce related topics. Score a C or above on Unit Test and or Final Examination.

To analyze the impact and effects of computer usage on the environment, workforce, and society at large.	Creating a safe environment by analyzing the positive and negative impacts of computing technology.	Score a C or above on a video project explain the 9 dynamics of Digital Citizenship. Score a C or above on Unit Test and or Final Examination.	Score a C or above on a video project on Ergonomics. Score a C or above on Unit Test and or Final Examination.	Score a C or above on a video project on Ergonomics. Score a C or above on Unit Test and or Final Examination.
Develop proficiency in Microsoft Office Suite.	Effective use Microsoft Office Suite to create and manipulate documents.	Score a C or above by creating a basic document in Microsoft Office Word and Excel. Score a C or above on Unit Test and or Final Examination.	Score a C or above by creating documents in Microsoft Office Word. Obtain a First Class or Pass in the City & Guilds Word Processing Essential or Intermediate Examination.	Score a C or above by creating spreadsheets and slide presentation using Microsoft Office Excel and PowerPoint. Obtain a First Class or Pass in the City & Guilds Spreadsheet Essential Examination.
Develop an appreciation of having proficient typing skills to increase work production.	Applying proficiency in Keyboarding.	Apply keyboarding techniques to achieve 25 words per minute goal. Score a C or above on an online keyboarding program. Eg.	Apply keyboarding techniques to achieve 45 words per minute goal. Score a C or above on an online keyboarding program. Eg.	Apply keyboarding techniques to achieve 45 – 60 words per minute goal. Score a C or above on an online keyboarding program. Eg.

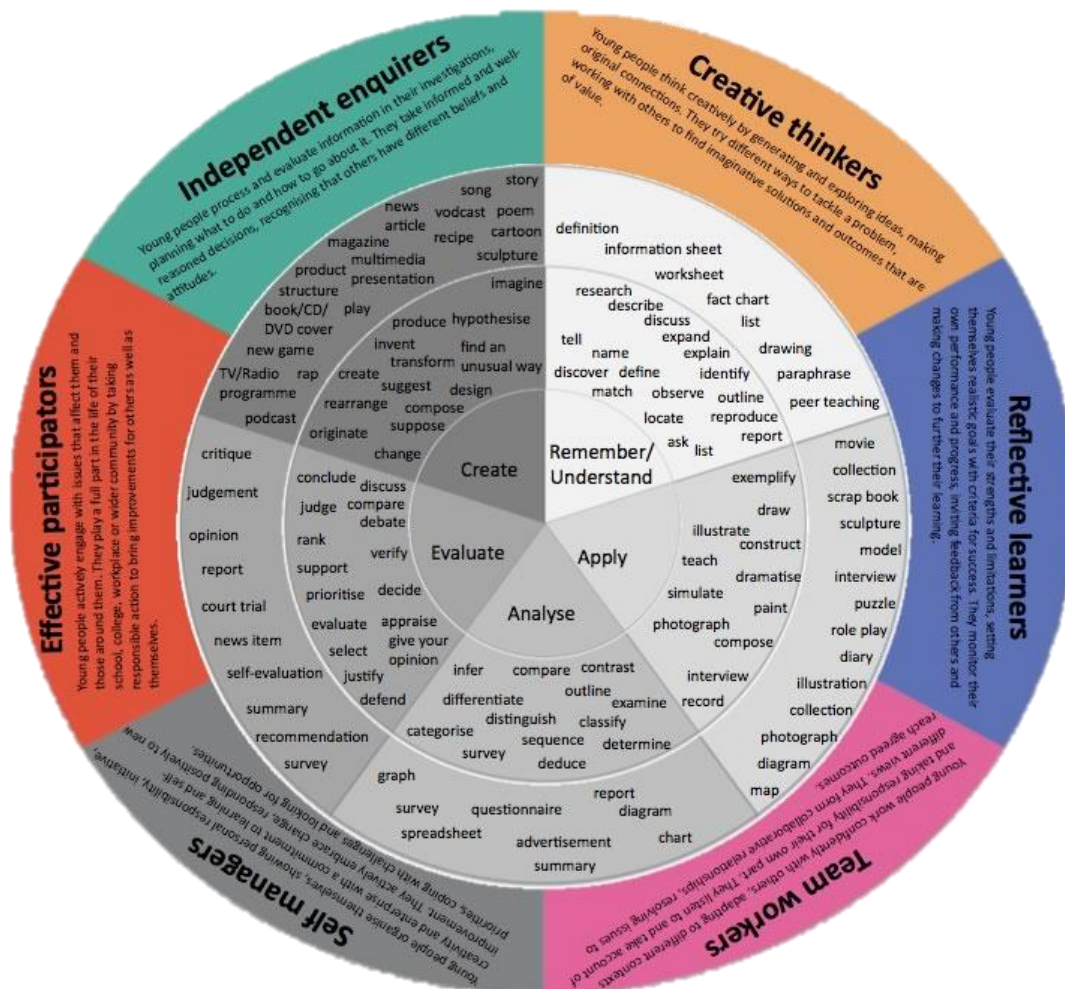
		https://www.typing.com/student/lessons https://www.freetypinggame.net/ Score a C or above on Unit Test and or Final Examination.	https://www.typing.com/student/lessons https://www.freetypinggame.net/ Score a C or above on Unit Test and or Final Examination. Obtain a First Class or Pass in the City & Guilds Word Processing Essential or Intermediate Examination.	https://www.typing.com/student/lessons https://www.freetypinggame.net/ Score a C or above on Unit Test and or Final Examination. Obtain a First Class or Pass in the City & Guilds Spreadsheet Essential Examination.
Produce documents in both printed and digital media using numerous software tools.	Design various printed and digital publications.	Score a C or above by creating documents using Microsoft Office Word and other online sites such as Canva, Poster My Wall, Adobe Sparks etc. Score a C or above on Unit Test and or Final Examination.	Score a C or above by creating documents using Microsoft Office Word, Publisher, and other online sites such as Canva, Poster My Wall, Adobe Sparks etc. Score a C or above on Unit Test and or Final Examination.	Score a C or above by creating documents using Microsoft Office Word, Publisher and other online sites such as Canva, Poster My Wall, Adobe Sparks etc. Score a C or above on Unit Test and or Final Examination.

To expose students to programming language.	To acquire basic programming skills in coding using the Scratch program.	Create a Project using instructions from a coding program, recognize patterns, relationship between variables and solve problems. Identifying and executing solutions (e.g., Coding). Score a C or above on Unit Test and or Final Examination.	Create a Project using instructions from a coding program, recognize patterns, relationship between variables and solve problems. Identifying and executing solutions (e.g. Coding). Score a C or above on Unit Test and or Final Examination.	Create a Project using instructions from a coding program, recognize patterns, relationship between variables and solve problems. Identifying and executing solutions (e.g. Coding). Score a C or above on Unit Test and or Final Examination.
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BLOOM'S TAXONOMY

The curriculum outcomes are written to define the level of knowledge or skill required to meet the outcomes as identified in Bloom's Taxonomy of Learning.

- A. Remembering – recalling previously learned material
- B. Understanding – demonstrating knowledge of previously learned material
- C. Applying – solving problems by using previously acquired knowledge
- D. Analyzing – examining and finding evidence to support choices and decisions
- E. Evaluating – using a set of criteria alternative solutions
- F. Creating – using learned information to create alternative solutions



Work Cited:<http://www.mmiweb.org.uk/downloads/bloomimages/bloom_plts.jpg>

Bloom's Critical Thinking Cue Questions
Cue Questions Based on Blooms' Taxonomy of Critical Thinking

LOWER-ORDER THINKING SKILLS (BASIC THINKING)	HIGHER-ORDER THINKING SKILLS (ABSTRACT THINKING)
3. APPLYING (Using learned knowledge in new situations or to solve a real life problem) • How would you use ...? • What examples can you find to ...? • How would you solve _____ using what you have learned ...? • How would you organize _____ to show ...? • How would you show your understanding of ...? • What approach would you use to ...? • How would you apply what you learned to develop ...? • What other way would you plan to ...? • What would result if ...? • How can you make use of the facts to ...? • What elements would you choose to change ...? • What facts would you select to show ...? • What questions would you ask in an interview with ...?	6. CREATING (Putting ideas together to form a new and different whole) • What changes would you make to solve ...? • How would you improve ...? • What would happen if ...? • How can you elaborate on the reason ...? • What alternative can you propose ...? • How can you invent ...? • How would you adapt _____ to create a different ...? • How could you change (modify) the plot (plan) ...? • What could be done to minimize (maximize) ...? • What way would you design ...? • What could be combined to improve (change) ...? • How would you test or formulate a theory for ...? • What would you predict as the outcome of ...? • How can a model be constructed that would change ...? • What is an original way for the ...?
2. UNDERSTANDING (Comprehension; Explaining the meaning of information) • How would you classify the type of ...? • How would you compare ...? contrast ...? • How would you rephrase the meaning ...? • What facts or ideas show ...? • What is the main idea of ...? • Which statements support ...? • How can you explain what is meant ...? • What can you say about ...? • Which is the best answer ...? • How would you summarize ...?	5. EVALUATING (Making judgments about the merits of ideas, materials, or phenomena <u>based on criteria</u>) • Why do you agree with the actions? The outcomes? • What is your opinion of ...? (Must explain why) • How would you prove ...? disprove ...? • How can you assess the value or importance of ...? • What would you recommend ...? • How would you rate or evaluate the ...? • What choice would you have made ...? • How would you prioritize ...? • What details would you use to support the view ...? • Why was it better than ...?
1. REMEMBERING INFORMATION (Knowledge; recalling facts and information) • What is ...? • How is ...? • Where is ...? • When did _____ happen? • How did _____ happen? • How would you explain ...? • How would you describe ...? • What do you recall ...? • How would you show ...? • Who (what) were the main ...? • What are three ...? • What is the definition of...? 	4. ANALYZING (Breaking down a whole into component parts; Examining critically) • What are the parts or features of ...? • How is _____ related to ...? • Why do you think ...? • What is the theme ...? • What motive is there ...? • What conclusions can you draw ...? • How would you classify ...? • How can you identify the different parts ...? • What evidence can you find ...? • What is the relationship between ...? • How can you make a distinction between ...? • What is the function of ...? • What ideas justify ...? 

Adapted by C. Allen (January 2013) from Public Consulting Group's Center for Resource Management, in partnership with the Council of Chief State School Officers, August 2007

SCOPE & SEQUENCE

GRADE 7

GENERAL OBJECTIVE	GRADE 7	GRADE 8	GRADE 9
Students will be able to: Computer Literacy A. Describe the term(s) computer literacy and computer digital literacy. Computer Care & Safety A. Discuss computer care, safety, health as it relates to ergonomics and potential illnesses while using the computer.	1. Define the terms computer literacy and digital literacy. 2. State the importance of computer literacy and digital literacy. 3. Explain - What is a computer? 4. Discuss the advantages and disadvantages of using the computer. 5. Label all parts of the computer system. 6. Differentiate hardware and software. 7. Discuss the uses of the computer and its impact on our society, economy and education. 8. Discuss how computers are used in different careers. 1. Demonstrate the ability to keep a computer clean and functional. 2. Perform turning on and off procedures. 3. Rebooting, common error messages, printer errors, internet connections.	N/A	N/A

Microsoft Windows Interface A. Identify and explain the distinguishing features between Windows 7, Windows, 8 and Windows 10 operating system. Learning Management System A. Connect to an online platform as a tool for virtual learning Information Processing Cycle A. Connect the stages of the Information Processing Cycle (IPOSC) to their various hardware devices.	4. Demonstrate the care and handling of all computer parts. 5. Discuss computer viruses. 6. Adapt guidelines when working at a computer workstation. 1. Explain what is a Graphical User Interface (GUI). 2. Identify and label the features of the Windows desktop. 1. Set up a learning management account for online, using one or more of the following platforms a. Edmodo b. Google classroom c. Office 365 d. GENIUS 2. Demonstrate how to upload and download documents 1. Explain the 5 stages of the Information Processing Cycle: a. Input		
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Digital Citizenship A. Discuss the importance of Ethics and Digital Citizenship.	b. Processing c. Output d. Storage e. Communication/Networking 2. Draw, label the Information Processing Cycle. 3. Identify the devices used in each stage (operation) of the Information Processing Cycle. 4. Define processing and describe the functions of the processor/CPU and Main Memory. 1. Discuss who is a Digital Citizen. 2. Explain the keys of Digital Citizenship. 3. Give examples of rules in acceptable use policies (AUPs). 4. Define the terms, copyright, plagiarism, virus, popups. 5. Explain online netiquette. 6. Describe how to use the Internet safely. 7. Discuss the terms: a. Cybercrime b. Cyber bullying c. Phishing d. Scamming e. Hackers 8. Analyze your digital footprint. 9. Give examples of copyright rules. 10. Discuss the importance of soft skills in the workplace as it correlates to digital citizenship.		
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History of Computers A. Design/construct a timeline on the evolution of computers	1. Name the 'Father of Computers'. 2. Explain the development of personal computers. 3. Identify the timeline of each generation of computers. 4. Name the products that marked each generation. 5. Discuss the development of Artificial Intelligence.		
Types of Computers B. Identify the different types of computers and their specifications.	1. Differentiate between the different types of computers based on size, speed, number of users and general price range: a. Personal computers (PCs) b. Mobile computers and mobile devices c. Game consoles d. Mainframe/Servers e. Supercomputers 2. Embedded computers 3. Name the products that marked each generation. 4. Discuss the development of Artificial Intelligence.		
Computer Hardware and Software A. Identify the various types of hardware devices and their functions in the IPOSC cycle.	1. Explain the term computer hardware. 2. Define the term peripheral device. 3. Describe an input device and provide examples.		

B. Distinguish the various types of software/apps.	4. Define processing and describe the functions of the processor CPU (Central Processing Unit). 5. Identify and label internal and external parts of the computer. 6. Describe an output device and provide examples. 7. Describe the various storage devices such as the CD-ROM, CD-RW and DVD drives, memory cards, jump drives, external hard drives and cloud storage. 8. Describe communications devices and provide examples. 9. Define software/application. 10. Explain the different types of software. a. System Software b. Operating System c. Utility Software (Settings & Control Panel) d. Application Software e. (Desktop Publishing Software, Video/Audio/Photo Editing Software, Web browsers, References, Gaming, Travel etc.) i. Word Processing: 1. Font Grouping 2. Spelling/Grammar Command 3. Save & Save As 4. Print ii. Spreadsheet: 1. Input of data (labels, values),		
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C. List 5 tips for successful keyboarding skills. D. Identify and label the numeric keyboard E. Practice touch typing (upper & lower keys) Pointing Devices A. Discuss pointing devices.	9. Demonstrate the use of the top and bottom row keys using correct fingering and ergonomic position. 10. Identify special keys and their purpose. 11. Discuss tips for developing successful keyboarding skills 12. Demonstrate skill in typing symbols and numbers on the numeric keypad. 13. Practice touch typing to achieve 45 words per minute with at least 90% accuracy. 14. Demonstrate Keying by touch and practicing reaching techniques without looking at the keyboard. 15. Develop speed and accuracy while keying in. 1. Discuss various pointing device and their usage. (e.g. stylus, joystick, touchpad, light pen) 2. Classify pointing devices based on the type of hardware devices used.		
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1. Explain the term e-commerce and its impact on the Bahamian society. Application Software <i>Word Processing</i> A. Apply formatting features in a document using a Word Processing programme. <i>Spreadsheet</i> B. Perform simple calculations using arithmetic operators in a worksheet using a Spreadsheet program. <i>Coding</i>	3. Business to Consumer 4. Consumer to Consumer 5. Business to Business 6. Discuss the impact of e-commerce as it relates to the Bahamian society 1. Create a simple document using Word and apply the editing tools to a document. 2. Insert text at the insertion point (cursor) 3. Use the editing tools to a document: a. Copy/cut/paste/BIU/font and font size 4. Insert an image/graphic in a document from online and apply the format picture tool to images/graphics: a. Word wrap b. Crop c. Rotate 5. Entering labels and values into a worksheet. 6. Create a worksheet that shows basic calculations: 7. Apply arithmetic operators in a worksheet to calculate simple formulas (Addition, Subtraction, Multiplication, Division and Exponents) 8. Recall Scratch coding. 9. Create a Scratch profile. 10. Identify basic elements of the Scratch interface. 11. Design tools for Solution.		
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C. Apply coding techniques using the Scratch Coding program.	12. Create different variations of projects using Scratch tools using the stage area and save project. 13. Apply good programming technique to repeat a sequence (loop).		
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SCOPE & SEQUENCE

GRADE 8

	GRADE 7	GRADE 8	GRADE 9
Students will be able to: The Internet A. Demonstrate a basic understanding of what the internet is and how it may be useful to us. B. Set-up and manage an e-mail account.	N/A	1. Provide definitions of the terms Internet and Web. 2. Distinguish the Internet from the web. 3. Discuss the different ways of accessing and connecting to the Internet. 4. Use Internet terminology. 5. Discuss relative key terms/definitions. 6. Network, Virus, download, cloud, URL (Uniform Resource Locator), websites, etc. 7. Discuss proper and inappropriate netiquette activities. 8. Set up an e-mail address. 9. Label an e-mail composition window. 10. Add attachments to an email. 11. Create an account on an online platform.	N/A

C. Discuss the importance of saving a document. D. Show basic knowledge of how to use a printer. E. Demonstrate the basic use of shortcut keys and their functions. F. Format text to change the appearance of text in the document.		5. Identify and describe the Microsoft Word icon. 6. Demonstrate the use of the show and hide tab. 7. Explain the terms: open/retrieve/save (save as, autosave) and share of files or documents. 8. Demonstrate how to collaborate within a shared a file. 9. Display how to print documents and conserve paper. 10. Identify printer errors and troubleshoot. 11. Identify shortcut keys applicable to this topic (saving, opening, new document, printing, etc.) 12. Identify the different types of alignments and their usage. 13. Illustrate highlighting or selecting text. 14. Change paragraph alignment. 15. Change line spacing. 16. Identify the various text wrapping options. 17. Identify short cut keys applicable to this topic. 18. Discuss the various types of font types. 19. Change a text's font style.	
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G. Manipulate document using tabs, margins, page layout and headers and footers.		20. Change a text's font color and font size. 21. Use text effects on text to add dimension and diversity. 22. Decipher which editing format should be used for given scenarios. 23. Differentiate between simple and complex underlining. 24. Identify shortcut keys applicable to this topic. 25. Illustrate the use of word art, shapes and adding graphics. 26. Differentiate between Clip Art and Word Art. 27. Manipulate the shape of clip art and Word Art. 28. Add features to text e.g., drop caps, superscript. 29. Demonstrate how to create a flyer using formatting features. 30. List the steps to inserting symbols. 31. Explain the purpose of SP CAPS. 32. Create a document using bullets/symbols and numbering. 33. Differentiate between tabs and alignments. 34. Define tabs (using the tab key) and tab stops (tab command). 35. Demonstrate the use of tab leaders. 36. Explain the term margin as it relates to a page. 37. Differentiate between margins and gutters 38. Explain how to change page margins, paper sizes and page orientation.	
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J. Use editing tools to edit documents. Business Letters A. Create business letters of various styles.		57. Identify abbreviations for days of the week, months of the year, locations, greetings and salutations. 58. Differentiate between acronyms and standard abbreviations. 59. Identify which words should and should not be abbreviated. 60. Discuss when abbreviations should and should not be used. 61. Discuss why blocks of text may be moved. 62. Define terms (select, highlight, cut, copy, paste, undo, redo etc.). 63. Differentiate between undo and redo. 64. Differentiate between cut and copy. 65. Demonstrate the use of cut, copy and paste text function using the edit function from the shortcut menu, keyboard shortcuts, and icons on the ribbon. 1. List the various types of business letters and memorandums (block style, modified block). 2. Explain the purpose of a business letter or memorandum. 3. Compare/Contrast the different types of letters.	
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Microsoft Word Tables A. Use basic knowledge of tables and how to create and manipulate them within a Word Processing software. Desktop Publishing A. Explain Desktop Publishing. B. Create and edit a newsletter.		4. List the parts of a business letter in its correct order. 5. Differentiate between a block-style business letter and modified business letter. 6. Define the term consistency and how it relates to dates within a business letter. 7. Discuss Pitman rules for each part of a business letter. 1. Define what is a table in Microsoft. 2. Differentiate between simple and complex tables. 3. Insert rows and columns into a table. 4. Insert table 5. Draw table 6. Merge cells and split cells. 7. Format tables with shading and borders. 1. Define Desktop Publishing. 2. Identify types of Desktop Publishing along with web base software. E.g., Picasso, Canva etc. 3. Identify the purpose of creating newsletters. 4. Identify the parts of the newsletter. 5. Discuss the steps involved in creating a newsletter in MS Word and MS Publisher. 6. Construct a newsletter. 7. Inserting clipart and WordArt in newsletters.	
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C. Discuss the advantages of using Microsoft Publisher D. Use features and skills learned to create various publications. E.g., flyers, brochures, etc Coding A. Using instructions from a coding program, recognize patterns, relationship between variables and solve problems.		8. Illustrate aligning text. 9. Insert borders and columns. 10. Demonstrate how to insert textboxes, wrap text and drop caps. 11. Describe the advantages of using MS Publisher. 12. Identify the features of the MS Publisher. 13. Create and design publications (e.g. invitations, brochures, and cards). 14. Select a design template. 15. Label the MS Publisher window. 16. Add and remove pages of a publication. 17. Change font types, sizes and colors. 18. Add clipart to publications. 19. Manipulate the arrangement of objects (text and clipart). 1. Differentiate the 10 coding blocks (motion, looks, sound, pen, data, events, control, sensing, operators, more blocks). 2. Demonstrate how to create a project using coding scripts, background and sprites.	
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B. Creating a story/game/project/using the Scratch program.		3. Create a simple coding game using script commands. 4. Add sound effects to Scratch project. Explore Scratch website, resources and project Studio. 5. Enhance a variable program with conditions. 6. Explain how to use broadcast and say blocks. 7. Develop a complete scratch story. 8. Create examples of scratch variables. 9. Differentiate between variables and conditions. 10. Discuss how to enhance variables with conditions. 11. Discuss what is Boolean logic and how it is used in programming. 12. Utilize variables and conditions to create a game and implement scoring. 13. Write programs with And/Or conditions (randomness).	
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SCOPE & SEQUENCE

GRADE 9

GENERAL OBJECTIVE	GRADE 7	GRADE 8	GRADE 9
Students will be able to: The Workplace A. Discuss computer training for the workplace. B. Identify careers in the business field.	N/A	N/A	1. Discuss why it is important to choose a career or have computer training, STEM (Science, Technology, Engineering and Mathematics) in 2020 and beyond. 2. Identify computer careers (Programmers/App Developers, Web Developers, System Analyst, Mass Communications, Online Marketing, IT Project Manager and Online Trading). 3. Differentiate between various certifications to obtain careers in the business field (networking and hardware certifications/A+ Certifications, Application Software Certifications/Mouse Certifications, Operating System Certifications, Programmer/Developer Certifications, Online Security, Computer Forensics, Internet Certifications, Database Systems Certifications).

B. Differentiate between errors found in Excel. Formulas A. Creating a basic formula without functions. B. Using Functions in Formulas (SUM, AVERAGE, MIN and MAX).			4. Practice using all mouse pointers for troubleshooting in Excel. 5. Justify why errors exist in Excel. 6. Identify 5 common errors (#DIV/0, #####, #VALUE, #REF, #NUM). 7. Explain why these 5 errors exist and demonstrate how to correct the errors. 1. Define what is a formula. 2. Label the parts of a formula. 3. Discuss words to prompt you to add, subtract, multiply and divide. 4. Identify all Math operator keys on the keyboard. 5. Differentiate between relative and absolute cell reference. 6. Compare and Contrast relative and absolute references. 7. Create equations in Excel, using operators. 8. Calculate VAT and Percentages/Discounts. 9. Define what are functions. 10. Examine how to set up formulas with functions. 11. Differentiate between SUM and AVERAGE function. 12. Differentiate between MIN and MAX function.
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Charts A. Create bar, column and pie charts.			13. Explain how to use the AutoSum icon on the ribbon. 1. State why charts are used. 2. Identify the types of charts found in Excel. (Pie, Column, Line and Bar). 3. Distinguish the difference between the parts of a chart. 4. Express when to use a pie vs a column/bar chart. 5. Illustrate how to add the 4 types of charts in Excel. 6. Maneuver a chart in Excel (as object in or on its own sheet). 7. Create 4 chart types (Pie, Column, Bar and Line) based on data and answer question from findings.
Microsoft PowerPoint A. Explain what is Microsoft PowerPoint. B. Identify the features of the PowerPoint window.	N/A	N/A	1. Define the term presentation. 2. Explain what is Microsoft PowerPoint. 3. Demonstrate steps used to start up, save, view and share PowerPoint presentations. 4. Identify the PowerPoint window features.

C. Discuss the advantages and disadvantages of using PowerPoint to create presentations. D. Create exciting PowerPoint presentations using various PowerPoint tools.			5. Discuss advantages and disadvantages of using PowerPoint to create presentations. 6. Distinguish between different slide layouts. 7. Create a presentation. 8. Demonstrate how to: 9. add text to slides. 10. change font style, font size and font color. 11. add, delete and arrange slides. 12. format slide background. 13. add a theme to a presentation. 14. Explain the importance of planning a presentation. 15. State the steps used when planning presentations. 16. Create a PowerPoint presentation 17. Present a PowerPoint presentation using slideshow view. 18. Explain the purpose of bullets and numbering in PowerPoint. 19. Demonstrate how to insert bullets and numbering. 20. Describe steps used to customize bullets.
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			21. Define slide media. 22. Discuss the advantages of using audio and video in PowerPoint. 23. Describe slide timing. 24. Explain how movie mode works. 25. Demonstrate how to: 26. insert audio files stored on the computer or record audio. 27. insert video files in PowerPoint from the computer or online. 28. customize videos. 29. use the loop tool and trim video tool. 30. record the screen. 31. Define animation and transition. 32. Identify different types of animations and transitions. 33. Demonstrate how to: 34. add animations to slides 35. add motion paths to the animations 36. add transitions to slides 37. Identify types of image file extensions that can be used in PowerPoint (JPEG, PNG, GIF) 38. Discuss the advantages and disadvantages of using image files 39. Demonstrate how to: 40. insert online images as well as images stored on the PC (personal computers) into PowerPoint.
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			41. Insert screenshots. 42. align, order, group and rotate images on a slide. 43. State what are hyperlinks and action buttons. 44. Discuss the purpose of using hyperlinks and action buttons within PowerPoint 45. Demonstrate how to: 46. hyperlink slides within PowerPoint. 47. hyperlink to other documents or websites. 48. insert action buttons and link them to slides. 49. Explain what are SmartArt graphics. 50. Examine the types of SmartArt graphics used in PowerPoint. 51. Demonstrate how to insert SmartArt graphics. 52. Create an organizational chart. 53. Define the term callout. 54. Identify types of callouts. 55. Demonstrate how to insert callouts on slides.
Web Page Design A. Create a Web page	N/A	N/A	1. Explain the terms website and web hosting.

			2. Describe the steps in designing a website. 3. List the components of a website. 4. Create a simple Web page using HTML Code and Notepad. 5. Create a simple Web page using a website builder. 6. List steps for maintaining a website.
Scratch Programming A. Create a final Scratch project	N/A	N/A	1. Explore the scratch website, resources and project studio. 2. Enhance a variable program with conditions. 3. Explain how to use broadcast and say blocks. 4. Develop a complete scratch story. 5. Create examples of scratch variables. 6. Differentiate between variables and conditions. 7. Discuss how to enhance variables with conditions. 8. Discuss what is Boolean logic and how it is used in programming. 9. Utilize variables and conditions to create a game and implement scoring. 10. Write programs with And/Or conditions (randomness).

CURRICULUM

GRADE 7 – TERM ONE	
GENERAL OBJECTIVES: 1. Describe the term(s) computer literacy and computer digital literacy. 2. Discuss computer care, safety, health as it relates to ergonomics and potential illnesses while using the computer. 3. Discuss the importance of Ethics and Digital Citizenship. 4. Connect to an online platform as a tool for virtual learning. 5. Connect the stages of the Information Processing Cycle (IPOSC) to their various hardware devices. 6. Design/Construct a timeline on the evolution of computers. 7. Identify the different types of computers and their specifications. 8. Identify the various types of Hardware devices and their functions in the IPOSC cycle 9. Distinguish between hardware and software. 10. Explain programming language as it relates to the Scratch programme.	
TOPIC 7.1.1. – THE COMPUTER	
Subtopic:	Students will:
7.1.1.a – The Computer Computer literacy Digital literacy	1. Define the terms computer literacy and digital literacy; 2. State the importance of computer literacy and digital literacy; 3. Explain - What is a computer; 4. Discuss the advantages and disadvantages of using the computer; 5. Label all parts of the computer system; 6. Differentiate between hardware and software; 7. Discuss the uses of the computer and its impact on our society, economy, education and; 8. Discuss how computers are used in different careers.
TOPIC 7.1.2. - COMPUTER CARE, SAFETY, HEALTH & ETHICS	
Subtopic:	Students will:
7.1.2. - Taking Care of the Computers	1. Demonstrate the ability to keep a computer clean and functional; 2. Perform turning on and off procedures; 3. Rebooting, common error messages, printer errors, internet connections; 4. Demonstrate the care and handling of all computer parts; 5. Discuss computer viruses and;

	6. Adapt guidelines when working at a computer workstation;
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms a. Padlet b. Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activities • Write an essay on The Importance of Digital Literacy. • Create a visual media presentation, identifying and explaining the parts of the computer system. • Using media (print or digital), create a document differentiating between hardware and software. • List the steps used to keep a computer clean and functional. • Research types of computer viruses that can be obtained if they are not used properly. • List types of antiviruses. Example: Norton, Avast, Webroot. • Create additional rules for the computer lab or workplace.	
Formative Assessment: • Create a 3D Model of a computer. • Create a survey and chart the data on how many persons are computer literate vs digitally literate. • Research how virus and various cyber-attack affect a Business (locally and internationally). • Create a 3D Model of a computer. • Write a letter telling someone why computers are considered the “dummy machine”. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz • Example: Kahoot or Quizizz, Blooket	

Resources:

- Handouts (Produced by the teacher)
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of a Computer Whiz (Levels I – IV)
 - We can Use the Computer (BK A-D)
- Online Learning Platforms
 - LiveWorksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Edmodo
 - Padlet
 - Nearpod

TOPIC 7.1.3 - WINDOWS DESKTOP & ONLINE LITERACY

Subtopic:	Students will:
<i>7.1.3.a. - The Windows Desktop</i> A. Windows Desktop B. Desktop Graphics C. The Start Menu and Taskbar D. Explain what is the Windows desktop E. Demonstrate the Use of Folders	 1. Explain what is a GUI. 2. Identify and label the features of the Windows desktop.
Subtopic:	Students will:
<i>7.1.3.b. – Online Literacy</i> A. Learning Management System	 1. Set up a learning management account for online using one or more of the following platforms: a. Edmodo b. Google Classroom c. Office 365 d. GENIUS 2. Demonstrate how to upload and download documents.
Suggested Activities: • Answer unit questions (by chapter)	

- Short Answer Questions – verbal and virtual learning platforms
 - a. Padlet
 - b. Online Polls
- Puzzles (Crossword, word search, unscramble)
- Labeling Diagrams
- Multiple Choice Questions
- Oral Quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube Video Presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer Vocabulary
- Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Compare and contrast Windows 7, Windows 8 and Windows 10 version or later desktop
- Create a visual media (digital or print) with 8 types of common GUI.

Formative Assessment:

- Group Project - Research 4 type of learning management programs for schools.
- Using any media (printed or digital) design your own personal desktop.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizizz, Blooket

Resources:

- Websites
 - Website: Teach ICT
 - <https://www.teach-ict.com/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - LiveWorksheets
 - Teams

- Kahoot
- Quizizz
- Pro-prof quiz
- Educaplay
- Blooket
- Adobe Spark
- Canva
- Edmodo
- Padlet
- Nearpod

TOPIC 7.1.4 – THE INFORMATION PROCESSING CYCLE & DIGITAL LITERACY

Subtopic:	Students will:
7.1.4.a - The Information Processing Cycle	1. Draw, label and describe the Information Processing Cycle. 2. Differentiate between data and information. 3. Identify the elements (parts) of the Information Processing Cycle.
7.1.4.b - Computer Ethics & Digital Citizenship A. Digital Citizenship Keys B. Internet Safety C. Social Media – Do's and Don'ts	1. Discuss who is a digital citizen. 2. Explain the keys of digital citizenship. 3. Give examples of rules in acceptable use policies (AUPs). 4. Define the terms, Copyright, Plagiarism, Virus, Popups. 5. Explain online netiquette. 6. Describe how to use the Internet safely. 7. Discuss the terms: a. Cybercrime b. Cyber bullying c. Phishing d. Scamming e. Hackers 8. Analyze your digital footprint. 9. Give examples of copyright rules. 10. Discuss the importance of soft skills in the workplace as it correlates to digital citizenship.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions	

- Oral Quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube Video Presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer Vocabulary
- Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Illustrate the cycle through uses of other machinery.
- Label the computer system.
- Label the IPOSC cycle.
- Explain the similarities and differences between the Computer Systems and the Human System (nervous system, various human parts – i.e., eyes – input, brain – processing, ears- input, mouth- output, hands – communication).
- Case Study – Consequences of plagiarism with discussion questions for students to answer.
- Demonstrate Social Etiquette through Role Playing.
- Play a Kahoot Game, Quizizz or Pro-prof quiz.
- Create visual presentation using various software such as Adobe Spark, Canva.
- Case Study: Discuss Case study material on the Keys of Digital Citizenship.
- Journal Writing: Journal – Cause and Effect on 3 of the keys of digital citizenship.
- Discuss the implications on the Website: Children Labor For Pennies Mining Mica In Madagascar.
 - <https://www.youtube.com/watch?v=9BCe3MtO1Oo>
- Guest speakers – Police officers, Guidance Counsellors, Victim of cyber bullying discuss the implications and solutions.
- Type a personal letter to a bully explaining the harmful effects of cyberbullying.
- Discuss various technology questions from the website: CNN10 – (Website containing videos about current world issues to inform students.

Formative Assessment:

- Class Presentation: Explain the implication if you do not use proper computer/internet safety protocols.
- Class Presentation: Explain the importance of practicing good computer and internet safety rules in the classroom/workplace and at home.
- Create a pledge or slogan to stop cyberbullying in the school.
- Journal Writing: Journal – Cause and Effect on 3 of the keys of digital citizenship.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Play a Kahoot Game, Quizizz or Pro-prof quiz, Educa-Play

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Digital Citizenship
 - <https://www.digitalcitizenship.net/nine-elements.html>
 - The 9 elements of digital citizenship your students need to know
 - https://www.neolms.com/info/the_9_elements_of_digital_citizenship_your_students_need_to_know
 - Inside Amazon's First Cashless "Go" Supermarket
 - <https://www.youtube.com/watch?v=plFoehDaVQI>

- CNN10.com
 - <https://www.cnn.com/cnn10>
- Teach ICT
 - <https://www.teach-ict.com/>
- Computer Studies Textbooks
 - Interact for Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - LiveWorksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Sparks
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.1.5 – COMPUTER EVOLUTION & TYPES OF COMPUTERS**Subtopic:***7.1.5.a - History of Computer***Students will:**

1. Name the 'Father of Computers'.
2. Explain the development of personal computers.
3. Identify the timeline of each generation of computers.
4. Name the products that marked each generation.
5. Discuss the development of Artificial Intelligence.

Subtopic:	Students will:
7.1.5.b - Types of Computers	1. Identify the different types of computers: a. Personal computers (PCs) b. Mobile computers and mobile devices c. Game consoles d. Mainframe e. Supercomputers f. Embedded computers 2. Differentiate computers according to: a. Size b. Speed c. Number of users d. General price range
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Create a Timeline • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educa-Play • Website: https://www.teach-ict.com/	
Extension Activity: • Group presentations; projects. • Create a collage of pictures comparing how technology has developed. e.g., telephone, cars, washing machine, electronics, ovens etc. • Create a Timeline on the Evolution of Computers. http://www.readwritethink.org/classroom-resources/student-interactives/timeline-30007.html	
Formative Assessment: • Group Presentations • Projects • Video Presentation on the evolution of computers. • Write a letter to Charles Babbage explain how his idea of a computer has developed over time. Summative Assessment: • Unit Quiz	

- Short Answer Questions
- Peer Assessment
- Use a variety of educational platforms to create a quiz

Example: Kahoot or Quizziz

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
 - Read Write Think – Create a timeline
 - <http://www.readwritethink.org/classroom-resources/student-interactives/timeline-30007.htm>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - LiveWorksheets
 - Teams
 - Kahoot,
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.1.6 - COMPUTER HARDWARE

Subtopic:	Students will:
7.1.6.- Type of Hardware Devices A. Peripheral Devices B. Input Devices C. Processing D. Output Devices E. Storage Devices F. Communications/ G. Networking Devices	1. Explain the term computer hardware. 2. Define the term peripheral device. 3. Describe an input device and provide examples. 4. Define processing and describe the functions of the processor CPU (Central Processing Unit). 5. Identify and label internal and external parts of the computer. 6. Describe an output device and provide examples.

	7. Describe the various storage devices such as the CD-ROM, CD-RW and DVD drives, Memory Cards, Jump Drives, External hard drives and Cloud Storage. 8. Describe communications/networking devices.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms a. Padlet b. Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Sparks, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: • Group Presentations - Identify a hardware device and discuss how it is used. • Projects - Make a 3D image of a hardware device • Create a collage of hardware devices and indicate which part of the IPOSC cycle they belong to. • Research online how each hardware connects to a computer in order for it to operate efficiently.	
Formative Assessment: • Dissect a computer (looking at the inside of the computer and show how each part connects). Summative Assessment: • Unit Quiz • Short Answer Questions • Peer Assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizizz	

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - LiveWorksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC: 7.1.7 – SOFTWARE/APPS

Subtopic:	Students will:
A. <i>Operating System/System Software</i> B. <i>Application (Apps) /Programmes</i>	1. Define software/application 2. Explain the different types of software a. System Software b. Operating System c. Utility Software (Settings & Control Panel) d. Application Software i. Word Processing a. Font Grouping b. Spelling/Grammar Command c. Save & Save As d. Print ii. Spreadsheet a. Input of data (labels, values) b. Perform basic calculations (Using Mathematical <i>operators ONLY</i>) iii. Desktop Publishing software, video/audio/photo editing, software, web browsers, references, gaming, travel etc

Suggested Activities:

- Answer unit questions (By chapter)
 - Short Answer Questions
 - Padlet
 - Online Polls
 - Puzzles (Crossword, word search, unscramble)
 - Labeling Diagrams
 - Multiple Choice Questions
 - Oral Quizzes
 - Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
 - YouTube Video Presentation
 - Watch appropriate videos using a Guide-o-rama with questions
 - Computer Vocabulary
 - Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Group Presentations – Give a presentation on various types of software and explain how they are used.
- Create a journal book on various types of software.
- Games software
- Word Processing software
- Social media software
- Presentation software (PowerPoint, Prezi, Keynote)
- Create a collage of software logos and explain reasons for its development.
- Create a class blog about different types of educational software
- Explain in your own words how software works if you are not able to see or touch them
- Type a friendly letter using various alignment
- Using the newspaper/magazine or printed media, create a collage of various types of fonts and indicate if it is a Serif or San Serif font
- Create a chart comparing System Software and Application Software
- Create a Table in Excel using 3-5 formatting tools.

Suggested topics:

- a. Islands of The Bahamas with their major settlements and what items/activities are popular on that island
- b. Periodic table
- c. Basic Math worksheet
- d. Create a BINGO template.

Formative Assessment:

- Research online how each software connects to a computer hardware for it to operate efficiently.

- Project – Think of an idea for a software that you would develop to make your life/problem easier.
- Create a simple bank statement and calculate the ending balance.
- Calculate a simple invoice inclusive of VAT.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Mrs. Rembold's BMS Classes
 - <https://rembold-dawg.weebly.com/>
 - Teach ICT
 - <https://www.teach-ict.com/>
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
 - Microsoft Excel
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.1.8 - INTRODUCTION TO CODING

Subtopic:	Students will:
<i>7.1.8.a. - Using Scratch as a Programming Language</i> A. Introduction to Algorithms B. Design tools for Solution C. Introduction to Scratch programming language D. Create a Scratch profile <i>7.1.8.b - Scratch as a Programming Language</i> A. Building Sequence in Scratch B. Using loops in Scratch sequencing (Again & Again and Moving it)	1. Explain how Algorithm's work. 2. Understanding flow chart, symbols and pseudocodes. 3. Discuss the history and development of Scratch. 4. Create a Scratch profile a. www.scratch.mit.edu 5. Identify basic elements of the Scratch interface. 6. Apply Blocks to create a sequence using the scratch area and save project. 7. Apply good programming technique to repeat a sequence (loop). 8. Explain the use of a Cartesian Grid for the positioning of a Sprite on the stage.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ◦ Padlet ◦ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: • Projects: - Create various backgrounds and Sprite • Create and move Sprite on the Cartesian Grid • Show programming technique to repeat a sequence (loop) • Project – Create a cartoon using Sprite interacting with speech bubble	
Formative Assessment: • Presentation – Designing and displaying Sprite actions • Project – Create a cartoon using two or more Sprite's interacting with speech bubble Summative Assessment: • Unit Quiz • Short Answer Questions	

- Peer Assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Scratch Programming
 - <https://scratch.mit.edu>
 - <https://code.org>
- Online Learning Platforms
 - LiveWorksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - EducaPlay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

NOTE:

The Scratch programming course may be new to some teachers and students. For the Fall 2021 school year, students in grades 7 – 8 are expected to start at the grade 7 introductory level and progress from there. This is only for those persons who may have not started the course.

GRADE 7– TERM TWO

GENERAL OBJECTIVES:

1. Describe the terms Ergonomics and Keyboarding.
2. List 10 tips for an ergonomic computer workstation.
3. Explain 4 health related illnesses associated with poor ergonomics.
4. Identify and label the home row keys and the other sections of the keyboard
5. List 5 tips for successful keyboarding skills.
6. Identify and label the numeric keyboard.
7. Practice touch typing (upper & lower keys).
8. Discuss pointing devices.
9. Discuss the mouse - commonly used pointing/input device
10. Discuss data communications transmission mediums.
11. Discuss the various types of networks.
12. Illustrate the various types of networks.
13. Explain the term E-Commerce and its impact on the Bahamian society.
14. Create documents in Word Processing and Spreadsheet.
15. Apply coding techniques using the Scratch coding program.

TOPIC 7.2.1- ERGONOMICS/KEYBOARDING

Subtopic:	Students will:
7.2.1. - Ergonomics/ Keyboarding	1. Discuss computer care and safety as it relates to ergonomics and potential. illnesses while using the computer. 2. Define the term Ergonomics. 3. Identify the various ergonomic positions. 4. Identify the disadvantages/illnesses associated with ergonomics. 5. Explain the 6 parts of the keyboard. 6. Revise home, lower and upper row keys. 7. Demonstrate the use of the top and bottom row keys using correct fingering and ergonomic position. 8. Identify special keys and their purpose. 9. Demonstrate skill in typing symbols and numbers on the numeric keypad. 10. Practice touch typing to achieve 45 words per minute with at least a 90% accuracy.

TOPIC 7.2.2- KEYBOARDING (MOUSE AND TOUCH TYPING)

Subtopic:	Students will:
7.2.2.a. – Keying It In A. Pointing devices B. The Mouse C. Mouse Actions D. Using Home Row Keys E. Touch Typing	1. Discuss pointing devices 2. Discuss the mouse as an input device 3. Label the mouse 4. Identify and perform mouse skills 5. Position themselves properly at the computer (ergonomics) 6. Key in by touch without looking at the keyboard

F. Keyboarding Exercises	7. Practice key reaching techniques 8. Develop speed and accuracy while keying in.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms • Padlet • Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay Website: https://www.teach-ict.com/	
Extension Activity: • Create a checklist of proper ergonomic setup for the home, school and workplace. • Discuss some of the help associated with ergonomics. • Label the keyboard and mouse and explain their various parts. • Label the numeric keypad. • Practice keyboard using various online keyboard programs ◦ Freetypinggame.net • Speed drill competition.	
Formative Assessment: • Create a 3D keyboard or mouse. • Create a rap/song/video etc. on home row keys and or correct keyboard fingering techniques. • Speed drill competition – 15wpm to achieve an online certificate in keyboarding. Summative Assessment: • Unit Quiz • Short Answer Questions • Peer Assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot, Blooket or Quizizz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod	
Resources: • Printed handouts (produced by the teacher)	

- Websites
 - Mrs. Rembold's BMS Classes
 - <https://rembold-dawg.weebly.com/>
 - Free Typing Game.Net
 - <https://www.freetypinggame.net/>
 - Teach ICT
 - <https://www.teach-ict.com/>
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
 - Microsoft Excel
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.2.3 DATA COMMUNICATIONS TRANSMISSION MEDIUMS

Subtopic:	Students will:
7.2.3 - Data Communications Transmission Mediums	1. Define data communications, simplex, duplex and half-duplex. 2. Explain the terms bandwidth, narrowband, voice-band and broadband 3. Describe the uses of a twisted pair cable, coaxial cable and fiber optic cable.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms • Padlet • Online Polls • Puzzles (Crossword, word search, unscramble)	

- Labeling Diagrams
- Multiple Choice Questions
- Oral Quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube Video Presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer Vocabulary
- Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Illustrate the difference between the various types of data communications.
- Create a document (printed or digital) identifying the various types of cables used for data communications and the devices that use them.

Formative Assessment:

- Create a pictogram on the various types of wiring/cables used.
- Group Project – Explain Data Communication Transmission Mediums.

Summative Assessment:

- Unit Quiz
- Short Answer Questions
- Peer Assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizizz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz

- Pro-prof quiz
- Educaplay
- Blooket
- Adobe Spark
- Canva
- Guide-o-rama
- Edmodo
- Puzzlemaker

TOPIC 7.2.4 NETWORK

Subtopic:

7.2.4.a - Types of Networks

A. LAN (Local Area Network), WAN (Wide Area Network), MAN (Metropolitan Area Network), Internet, Intranet, Bluetooth, Wireless and Hotspot

Students will:

1. Explain the internet and network.
2. Discuss the TCP/IP (Transmission Protocol) and Network domains.
3. Differentiate the different types of networks.
4. Describe switches/hubs and router.
5. Define and demonstrate the uses of Bluetooth, wireless (WI-FI), hotspots, cellular radio, microwave transmission.

Suggested Activities:

- Answer unit questions (by chapter)
- Short Answer Questions – verbal and virtual learning platforms
 - Padlet
 - Online Polls
- Puzzles (Crossword, word search, unscramble)
- Labeling Diagrams
- Multiple Choice Questions
- Oral Quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube Video Presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer Vocabulary
- Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Create a chart comparing the different types of networks.
- Guest speaker – Person from a communication company discussing the various types of networks.
- Create a CAT-5 ethernet cable from scratch.
- Group presentations.
- Projects.

Formative Assessment:

- Create a pictogram on the various types of wiring/cables used.
- Create a timeline showing the development of network from dial up to fiber optics.

Summative Assessment:

- Unit Quiz
- Short Answer Questions
- Peer Assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC: 7.2.5 THE INTERNET	
Subtopic:	Student will be able to:
7.2.5.a - E-Commerce (Online Banking & Shopping)	1. Define the term- E-Commerce. 2. Describe the types of E-commerce: a. Business to Consumer b. Consumer to Consumer c. Business to Business 3. Discuss the impact of E-commerce as it relates to the Bahamian society.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms a. Padlet b. Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: • Using printed or digital media, research the impact of e-commerce pre-pandemic and post-pandemic as it relates to the Bahamian local economy. • Create an advertisement (digital or printed) for your own business, indicating it now features e-commerce. • Group presentations. • Projects	
Formative Assessment: • Project – Discuss examples of the three types of e-commerce business practiced in The Bahamas and in other countries	
Summative Assessment: • Unit Quiz • Short Answer Questions • Peer Assessment • Use a variety of educational platforms to create a quiz	

○ Example: Kahoot, Blooket or Quizizz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod	
Resources: • Printed handouts (produced by the teacher) • Websites ○ Teach ICT ▪ https://www.teach-ict.com/ • Apps/Software • Microsoft Office Suite 2010 or higher ○ Microsoft Word • Computer Studies Textbooks ○ Interact with Information Technology BK 1 – 3 ○ Discovery Computers by Shelly Cashman ○ A Guide to Microsoft Office 2003, 2007, 2010, 2013 ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ Liveworksheets ○ Teams ○ Kahoot ○ TeacherMade ○ Quizizz ○ Pro-prof quiz ○ EducaPlay ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo ○ Puzzlemaker	
TOPIC: 7.2.6. – WORD PROCESSING, SPREASHEET & CODING	
Subtopic:	Student will be able to:
7.2.6.a - Word Processing	1. Create a simple document using Word and apply the editing tools to a document a. Insert text at the insertion point (cursor). b. Use the editing tools to a document: copy/cut/paste/BIU/font and font size. c. Insert an image/graphic in a document from online and apply the format picture tool to images/graphics. • Word wrap

	• Crop • Rotate
Subtopic:	Students will be able to:
7.2.6.b – Spreadsheet	1. Enter labels and values into a worksheet. 2. Create a worksheet that shows basic calculations. 3. Apply arithmetic operators in a worksheet to calculate simple formulas (Addition, Subtraction, Multiplication, Division and Exponents).
Subtopic:	Students will be able to:
7.2.6.c. - Scratch Coding	1. Recall Scratch Coding. 2. Create a Scratch profile. 3. Identify basic elements of the Scratch interface. 4. Design tools for Solution. 5. Create different variations of projects using Scratch tools using the stage area and save project. 6. c. Apply good programming technique to repeat a sequence (loop).
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms A. Padlet B. Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: • Basic Math worksheet. • Create Flyers, Letters and other media incorporating the various features using Word Processing programs.	

- Create variations of projects using Scratch tools.
- Create a document using a spreadsheet program to calculate grades for a class.

Formative Assessment:

- Create an invoice for your business using a spreadsheet program.
- Create a personal budget for yourself using a spreadsheet program.
- Create a multiplication table using a spreadsheet program.
- Create variations of projects using Scratch tools.

Summative Assessment:

- Unit Quiz
- Short Answer Questions
- Peer Assessment
- Use a variety of educational platforms to create a quiz
Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Scratch
 - <https://scratch.mit.edu/>
 - Code
 - <https://code.org>
 - Teach ICT
 - <https://www.teach-ict.com/>
- Apps/Software
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
 - Microsoft Excel
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - EducaPlay

- Blooket
- Adobe Sparks
- Canva
- Guide-o-rama
- Edmodo
- Puzzlemaker

NOTE: School districts in New Providence and some Family Islands, whose students in Grade 7 are in the Exchange options (i.e., different students during the Spring/Summer term), the document below is an abbreviated version of the grade 7 curriculum for you to follow.

GRADE 7 – EXCHANGE

GENERAL OBJECTIVES:

1. Computer Literacy/Digital Literacy
 - a. Computer Literacy/Digital Literacy.
 - b. Describe the term(s) computer literacy and digital literacy.
 - c. Design/Construct a timeline on the evolution of computers.
2. Computer Care and Safety
 - a. Discuss computer care, safety, health while using the computer.
 - b. Discuss and Demonstrate Basic Troubleshooting.
3. The Windows Desktop
 - a. Explain and demonstrate the features of the Windows desktop.
4. Online Literacy
 - a. Connect to an online platform as a tool for virtual learning.
5. The Information Processing Cycle
 - a. Connect the stages of the Information Processing Cycle (IPOSC Cycle) to their various hardware devices.
 - b. Discuss types of hardware & software.
 - c. Differentiate between application software and system software.
 - d. Identify the different types of computers and their specifications.
 - e. Identify and perform mouse skills.
 - f. Explain the 6 parts of the keyboard.
 - g. Demonstrate touch typing techniques with the homerow keys.
6. Computer Ethics & Digital Citizenship
 - a. Validate the importance of digital citizenship while using the internet.
 - b. Discuss ways in which your information online can be breached through cyber-attacks.
 - c. Discuss the implications of e-commerce as a modern model for conducting business both locally and globally.
7. Using Application Software
 - a. Create and edit a simple document using a Word Processor (Microsoft Word).
 - b. Create and edit a simple document using a Spreadsheet software (Microsoft Excel).
8. Discuss what is coding/ algorithm and flow chart.
 - a. Explain programming language as it relates to the to the Scratch program.
9. Types of Networks

a. Explain the internet and network. b. Differentiate the various types of computer network. c. Define and demonstrate the uses of bluetooth, wireless, (WI-FI), hotspots, cellular radio, microwave transmission.	
TOPIC 7.1 - COMPUTER LITERACY/DIGITAL LITERACY (3wks)	
Subtopic:	Students will:
7.1.a – Computer Literacy/Digital Literacy	1. Describe the term(s) computer literacy and digital literacy. 2. Explain what is a computer. 3. Discuss the advantages and disadvantages of using the computer. 4. Discuss the uses of the computer and its impact on our society, economy and education. 5. Discuss how computers are used in different careers. 6. Label all parts of the computer system. 7. Define hardware and software. 8. Differentiate between data and information.
Subtopic:	Students will:
7.1.b - Computer Care & Safety A. Taking Care of the Computers	1. Demonstrate the ability to keep a computer clean and functional. 2. Perform turning on and off procedures: a. Rebooting, common error messages, printer errors, internet connections. 3. Demonstrate the care and handling of all computer parts. 4. Define troubleshooting. 5. Demonstrate and Explain troubleshooting for the following: a. Rebooting b. Printer Errors c. Internet Connections
Subtopic:	Students will
7.1.c -The Windows Desktop A. The Windows Desktop	1. Explain the Windows Desktop. 2. Explain the term Graphical User Interface (GUI) and its purpose. 3. Identify and label the features of the Windows desktop.

	4. Demonstrate the use of folders on the Window's Desktop.
Subtopic:	Students will
7.1.d. – Online Literacy	1. Explain the various types of online platforms and their usage. 2. Illustrate Set up an online account using one or more of the following platforms: a. Edmodo b. Google classroom c. Office 365 d. GENIUS 3. Demonstrate how to upload and download documents.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/ • Digital Citizenship ○ https://www.digitalcitizenship.net/nine-elements.html • The 9 elements of digital citizenship your students need to know ○ https://www.neolms.com/info/the_9_elements_of_digital_citizenship_your_students_need_to_know • Website- Troubleshooting: a. https://earlylearningideas.com/troubleshoot b. https://www.support.com/how-to/how-to-fix-a-windows-pc-that-keeps-rebooting-12992 c. https://www.russharvey.bc.ca/resources/internet.html	

Extension Activity:

- Create additional rules for the computer lab.

Extension Activity: Troubleshooting

- Troubleshoot printer errors in the classroom (disconnected printer from its IP address).

Formative Assessment:

- Use various educational platforms to create a simple quiz that students can take to familiarize themselves with using platform.

Formative Assessment: What is a Computer?

- Create a 3D Model of a computer.
- Write a letter telling someone why computers are considered the “dummy machine”.
- Research 3 possible computer related careers.

Formative Assessment: Troubleshooting

- Give 5 benefits of being able to troubleshoot basic errors.

Summative Assessment:

- Unit Quiz
- Short Answer Questions
- Peer Assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Digital Citizenship
 - <https://www.digitalcitizenship.net/nine-elements.html>
 - The 9 elements of digital citizenship your students need to know
 - https://www.neolms.com/info/the_9_elements_of_digital_citizenship_your_students_need_to_know
 - Teach ICT
 - <https://www.teach-ict.com/>
- Microsoft Office Suite 2010 or higher
 - Microsoft Word
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman

- A Guide to Microsoft Office 2003, 2007, 2010, 2013
- The Adventures of A Computer Whiz (Levels I – IV)
- We can use the Computer (Books A-D)
- Printing Problems? Troubleshooting Tips For Printable Resources
 - <https://earlylearningideas.com/troubleshoot>
- How to Fix a Windows PC that Keeps Rebooting
 - <https://www.support.com/how-to/how-to-fix-a-windows-pc-that-keeps-rebooting-12992>
- Internet Connection Issues
 - <https://www.russharvey.bc.ca/resources/internet.html>
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.2 – THE INFORMATION PROCESSING CYCLE (7 wks.)

Subtopic:	Students will:
<i>7.2.a - History of Computer</i>	1. Name the 'Father of Computers'. 2. Identify the timeline of each generation of computers and name the products that marked each generation. 3. Discuss the development of Artificial Intelligence. 4. Design/Construct a timeline of the evolution of computers.
Subtopic:	Students will:
<i>7.2.b - Types of Computers</i>	1. Differentiate between the different types of computers based on size, speed, number of users and general price range: a. Personal computers (PCs) b. Mobile computers and mobile devices c. Game consoles d. Mainframe/Servers

	e. Supercomputers f. Embedded computers
Subtopic:	Students will:
<i>7.2.c -The Information Processing Cycle</i>	1. Explain the 5 stages of the Information Processing Cycle: a. Input b. Processing c. Output d. Storage e. Communication/Networking 2. Draw, label the Information Processing Cycle. 3. Identify the devices used in each stage (operation) of the Information Processing Cycle: a. Define processing and describe the functions of the processor/CPU and Main Memory.
Subtopic:	Students will:
<i>7.2.d – Hardware</i>	1. Explain the term computer hardware. 2. Explain the stages IPOSC Cycle as it relates to hardware and give examples: a. Input: Types of Input/Input Devices/Softcopy b. Processing: Identify and label the internal parts of the computer. c. Output: Types of Output /Output Devices/Hard copy. d. Storage: Storage Devices/Capacities. e. Communication/Networking: Types of Communication devices and Types of Networking platforms.
Subtopic:	Students will:
<i>7.2.e - Hardware– Software/Apps</i> A. Operating System/System Software B. Application (Apps)/Programmes	1. Define software/application. 2. Explain the different types of software: a. System Software i. Operating System ii. Utility Software (Settings & Control Panel) b. Application Software i. Desktop Publishing Software ii. Video/Audio/Photo Editing Software iii. Web browsers iv. References

	v. Gaming vi. Travel
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: What is a Computer? • Label the computer system. Extension Activity: History of the Computer • Create a collage of pictures comparing how technology has developed. E.g., telephone, cars, washing machine, electronics, ovens etc. • Create a timeline on the evolution of computers. ○ http://www.readwritethink.org/classroom-resources/student-interactives/timeline-30007.html Extension Activity: Information Processing Cycle • Label the IPOS cycle. • Explain the similarities and differences between the Computer Systems and the Human System (nervous system, various human parts – i.e., eyes – input, brain – processing, ears- input, mouth- output, hands – communication). Extension Activity: Hardware • Group Presentations - Identify a hardware device and discuss how it is used. • Projects - Make a 3D image of a hardware device. • Create a collage of hardware devices and indicate where in the IPOS they belong. • Research online how each hardware connects to a computer for it to operate efficiently.	

Extension Activity: Software

- Group Presentations – Present on types of software and explain how they are used.
- Create a journal book on various types of software.
 - Games software/Word Processing Software/Social media software/Presentation software (PowerPoint, Prezi, Keynote)
- Create a collage of software logos and explain reasons for its development.
- Create a class blog about different types of educational software.
- Explain in your own words how software works if you are not able to see or touch them.
- Create a chart/song comparing System Software and Application Software.
- Research the development of Windows over time. e.g., Windows 98 to Windows 10 or Mac OS.
- Create a pictorial timeline of the various operating systems over the years.

Formative Assessment: History of Computers

- Group Presentations.
- Group Project: Research the evolution of computers from the Difference Engine (Charles Babbage) to Artificial Intelligence.
- Create a video Presentation on the Evolution of Computers.
- Write a letter to Charles Babbage explaining how his idea of a computer has developed/changed how we live and work today.

Formative Assessment: Hardware

- Dissect a computer (looking at the inside of the computer and show how each part connects).

Formative Assessment: Software

- Research online how each software connects to a computer hardware for it to operate efficiently.
- Project – Think of an idea for a software that you would develop to make your life/problem easier.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Read Write Think – Timeline Activity
 - <http://www.readwritethink.org/classroom-resources/student-interactives/timeline-30007.html>
 - Teach ICT
 - <https://www.teach-ict.com/>
- Software - Microsoft Office Suite 2010 or higher
 - Microsoft Word
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- **Online Learning Platforms**
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC:7.3 – COMPUTER ETHICS & DIGITAL CITIZENSHIP (3wks)

Subtopic:	Student will be able to:
<i>7.3.a - Digital Citizenship</i>	1. Define the term(s) digital citizenship, digital footprint. 2. Explain Ribble's 9 Elements of Digital Citizenship: a. Digital Law b. Digital Security c. Digital Etiquette d. Digital Access e. Digital Commerce f. Digital Communication

	g. Digital Literacy h. Digital Rights & Responsibilities i. Digital Health and Wellness 3. Analyze your digital footprint. 4. Give examples of copyright rules. 5. Discuss the importance of soft skills in the workplace as it correlates to digital citizenship.
Subtopic:	Student will be able to:
7.3.b - Cyber Attacks	1. Define the term Cyber-Attack. 2. Discuss the following terms related to cyber-attacks : - Virus - Popups - Cybercrime - Phishing - Scamming - Hackers
7.3.c - E-Commerce (Online Banking & Shopping)	1. Define the term- E-Commerce. 2. Describe the types of E-Commerce: - Business to Consumer 3. Consumer to Consumer: - Business to Business 4. Discuss the impact of E-Commerce relative to our Bahamian economy and the global society.
Suggested Activities • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube video presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	

Extended Activities

- Discuss the implications on the Website: *Children Labor For Pennies Mining Mica In Madagascar*:
 - <https://www.youtube.com/watch?v=9BCe3MtO1Oo>
- Discuss the implications on the Website: *Inside Amazon's First Cashless "Go" Supermarket*:
 - <https://www.youtube.com/watch?v=plFoehDaVQI>
- Guest speakers – Police Officers, Guidance Counsellors, Victim of cyber bullying discuss the implications and solutions.
- Type a personal letter to a bully explaining the harmful effects of cyberbullying
- Case Study – Consequences of plagiarism with discussion questions for students' answer.
- Research types of computer viruses that can be obtained if they are not used properly.
- List types of antiviruses. Example: Norton, Avast, Webroot.
- Create additional rules for the computer lab.
- Create posters or signs of computer, internet and or classroom safety rules.
- Create rap songs about the safety rules.

Formative Assessment:

- Create a pledge or slogan to stop cyberbullying in the school.
- Class Presentation: Explain the implication if you do not use proper computer/internet safety protocols.
- Class Presentation: Explain the importance of practicing good computer and internet safety rules in the classroom/workplace and at home.

Summative Assessment

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed Handouts (produced by the teacher)
- Websites
 - Children Labor For Pennies Mining Mica In Madagascar
 - <https://youtu.be/9BCe3MtO1Oo>
 - Inside Amazon's First Cashless "Go" Supermarket
 - <https://youtu.be/plFoehDaVQI>
 - Teach ICT
 - <https://www.teach-ict.com/>

- Software
 - Microsoft Office Suite 2013 or higher
 - Microsoft Word
- Computer Studies Textbooks
 - Information Technology for CXC – Roland Birbal & Joseph Blair
 - Interact with Information Technology Bk 1-3 by Roland Birbal & Michele Taylor
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.4 - USING APPLICATION SOFTWARE (5wks)

Subtopic:	Students will:
<i>7.4.a - Word Processor</i>	1. Create a simple document using Word and apply the editing tools to a document. 2. Insert text at the insertion point (cursor). 3. Use the editing tools to a document: a. copy/cut/paste/BIU/font and font size 4. Insert an image/graphic in a document from online and apply the Format picture tool to images/graphics: a. Word wrap b. Crop c. Rotate
Subtopic	Students will:
<i>7.4.b – Spreadsheet</i>	1. Entering labels and values into a worksheet. 2. Create a worksheet that shows basic calculations:

	a. Apply arithmetic operators in a worksheet to calculate simple formulas (Addition, Subtraction, Multiplication, Division and Exponents).
Subtopic:	Students will:
7.4.c - Introduction to Coding	1. Discuss the term Algorithms. 2. Demonstrate the use of Algorithms used in coding. 3. Understanding flow chart, symbols and pseudocodes.
Subtopic:	Students will:
7.4.d - Introduction to Scratch	1. Introduction to Scratch programming language. 2. Discuss the history and development of Scratch. 3. Create a Scratch profile. 4. Identify basic elements of the Scratch interface. 5. Design tools for Solution. 6. Apply Blocks to create a sequence using the scratch area and save project. 7. Apply good programming technique to repeat a sequence (loop). 8. Explain the use of a Cartesian Grid for the positioning of a Sprite on the stage.
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions – verbal and virtual learning platforms ○ Padlet ○ Online Polls • Puzzles (Crossword, word search, unscramble) • Labeling Diagrams • Multiple Choice Questions • Oral Quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube Video Presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer Vocabulary • Play a Kahoot Game, Quizzes or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/	
Extension Activity: Word Processor • Create a flyer using 10 tools learnt.	

- Type a friendly letter using various alignment.
- Using the newspaper/magazine or printed media create a collage of several types of fonts indicating a Serif, San Serif font, Formal, Decorative, Dingbats, Script.

Extension Activity: Spreadsheet

- Islands of The Bahamas with their major settlements and what items/activities is popular on that island.
- Periodic table.
- Basic Math worksheet.

Extension Activity: Coding

- Projects - Create various backgrounds and Sprite.
- Project – Create and move Sprite on the Cartesian Grid.
- Show programming technique to repeat a sequence (loop).
- Project – Create a cartoon using Sprite interacting with speech bubble.

Formative Assessment: Word Processor

- Create a poem inserting graphics.
 - Create a seasonal (Halloween, Christmas, Valentine's Day, Easter, Mother's Day) document using the Word template.

Formative Assessment: Spreadsheet

- Create a simple bank statement and calculate the ending balance.
- Calculate a simple invoice inclusive of VAT.

Formative Assessment: Coding

- Presentation – Designing and displaying Sprite actions.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz:
- Example: Kahoot, Blooket or Quizziz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod.

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Scratch
 - <https://scratch.mit.edu/>
 - Code
 - <https://code.org>
 - Teach ICT
 - <https://www.teach-ict.com/>

- Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/microsoft-word.html/>
- Software
 - Microsoft Office Suite 2013 or higher
 - Microsoft Word
 - Microsoft Excel
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Information Technology for CXC – Roland Birbal & Joseph Blair
 - Interact with Information Technology Bk 1-3 by Roland Birbal & Michele Taylor
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 7.5 - COMMUNICATIONS/NETWORKING (1wk)

Subtopic:	Students will:
<i>7.5.a -Types of Networks</i>	1. Explain the term Computer Network 2. Differentiate the types of networks (LAN, WAN, MAN, internet, intranet, Bluetooth, wireless and hotspot) 3. Define and demonstrate the uses of Bluetooth, wireless and hotspots.

Suggested Activities:

- Answer unit questions (by chapter)
- Short answer questions – verbal and virtual learning platforms
 - Padlet
 - Online polls
- Puzzles (crossword, word search, unscramble)
- Labeling diagrams
- Multiple choice questions

- Oral quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- Youtube video presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer vocabulary
- Play a Kahoot game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Create a chart comparing the different types of networks.
- Guest speaker – Person from a communication company, discussing the various types of networks.
- Assemble a CAT-5/5e ethernet cable from scratch.
- Group Presentations.
- Individual or Group Projects.

Formative Assessment:

- Create a pictogram on the various types of wiring/cables used.
- Create a timeline showing the development of network from dial up to fiber optics.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot, Blooket or Quizizz to create a quiz, Teams, Edmodo, TeacherMade, Liveworksheets, Nearpod

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
- Software
 - Microsoft Office Suite 2013 or higher
 - Microsoft Word
 - Microsoft Excel
- Computer Studies Textbooks
 - Information Technology for CXC – Roland Birbal & Joseph Blair
 - Interact with Information Technology Bk 1-3 by Roland Birbal & Michele Taylor
 - Discovery Computers by Shelly Cashman

- A Guide to Microsoft Office 2003, 2007, 2010, 2013 The Adventures of A Computer Whiz (Levels I – IV)
- We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - TeacherMade
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

GRADE 8 – TERM ONE

GENERAL OBJECTIVES:

Students are expected to:

1. Demonstrate a basic understanding of what the internet is and how it may be useful to us.
2. Set-up and manage an e-mail account.
3. Apply keyboarding techniques to achieve 45 words per minute goal.
4. Discuss the importance of saving a document.
5. Format text to change the appearance of text in the document.
6. Manipulate document using page layout and headers and footers.
7. Demonstrate the basic use of shortcut keys and their functions.
8. Students are expected to be preparing for Word Processing Pitman examination.
9. Identify situations that would require writing a business letter.
10. Demonstrate the basic understanding of the use of memos.
11. Identify the various types of memos.

TOPIC 8.1 THE INTERNET & DISTANCE LEARNING PLATFORMS

Subtopic:

Students will:

8.1.1 - *The Internet & Distance Learning*

- A. The Internet
- B. Services on the Internet
- C. Connecting to the Internet
- D. Netiquette
- E. Electronic Mail
- F. Online Learning

1. Provide definitions of the terms Internet and Web.
2. Distinguish the Internet from the Web.
3. Discuss the different ways of accessing and connecting to the Internet.
4. Use Internet terminology.
5. Discuss relative key terms/definitions.
 - a. Network, virus, download, cloud, URL (Uniform Resource Locator), websites, etc.
6. Discuss proper & inappropriate netiquette activities.
7. Set up an e-mail address.
8. Label an e-mail composition window.
9. Add attachments to an email.
10. Create an account on an online platform.

Suggested Activities:

- Answer unit questions (by chapter)
- Short Answer Questions – verbal and virtual learning platforms
 - Padlet
 - Online Polls
- Puzzles (crossword, word search, unscramble)
- Labeling diagrams

- Multiple choice questions
- Oral quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube video presentation
- Watch appropriate videos using a Guide-o-rama with questions
- Computer vocabulary
- Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay
- Website: <https://www.teach-ict.com/>

Extension Activity:

- Group presentations; projects
- Label the parts of the web
- Guest speaker – How to design a webpage
- Timeline on the History of the Internet
- Create a dictionary of internet terms e.g., download, upload, web browsers, etc.
- Role Play – Netiquette

Formative Assessment:

- Create a simple webpage using an online software. e.g., Weebly.
- Compare and contrast the types of viruses and their effects on computers (trifold brochures)
- Create a cartoon journal of internet jargon terms. E.g., Lol (laugh out loud); btw (by the way)
- Project – Explain how the internet works and its implication on society (e.g., students, medicine, shopping etc.)

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizizz to create a quiz

Resources:

- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Word
- Printed handouts (produced by the teacher)
- Websites
 - Website: Teach ICT
 - <https://www.teach-ict.com/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013

- Introducing Word Processing by Camilla Bradley
- Continuing Word Processing by Camilla Bradley
- The Adventures of A Computer Whiz (Levels I – IV)
- We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo
 - Puzzlemaker

TOPIC 8.1.2 – KEYBOARDING

Subtopic:	Students will:
8.1.2.a - Ergonomics/ Keyboarding	1. Define the term ergonomics. 2. Identify the various ergonomic positions 3. Identify the disadvantages/illnesses associated with ergonomics. 4. Demonstrate the use of the top and bottom row keys using correct fingering and ergonomic position. 5. Identify special keys and their purpose. 6. Demonstrate skill in typing symbols and numbers on the numeric keypad. 7. Practice touch typing to achieve 45 words per minute with at least a 90%.

Suggested Activities:

- Answer unit questions (by chapter)
- Short Answer Questions – verbal and virtual learning platforms
 - Padlet
 - Online polls
- Puzzles (Crossword, word search, unscramble)
- Labeling diagrams
- Multiple choice questions
- Oral quizzes
- Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid
- YouTube video presentation

• Watch appropriate videos using a Guide-o-rama with questions • Computer vocabulary • Play a Kahoot Game, Quizizz or Pro-prof quiz, Educaplay • Website: https://www.teach-ict.com/ • Typing games
Extension Activity: • Speed typing – 30 wpm. • Use online games to develop proficiency and accuracy. • Given a situation, find solutions to ergonomic problems.
Formative Assessment: • Speed typing – 50 wpm or more higher. • Use an online keyboarding software for proficiency. • Achieve a certificate for obtaining online proficiency – 50 wpm or higher. • Label a diagram showing proper ergonomic seating. • Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizizz to create a quiz
Resources: • Software - Microsoft Office Suite 2013 or higher ○ Microsoft Word • Printed handouts (produced by the teacher) • Websites ○ Free Typing Game.Net ▪ https://www.freetyinggame.net/ ○ Website: ▪ Teach ICT • https://www.teach-ict.com/ ▪ GCF Learn Free. • https://edu.gcfglobal.org/en/t • Computer Studies Textbooks ○ Interact with Information Technology BK 1 – 3 ○ Discovery Computers by Shelly Cashman ○ A Guide to Microsoft Office 2003, 2007, 2010, 2013 ○ Introducing Word Processing by Camilla Bradley ○ Continuing Word Processing by Camilla Bradley ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ Liveworksheets ○ Teams

- Kahoot
- Quizizz
- Pro-prof quiz
- Educaplay
- Blooket
- Adobe Spark
- Canva
- Guide-o-rama
- Edmodo
- Puzzlemaker

TOPIC 8.1.3. - USING A WORD PROCESSING SOFTWARE or APP

Subtopic:	Students will:
<i>8.1.3.a - Microsoft Word</i>	1. Define the term Word Processing. 2. Identify the various types of Word Processing Software. 3. Label the parts of the Microsoft Word window. 4. Explain the commands and tools found in Microsoft Word. 5. Identify and describe the Microsoft Word icon. 6. Demonstrate the use of the show and hide tab. 7. Explain the opening/retrieving/saving and sharing of files. 8. Display how to print documents and conserve paper. 9. Identify shortcut keys applicable to these topics (saving, opening, new document, printing, etc.) 10. Identify printer errors and troubleshoot
<i>8.1.3.b - Google Docs</i>	1. Identify and describe the Google Docs icon. 2. Label the parts of the Google Docs window. 3. Explain the opening/retrieving, sharing and saving of files. 4. Demonstrate how to collaborate within a shared document. 5. Display how to print documents and conserve paper. 6. Identify short cut keys applicable to this topic (saving, opening, new document, printing, etc.). 7. Identify where formatting choice can be found.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions – verbal and virtual learning platforms a. Padlet	

b. Online polls • Puzzles (crossword, word search, unscramble) • Labeling diagrams • Multiple choice questions • Oral quizzes • Create visual presentation using various software such as Adobe Spark, Canva, Flipgrid • YouTube video presentation • Watch appropriate videos using a Guide-o-rama with questions • Computer vocabulary • Play a Kahoot game, Quizizz or Pro-prof quiz, Educa-Play • Website: https://www.teach-ict.com/ • http://parrydawg.weebly.com/computer-classes.html • https://edu.gcfglobal.org/en/topics/googleapps/
Extension Activity: • Label the parts of the Word windows. • Identify and explain common icons used.
Formative Assessment: • Create a document Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot or Quizizz to create a quiz
Resources: • Software - Microsoft Office Suite 2013 or higher ▪ Microsoft Word • Printed handouts (produced by the teacher) • Websites: ◦ Kathryn Parry - Baker Middle School Computer Classes ▪ http://parrydawg.weebly.com/computer-classes.html ◦ Free Typing Game.Net ▪ https://www.freetyinggame.net/ ◦ Teach ICT ▪ https://www.teach-ict.com/ ◦ GCF Learn Free. ▪ https://edu.gcfglobal.org/en/topics/googleapps/ • Computer Studies Textbooks ◦ Interact for Technology BK 1 – 3 ◦ Discovery Computers by Shelly Cashman ◦ A Guide to Microsoft Office 2003, 2010, 2013

○ Introducing Word Processing by Camilla Bradley ○ Continuing Word Processing by Camilla Bradley ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ LiveWorksheet ○ Teams ○ Kahoot, ○ Quizizz ○ Pro-prof quiz ○ Educa-Play ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo ○ Puzzlemaker	
TOPIC 8.1.4. -DOCUMENT AND PARAGRAPH FORMATTING	
Subtopic:	Students will:
<i>8.1.4.a – Alignments</i>	1. Identify the different types of alignments and their usage. 2. Illustrate highlighting or selecting text. 3. Change paragraph alignment. 4. Change line spacing. 5. Identify the various text wrapping options. 6. Identify shortcut keys applicable to this topic.
Subtopic:	Students will:
<i>8.1.4.b – Fonts</i>	1. Discuss the various types of font types. 2. Change a text's font style. 3. Change a text's font color and font size. 4. Use text effects on text to add dimension and diversity. 5. Decipher which editing format should be used for given scenarios. 6. Differentiate between simple and complex underlining. 7. Identify shortcut keys applicable to this topic.
Subtopic:	Students will:
<i>8.1.4.c -Tab key/ Tab Command</i>	1. Differentiate between tabs and alignments. 2. Define tabs (using the tab key) and tab stops (tab command). 3. Move tabs stops 4. Clear tab stops using the ruler and the tab dialog box 5. Demonstrate the use of tab leaders. 6. Identify shortcut keys applicable to this topic
Suggested Activities/Documents:	
• Answer unit questions (by chapter) • Short answer questions	

• Puzzles • Labeling diagrams • Multiple choice questions • Oral quizzes • Watch appropriate videos using a Guide-o-rama with questions • Practical tasks: Menus, table of content, programs, booklets
Extension Activity: Create a collage of different fonts. • Create a menu, table of content, programs, booklets newsletter using various formatting features.
Formative Assessment: Practical Assessment (formatting a given paragraph). • Create a menu, table of content, programs, booklets, newsletter using various formatting features. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizziz to create a quiz
Resources: • Software - Microsoft Office Suite 2013 or higher ○ Microsoft Word • Printed handouts (produced by the teacher) • Websites ○ Free Typing Game.Net ▪ https://www.freetyinggame.net/ ○ Website: Teach ICT ▪ https://www.teach-ict.com/ ○ Kathryn Parry - Baker Middle School Computer Classes ▪ http://parrydawg.weebly.com/computer-classes.html • Computer Studies Textbooks ○ Interact for Technology BK 1 – 3 ○ Discovery Computers by Shelly Cashman ○ A Guide to Microsoft Office 2003, 2010, 2013 ○ Introducing Word Processing by Camilla Bradley ○ Continuing Word Processing by Camilla Bradley ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ LiveWorksheet ○ Teams ○ Kahoot, ○ Quizizz ○ Pro-prof quiz

○ Educa-Play ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 8.1.5 - PAGE LAYOUT	
Subtopic:	Students will:
8.1.5.a - <i>Page Layout</i> A. Page Margins B. Page Size C. Page Orientation	1. Explain the term margin as it relates to a page. 2. Differentiate between margins and gutters. 3. Explain how to change page margins, paper sizes and page orientation. 4. Apply page margins, paper sizes and page orientation to a document. 5. Discuss appropriate margins for professional documents. 6. Customize margins for documents. 7. Differentiate between letter and legal-size papers. 8. Identify the two types of page orientations.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions • Puzzles • Labeling diagrams • Multiple choice questions • Oral quizzes • Watch appropriate videos using a Guide-o-rama with questions.	
Extension Activity: Group presentations; projects • Discuss appropriate/acceptable 'looks' (size, margins/orientation) for various types of documents.	
Formative Assessment: • Practical assessment (follow instructions to show knowledge/ability).	
Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizziz to create a quiz	
Resources: • Software - Microsoft Office Suite 2013 or higher ○ Microsoft Word • Printed handouts (produced by the teacher) • Websites: ○ Kathryn Parry - Baker Middle School Computer Classes	

- <http://parrydawg.weebly.com/computer-classes.html>
- Free Typing Game.Net
 - <https://www.freetyinggame.net/>
- Teach ICT
 - <https://www.teach-ict.com/>
- GCF Learn Free.
 - <https://edu.gcfglobal.org/en/subjects/basic-skills/>
- Computer Studies Textbooks
 - Interact for Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - Introducing Word Processing by Camilla Bradley
 - Continuing Word Processing by Camilla Bradley
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - LiveWorksheet
 - Teams
 - Kahoot,
 - Quizizz
 - Pro-prof quiz
 - Educa-Play
 - Blooket
 - Adobe Sparks
 - Canva
 - Guide-o-rama
 - Edmodo

TOPIC 8.1.6. - DOCUMENT GRAMMAR

Subtopic:	Students will:
8.1.6.a - <i>Spell Check, Find and Replace</i>	1. Identify the command icons for spell check and find and replace. 2. Explore spell check. 3. Add words to the dictionary 4. Explain the use of find and replace 5. Display how to use the spell check and the find and replace tools. 6. Identify shortcut keys applicable to this topic.
8.1.6.b - <i>Proofreaders Marks & Alterations</i>	1. Define proofreader's marks. 2. Identify proofreader's marks. 3. Identify the 5 spacing rules: ○ PITMAN spacing rules for punctuations, paragraphs, etc. 4. Compare and contrast non-printing characters 5. Explain how each symbol is used and 6. Demonstrate how to accurately edit change to a document where proofreader's marks are found.

8.1.6.c - Abbreviations	1. List the types of abbreviations. 2. Identify abbreviations for days of the week, months of the year, locations, greetings and salutations. 3. Differentiate between acronyms and standard abbreviations. 4. Identify which words should and should not be abbreviated. 5. Discuss when abbreviations should and should not be used.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions • Puzzles • Labeling diagrams • Multiple choice questions • Oral quizzes • Peer review • Watch appropriate videos using a Guide-o-rama with questions • Practical tasks	
Extension Activity: • Create a list of popular abbreviations • Group Presentations • Projects	
Formative Assessment: • Practical Assessment (follow instructions to show knowledge/ability), add proofreader's marks to classmate's assignment, make alterations to a document based on displayed proofreader's marks. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot or Quizziz to create a quiz	
Resources: • Past City & Guilds Pitman Word Processing Paper ◦ (Essential) • Software - Microsoft Office Suite 2013 or higher ◦ Microsoft Word • Printed handouts (produced by the teacher) • Websites ◦ Free Typing Game.Net ▪ https://www.freetyinggame.net/	

○ Kathryn Parry - Baker Middle School Computer Classes ▪ http://parrydawg.weebly.com/computer-classes.html ○ Teach ICT ▪ https://www.teach-ict.com/ ○ GCF Learn Free. ▪ https://edu.gcfcglobal.org/en/subjects/basic-skills/ • Computer Studies Textbooks ○ Interact for Technology BK 1 – 3 ○ Discovery Computers by Shelly Cashman ○ A Guide to Microsoft Office 2003, 2010, 2013 ○ Introducing Word Processing by Camilla Bradley ○ Continuing Word Processing by Camilla Bradley ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ LiveWorksheet ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz ○ Educa-Play ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 8.1.7 - PARAGRAPH MANIPULATION	
Subtopic:	Students will:
8.1.7.a - Working with Paragraphs	1. Discuss why blocks of text may be moved. 2. Define terms (select, highlight, cut, copy, paste, undo, redo etc.). 3. Differentiate between undo and redo. 4. Differentiate between cut and copy. 5. State the functions of cut, copy and paste. 6. Demonstrate the use of cut, copy and paste text function, using the edit function from the shortcut menu, keyboard shortcuts and icons on the ribbon. 7. Apply knowledge learned using cut, copy, paste, undo and redo in exercises in Microsoft Word. 8. Identify shortcut keys associated with cut, copy, paste, undo, redo etc.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions	

- Puzzles
- Labeling diagrams
- Watch appropriate videos using a Guide-o-rama with questions
- Multiple choice questions
- Discussion on the advancement technology has made on paragraph manipulation
- Oral quizzes

Extension Activity: Group presentations; projects

- Create a table to compare the different ways the copy, cut and paste commands are accessed.

Formative Assessment: GUI icon test practical test (follow instructions to show formatting knowledge/ability)

- Cut, copy and paste pictures in a labeling/sequencing exercise.
- Cut, copy and paste words in a matching/labeling exercise.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Word Processing Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Word
- Printed handouts (produced by the teacher)
- Websites
 - Free Typing Game.Net
 - <https://www.freotypinggame.net/>
 - Kathryn Parry - Baker Middle School Computer Classes
 - <http://parrydawg.weebly.com/computer-classes.html>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - GCF Learn Free.
 - <https://edu.gcfglobal.org/en/subjects/basic-skills/>
- Computer Studies Textbooks
 - Interact for Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - Introducing Word Processing by Camilla Bradley
 - Continuing Word Processing by Camilla Bradley
 - The Adventures of A Computer Whiz (Levels I – IV)

○ We can use the Computer (Books A-D) ● <u>Online Learning Platforms</u> ○ LiveWorksheet ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz ○ Educa-Play ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC: 8.1.8 -BUSINESS LETTERS (PITMAN)	
Subtopic	Students will:
8.1.8.a - Business Letter	1. List the various types of business letters and memorandums. 2. Explain the purpose of each type of letter. 3. Compare/Contrast the different types of letters. 4. List the parts of a business letter in its correct order. 5. Differentiate between a block style business letter and modified business letter. 6. Define the term consistency and how it relates to dates within a business letter 7. Discuss Pitman rules for each part of a business letter
Suggested Activities: ● Answer unit questions (by chapter) ● Short answer questions ● Puzzles ● Labeling diagrams ● Multiple choice questions ● Oral quizzes ● Practical tasks ● Watch appropriate videos using a Guide-o-rama with questions	
Extension Activity: ● Role Play – act out scenarios where a business letter would be needed. ● Create table/chart showing differences between business letters and other types of letters. ● Create letterhead to accompany a business letter.	
Formative Assessment: ● Unscramble letter parts ● Label diagrams ● Practical test (follow instructions to show ability to create and format business letters)	

.Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Word Processing Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or Higher
 - Microsoft Word
- Printed handouts (produced by the teacher)
- Websites
 - Free Typing Game.Net
 - <https://www.freetypinggame.net/>
 - Kathryn Parry - Baker Middle School Computer Classes
 - <http://parrydawg.weebly.com/computer-classes.html>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - GCF Learn Free.
 - <https://edu.gcfglobal.org/en/subjects/basic-skills/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - Introducing Word Processing by Camilla Bradley
 - Continuing Word Processing by Camilla Bradley
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

GRADE 8 – TERM TWO

GENERAL OBJECTIVES:

Students are expected to:

1. Demonstrate a basic understanding of rows and columns using the Microsoft Word table feature.
2. Create and manipulate a table in Microsoft Word.
3. Use skills learned to create various publications. E.g., newsletter,
4. Demonstrate the basic use of short cut keys and their functions.

TOPIC 8.2.1 - TABLES USING MICROSOFT WORD

Subtopic:

8.2.1.a - Creating Tables

Students will:

1. Define what is a table.
2. Differentiate between simple and complex tables.
3. Insert rows and columns into a table:
 - a. Insert Table
 - b. Draw Table
4. Merge cells and Split cells.
5. Format tables with shading and borders.

Suggested Activities:

- Answer unit questions (by chapter)
- Short answer questions
- Puzzles
- Labeling diagrams
- Multiple choice questions
- Oral quizzes
- Watch appropriate videos using a Guide-o-rama with questions
- Practical tasks

Extension Activity: Group Presentations; Projects

- Create different types of tables (calendar, BINGO card, etc.).

Formative Assessment:

- Practical test (follow instructions to show ability to create and manipulate tables in MS Word)

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
- Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Word Processing Paper
 - (Essential)

- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Word
- Printed handouts (produced by the teacher)
 - Websites
 - Microsoft Word: Working with Tables
 - https://www.montclair.edu/media/montclairedu/oit/documentation/whatsnewinoffice20072003/Microsoft_Working_with_Tables.pdf
 - Free Typing Game.Net
 - <https://www.freetypinggame.net/>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - Kathryn Parry - Baker Middle School Computer Classes
 - <http://parrydawg.weebly.com/computer-classes.html>
 - GCF Learn Free.
 - <https://edu.gcfglobal.org/en/subjects/basic-skills/>
 - Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - Introducing Word Processing by Camilla Bradley
 - Continuing Word Processing by Camilla Bradley
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
 - Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

TOPIC 8.2.2 - NEWSLETTERS (WORD & PUBLISHER)

Subtopic:	Students will:
8.2.2.a - Creating Newsletters	1. Identify the purpose of creating newsletters. 2. Identify the parts of the newsletter. 3. Discuss the steps involved in creating a newsletter in MS Word and MS Publisher. 4. Construct a newsletter.
Subtopic:	Students will:
8.2.2 b - Formatting Newsletters	1. Inserting clipart and WordArt in newsletters. 2. Illustrate aligning text. 3. Insert borders and columns.

	4. Demonstrate how to insert textboxes, wrap text and drop caps.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions • Puzzles • Labeling diagrams • Multiple choice questions • Watch appropriate videos using a Guide-o-rama with questions • Oral quizzes • Practical tasks	
Extension Activity: Group presentations; projects • Interview classmate(s) for an article in the newsletter. • Create a one-month calendar highlighting holidays and events for the newsletter. • Activity inserting scanned graphics and copy-right free online graphics.	
Formative Assessment: • Practical/theory test • Students may work in groups to create a newsletter, each creating and editing their own portion. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot or Quizziz to create a quiz	
Resources: • Past City & Guilds Pitman Word Processing Paper ◦ (Essential) • Software - Microsoft Office Suite 2013 or higher ◦ Microsoft Word ◦ Microsoft Publisher • Printed handouts (produced by the teacher) • Websites ◦ Free Typing Game.Net ▪ https://www.freotypinggame.net/ ◦ Teach ICT ▪ https://www.teach-ict.com/ ◦ GCF Learn Free. ▪ https://edu.gcfglobal.org/en/subjects/basic-skills/ • Computer Studies Textbooks ◦ Interact with Information Technology BK 1 – 3 ◦ Discovery Computers by Shelly Cashman	

○ A Guide to Microsoft Office 2003, 2010, 2013 ○ Introducing Word Processing by Camilla Bradley ○ Continuing Word Processing by Camilla Bradley ○ The Adventures of A Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) • Online Learning Platforms ○ Liveworksheets ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz ○ Educaplay ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 8.2.3 - CREATING MICROSOFT PUBLICATIONS / DESKTOP PUBLISHER	
Subtopic:	Students will:
8.2.3.a - <i>Creating Publications:</i> Invitations/Cards Brochures Programs Certificates Business Cards Flyers	1. Define Desktop Publishing. 2. Identify types of Desktop Publishing along with web-based software. e.g., Picasso. 3. Describe the advantages of using MS Publisher. 4. Identify the features of MS Publisher. 5. Create and design publication: a. invitations, brochures and cards). 6. Select a design template. 7. Label the MS Publisher window.
Subtopic:	Students will:
8.2.3.b - <i>Formatting Publications</i>	1. Add and remove pages of a publication. 2. Change font types, sizes and colors. 3. Add clipart to publications. 4. Manipulate the arrangement of objects (text and clip arts).
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions • Puzzles • Labeling diagrams • Multiple choice questions • Watch appropriate videos using a Guide-o-rama with questions	

• Oral quizzes • Practical tasks
Extension Activity: • Create a given publication, using various formatting skills (text wrapping, drop caps, etc.).
Formative Assessment: • Practical test – follow instructions to format a template. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizziz to create a quiz
Resources: ○ Past City & Guilds Pitman Word Processing Paper ○ (Essential) ○ Software - Microsoft Office Suite 2013 or higher ○ Microsoft Word ○ Microsoft Publisher ○ Printed handouts (produced by the teacher) ○ Websites ▪ Kathryn Parry - Baker Middle School Computer Classes ▪ http://parrydawg.weebly.com/computer-classes.html ▪ Free Typing Game.Net ▪ https://www.freotypinggame.net/ ▪ Teach ICT ▪ https://www.teach-ict.com/ ▪ GCF Learn Free. ▪ https://edu.gcfglobal.org/en/subjects/basic-skills/ ○ Computer Studies Textbooks ▪ Interact with Information Technology BK 1 – 3 ▪ Discovery Computers by Shelly Cashman ▪ A Guide to Microsoft Office 2003, 2010, 2013 ▪ Introducing Word Processing by Camilla Bradley ▪ Continuing Word Processing by Camilla Bradley ▪ The Adventures of A Computer Whiz (Levels I – IV) ▪ We can use the Computer (Books A-D) • Online Learning Platforms ▪ Liveworksheets ▪ Teams ▪ Kahoot ▪ Quizizz ▪ Pro-prof quiz ▪ Educaplay ▪ Blooket ▪ Adobe Spark

▪ Canva ▪ Guide-o-rama ▪ Edmodo	
TOPIC 8.2.4 - SCRATCH CODING	
Subtopic:	Students will:
8.2.4.a - Creating a Scratch Project	1. Differentiate between the 10 coding blocks (motion, looks, sound, pen, data, events, control, sensing, operators, more blocks). 2. Demonstrate how to create a project using coding scripts, background and sprites. 3. Create a simple coding game using script commands. 4. Add sound effects to Scratch Project. Explore Scratch Website, Resources and Project Studio. 5. Enhance a variable program with conditions. 6. Explain how to use broadcast and say blocks. 7. Develop a complete scratch story. 8. Create examples of scratch variables. 9. Differentiate between variables and conditions. 10. Discuss how to enhance variables with conditions. 11. Discuss what is Boolean logic and how it is used in programming. 12. Utilize variables and conditions to create a game and implement scoring. 13. Write programs with And/Or conditions (randomness).
Suggested Activities: • Answer unit questions (by chapter) • Short Answer Questions: Variables and Conditions, What is Boolean logic? • Matching Diagrams: Labels and Conditions • Multiple choice: Using and/or, broadcast and say blocks • Computer vocabulary • Oral type quizzes • Website: https://moest.classflow.com/classflow/#!/login/teacher Labeling diagrams	
Extension Activity: • Debate on programming language.	
Formative Assessment: • Choose an appropriate final project and start the design process while utilizing all objective points.	
Summative Assessment: • Unit quiz • Short answer questions • Peer assessment	

- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz
 - Create a game with sound effects

Resources:

- Printed handouts (produced by the teacher)
- Websites
 - Scratch coding programming
 - <https://scratch.mit.edu/>
- Code
 - <https://code.org>
- Computer Studies Textbooks
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

GRADE 9 – TERM ONE

GENERAL OBJECTIVES:

1. The Workplace
 - a. Discuss computer training for the workplace.
 - b. Identify careers in the business field.
 - c. Create a resume.
2. Technology in the Workplace
 - a. Discuss what is cloud computing and mobile office.
 - b. Discuss computers in the business world.
 - c. Explain advantages and disadvantages of using a technology at the workplace.
3. Introduction to Excel
 - a. Explain is what Microsoft Excel and its purpose.
 - b. Opening and saving an Excel document.
 - c. Label Microsoft Excel window.
 - d. Identify templates associated with Excel.
4. Moving within Excel
 - a. Navigate within Excel.
 - b. Demonstrate how to insert and delete rows and columns.
5. Formatting Data and Numbers
 - a. Alignments
 - b. Establish how to format Data in Excel.
 - c. Demonstrate how to format Numbers in Excel.
 - d. Show how to SORT in ascending and descending order.
6. Mouse Pointers and Errors in Excel
 - a. Differentiate between Mouse Pointers found in Excel.
 - b. Differentiate between Errors found in Excel.
7. Formulas
 - a. Creating a basic formula without functions.
 - b. Using Functions in Formulas (SUM, AVERAGE, MIN and MAX).
8. Charts
 - a. Create bar, column and pie charts.

TOPIC 9.1.1 - THE WORKPLACE

Subtopic	Students will:
9.1.1.a - Careers and Training	1. Discuss why it is important to choose a career or have computer training, STEM (Science, Technology, Engineering and Mathematics) in 2020 and beyond. 2. Identify computer careers (programmers/App Developers, Web Developers, System Analyst, Mass Communications, Online Marketing, IT Project Manager and Online Trading).

	3. Differentiate between various certifications to obtain careers in the business field (networking and hardware certifications/A+ Certifications, Application Software Certifications/Mouse Certifications, Operating System Certifications, Programmer / Developer Certifications, Online Security, Computer Forensics, Internet Certifications, Database systems Certifications).
Subtopic	Students will:
9.1.1.b – Resume	1. Identify the various names for the word 'resume/curriculum vitae'. 2. Explain the purpose of a resume. 3. Discuss the parts included in a Resume and the layout of the resume. (Objective, Education, Work Experience, Volunteer Experience, Activities, Hobbies and References). 4. Create a Resume/create an employment-oriented profile – using online service websites such as LinkedIn.
Suggested Activities: Answer unit questions (by chapter) • Short answer questions: Computer certifications. • Puzzles: Careers/Computer Training. • Multiple Choice: Careers/Computer Certifications. • Role play: Computer careers. • Watch appropriate videos using a Guide-o-rama with questions. • Peer practical workshop: Create a resume then peer up and discuss/find/fix. • Platform: Create a LinkedIn profile. • Website: ○ Resume: https://www.teachingcove.com/writing/resume-writing/ ○ Careers: https://www.thebalancecareers.com/best-jobs-for-business-majors-2059628 https://thebestschools.org/careers/best-information-technology-jobs/ https://Linkedin.com	
Extension Activity: • Create a project booklet showing 2-6 different possible careers they are interested in. Give an overview of the career, what would be the training needed and salary. • Use LinkedIn/Path Align to explore the types of careers available and CVs that best match those positions.	
Formative Assessment: • Create a resume for a family member/or personal resume (interview family member to fill out information for resume using LinkedIn).	
Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ○ Example: Kahoot or Quizziz to create a quiz	

Resources:

- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Word
- Printed handouts (produced by the teacher)
 - Websites
 - How To Teach Resume Writing: 5 Tips
 - <https://www.teachingcove.com/writing/resume-writing/>
 - Best Jobs for Graduates With a Business Degree
 - <https://www.thebalancecareers.com/best-jobs-for-business-majors-2059628>
 - The Best IT Jobs
 - <https://thebestschools.org/careers/best-information-technology-jobs/>
 - LinkedIn
 - <https://Linkedin.com>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - GCF Learn.org
 - <https://edu.gcfglobal.org/en/subjects/work/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
 - Online Learning Platforms
 - Live worksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

TOPIC 9.1.2 - TECHNOLOGY IN THE BUSINESS WORLD

Subtopic	Students will:
9.1.2.a - The Modern Workplace	1. Determine what is Cloud Computing and/or mobile office? 2. Identify and describe mobile devices that are commonly used in the workplace (tables, electronic whiteboards, smart tv, Microsoft surface, communication apps). 3. Explain how these devices increase business efficacy.

	4. Discuss the negative effects of using technology in the workplace.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions: advantages and disadvantages of using technology in the workplace. • Multiple choice: differentiate between devices. • Computer vocabulary: cloud computing/mobile office. • Watch appropriate videos using a Guide-o-rama with questions. • Video: ◦ https://www.youtube.com/watch?v=z9bteu3vwiw • Website: ◦ https://www.klientsolutech.com/importance-of-computer-in-business/ ◦ https://smallbusiness.chron.com/uses-computers-business-56844.html ◦ https://bizfluent.com/about-7508300-impact-computers-business.html ◦ https://f450c.org/technology-in-the-workplace/	
Extension Activity: • Conduct an interview with a local business owner and ask him/her about the types of technology/devices they use for their business. • Ask what the advantages and disadvantages are for using these devices.	
Formative Assessment: • Explain what the modern workplace consists of in terms of devices, communication tools. Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot or Quizziz to create a quiz	
Resources: • Software - Microsoft Office Suite 2013 or higher ◦ Microsoft Word • Printed handouts (produced by the teacher) • Video: ◦ The Modern Workplace ▪ https://www.youtube.com/watch?v=Z9bTeU3Vwlw • Website: ◦ Importance of Computer in Business ▪ https://www.klientsolutech.com/importance-of-computer-in-business/	

- Uses for Computers in Business:
 - <https://smallbusiness.chron.com/uses-computers-business-56844.html>
- The Impact of Computers in Business:
 - <https://bizfluent.com/about-7508300-impact-computers-business.html>
- Top 8 Technological Indispensables of Modern Workspaces:
 - <https://f450c.org/technology-in-the-workplace/>
- Teach ICT
 - <https://www.teach-ict.com/>
- GCF Learn.org - Work
 - <https://edu.gcfglobal.org/en/subjects/work/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - The Adventures of a Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Live worksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

TOPIC 9.1.3 - INTRODUCTION TO MICROSOFT EXCEL

Subtopic	Students will:
9.1.3.a - What is Excel /Parts of an Excel Window	1. Explain the purpose of Microsoft Excel. 2. Identify the excel icon and 4 ways of opening Microsoft Excel. 3. Identify basic parts of the Excel Window (title bar, ribbon, file tab, formula bar, vertical and horizontal scroll bars and sheet tabs). 4. Differentiate between column and row, column heading and row heading and cell and active cell. 5. Identify a worksheet, select all and name box.
Subtopic	Students will:
9.1.3.b – Templates	1. Discuss what are templates and why are they used. 2. Locate how to find templates in Excel. 3. Differentiate between 4 templates used in Excel.

Suggested Activities:

- Answer unit questions (by chapter)
- Short answer questions: Compare and Contrast Word and Excel templates.
- Puzzles: Word search for different templates
- Labeling diagrams: Parts of Excel window
- Multiple choice/matching: Excel window and templates
- Computer vocabulary: Excel Window
- Oral Type Quizzes: Opening and saving in Excel
- Watch appropriate videos using a Guide-o-rama with questions
- Website templates: <https://edu.gcfglobal.org/en/excel2010/using-templates/1/>

Extension Activity:

- Group work- Create a chart or a Microsoft Word presentation and state fun facts about the template they are given.
- Research in your groups the templates given. Use your findings to present on, definition, what profession uses the template and its benefits.
- Design accordingly in Microsoft Word presentation and role play.

Formative Assessment:

- Label the parts of an excel window on Activboard and worksheet.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Spreadsheet Paper
 - (Essential)
 - Software - Microsoft Office Suite 2013 or higher
 - Microsoft Excel
- Printed handouts (produced by the teacher)
- Websites
 - Teach ICT
 - <https://www.teach-ict.com/>
- GCF Learn Free.
 - <https://edu.gcfglobal.org/en/excel2010/using-templates/1/>
- Kathryn Parry - Baker Middle School Computer Classes
 - <http://parrydawg.weebly.com/computer-classes.html>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of A Computer Whiz (Levels I – IV)

○ We can use the Computer (Books A-D) ● Online Learning Platforms ○ Live worksheets ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz ○ Educaplay ○ Blooket ○ Adobe Spark ○ Canva ○ Guide-o-rama	
TOPIC 9.1.4 - MOVING WITHIN MICROSOFT EXCEL	
Subtopic	Students will:
<i>9.1.4.a – Navigation</i>	1. Explain types of characters that can be entered into a cell. (labels, values and formulas). 2. Demonstrate different ways of navigating to cell address in Excel. 3. (tab, enter, shift+tab, shift+enter, arrow keys, ctrl+home, ctrl+end, alt+enter) 4. Practice navigating in Excel.
Subtopic	Students will:
<i>9.1.4.b - Inserting and Deleting Rows and Columns</i>	1. Demonstrate ways of: a. Inserting/Deleting rows & columns using ribbon b. Inserting/Deleting rows & columns using row and column headings c. Inserting/Deleting & columns right click 2. Create a basic worksheet. 3. Practice Printing a worksheet.
Suggested Activities: Answer unit questions (by chapter) ○ Short answer questions: Inserting and deleting rows and columns ○ Scavenger hunt: Navigation ○ Multiple choice: Inserting and deleting rows and columns ○ Oral assessment: Navigation keys ○ Computer vocabulary ○ Watch appropriate videos using a Guide-o-rama with questions ○ Video - Navigation: ○ https://www.youtube.com/watch?v=biRp0sLK9I4 ○ Website - Navigation: ○ https://www.pcworld.com/article/3211436/excel-spreadsheets-navigation-shortcut-keys-data-sort-and-filter-formulas-and-functions.html	
Extension Activity: ● Create a short video and send to Edmodo about navigating in Excel.	

Formative Assessment:

- Scavenger hunt: Given a worksheet, find and list the items using navigation keys.
- Pitman Paper 1

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - a. Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Spreadsheet Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Excel
- Printed handouts (produced by the teacher)
- Video: Navigation
 - Microsoft Excel 2019: How to Navigate in Excel
 - <https://www.youtube.com/watch?v=biRp0sLK9I4>
- Website: Navigation:
 - Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/computer-classes.html>
 - GCF Learn.org – Spreadsheet
 - <https://edu.gcfglobal.org/en/topics/excel/>
 - Excel spreadsheets: Navigation, shortcut keys, data sort and filter, formulas and functions
 - <https://www.pcworld.com/article/3211436/excel-spreadsheets-navigation-shortcut-keys-data-sort-and-filter-formulas-and-functions.html>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - GCF Learn Free.
 - <https://edu.gcfglobal.org/en/excel2010/using-templates/1/>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
 - The Adventures of a Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Live worksheets
 - Teams
 - Kahoot
 - Quizizz
 - Pro-prof quiz

○ Educaplay ○ Blooket ○ Adobe Spark ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 9.1.5 - FORMATTING LABELS AND VALUES	
Subtopic	Students will:
<i>9.1.5.a – Alignments</i>	1. Identify alignments box in Excel. 2. Demonstrate Text alignment based on 6 alignment icons in Excel. 3. Differentiate between merge and center and wrap text. 4. Illustrate angle text (horizontal and vertical text). 5. Practice using alignment box in an activity.
Subtopic	Students will:
<i>9.1.5.b - Formatting Data (labels)</i>	1. Justify reasons why we format. 2. Identify the format cells dialogue box and how to open using ruler, right click or short cut keys. 3. Recall the icons for Word Bold, Italic and Underline (BIU) on the ribbon and explain their function that can be found in Excel. Demonstrate using shortcut keys also. 4. Explain and demonstrate how to add borders and shading.
Subtopic	Students will:
<i>9.1.5.c - Formatting Numbers (values)</i>	1. Overview of the number group on the ribbon. 2. Differentiate between accounting and currency style 3. Summarize the number format styles used (comma, percent). 4. Execute when to increase and decrease decimal.
Subtopic	Students will:
<i>9.1.5.d – Sorting</i>	1. Identify sort data icons on the ribbon. 2. Differentiate between sort ascending and sort descending for labels and values. 3. Demonstrate the use of the sort data icons.
Suggested Activities: Answer unit questions (by chapter) • Short answer questions: How to add borders and shading. • Labeling diagrams: Number group, font group, alignment group on the ribbon and sorting. • Multiple choice • Computer vocabulary • Matching: Match the values to their number group style. Identify the sort ascending and descending icon. • Oral type quizzes: What is the difference between sort ascending and descending. What are the steps to sort?	

• Watch appropriate videos using a Guide-o-rama with questions • Website: ◦ Percent style video https://www.youtube.com/watch?v=h2tv2w44m24 • Alignments website: ◦ https://edu.gcfglobal.org/en/excelxp/text-and-cell-alignments/1/ • Video: ◦ How to Merge https://www.youtube.com/watch?v=I2Rd8z_VHpE
Extension Activity: • Find a newspaper clipping of a table. Paste on chart paper and label table for formatting data and label changes. • Create a picture using shading E.g. Christmas tree or a pumpkin.
Formative Assessment: • Complete a worksheet showing a table with formatted data and labels • Students can write which cells have borders, shading, currency style, percent style, comma style. • State what alignment are in certain cells based on where the labels and values are located, which sort order are data/values and explain how to BIU cells. • Pitman Paper 1 Task 1 Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz ◦ Example: Kahoot or Quizziz to create a quiz
Resources: • Past City & Guilds Pitman Spreadsheet Paper ◦ (Essential) • Software - Microsoft Office Suite 2013 or higher ◦ Microsoft Excel • Printed handouts (produced by the teacher) • Websites ◦ Teach ICT ▪ https://www.teach-ict.com/ ◦ Percent style video: ▪ https://www.youtube.com/watch?v=h2Tv2W44m24 ◦ Alignments website: ▪ https://edu.gcfglobal.org/en/excelxp/text-and-cell-alignments/1/ ◦ Video: ▪ How to Merge ▪ https://www.youtube.com/watch?v=I2Rd8z_VHpE • Computer Studies Textbooks ◦ Interact with Information Technology BK 1 – 3 ◦ Discovery Computers by Shelly Cashman ◦ A Guide to Microsoft Office 2003, 2007, 2010, 2013 ◦ The Adventures of a Computer Whiz (Levels I – IV)

○ We can use the Computer (Books A-D) ● Online Learning Platforms ○ Live worksheets ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz	
○ Educaplay ○ Blooket ○ Adobe Spark ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 9.1.6 MOUSE POINTERS AND ERRORS	
Subtopic	Students will:
9.1.6.a - Mouse Pointers	1. Define what are mouse pointers. 2. Identify 8 mouse pointers (left-right pointer, up-down pointer, right pointer, hollow plus, solid plus, 4 headed arrow pointer, column selector and row selector). 3. Explain the purpose of all 8 mouse pointers. 4. Practice using all mouse pointers. 5.
Subtopic	Students will:
9.1.6.b. - Errors in Excel	1. Justify why errors exist in Excel 2. Identify 5 common errors (#DIV/0, #####, #VALUE, #REF, #NUM) 3. Explain why these 5 errors exist and demonstrate how to correct the errors.
Suggested Activities: ● Answer unit questions (by chapter). ● Matching: Mouse pointers to their titles, errors to their explanations. ● Labeling Diagrams: Identify the errors and mouse pointers. ● Multiple Choice: Mouse pointers. ● Word search and crossword puzzle - Mouse Pointers / Errors in Excel. ● Computer vocabulary. ● Watch appropriate videos using a Guide-o-rama with questions. ● Oral Type Quizzes: State how to correct the error shown on the screen. ● Website: Errors in Excel https://www.youtube.com/watch?v=S3LphvqVrU ● Errors in Excel https://www.educba.com/errors-in-excel/ ● Mouse Pointers http://www.sussex.ac.uk/its/help/faq?faqid=1144	

Extension Activity:

6. Create a glossary with a minimum of 7 errors found in Excel and how to correct the errors.
7. Create a multiplication table using formulas and autofill.

Formative Assessment:

- Edit a worksheet, showing use of various mouse pointers and correcting errors.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Spreadsheet Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Excel
- Printed handouts (produced by the teacher)
- Websites
 - Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/computer-classes.html>
 - GCF Learn.org – Spreadsheet
 - <https://edu.gcfglobal.org/en/topics/excel/>
 - Teach ICT
 - <https://www.teach-ict.com/>
- Errors in Excel
 - <https://www.youtube.com/watch?v=S3LphvqVErU>
- Errors in Excel <https://www.educba.com/errors-in-excel/>
 - Mouse Pointers
 - <http://www.sussex.ac.uk/its/help/faq?faqid=1144>
- Computer Studies Textbooks
 - Interact for Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - The Adventures of a Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Live Worksheet
 - Teams
 - Kahoot
 - Quizizz

○ Pro-prof quiz ○ Educa-Play ○ Blooket ○ Adobe Sparks ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 9.1.7 FORMULAS	
Subtopic 7a	Students will:
9.1.7.a Formulas Without Functions	1. Define what is a formula. 2. Label the parts of a formula. 3. Discuss words to prompt you to add, subtract, multiply and divide. 4. Identify all Math operator keys on the keyboard. 5. Differentiate between relative and absolute cell reference. 6. Compare and contrast relative and absolute references. 7. Create equations in Excel using operators. 8. Calculate VAT and percentages/discounts.
Subtopic	Students will:
9.1.7.b - Formulas with Functions	1. Define what are functions. 2. Examine how to set up formulas with functions. 3. Differentiate between SUM and AVERAGE function. 4. Differentiate between MIN and MAX function. 5. Explain how to use the AutoSum icon on the Ribbon.
Suggested Activities: • Answer unit questions (by chapter) • Short answer questions: formulas with and without functions • Labeling diagrams: Parts of a formula • Multiple choice: What is the correct answer if entering the sum, min, max and average function • Computer vocabulary • Role play: Calculating VAT and percentages • Watch appropriate videos using a Guide-o-rama with questions • Oral type quizzes: How to start and end a formula • Website - Cell References: https://www.youtube.com/watch?v=iDg9s7BJ2m4 • Functions in Excel https://support.office.com/en-us/article/overview-of-formulas-in-excel-ecfdc708-9162-49e8-b993-c311f47ca173 • Auto Sum Video https://www.youtube.com/watch?v=AdU5qlwev5Y	
Extension Activity: • Calculate income statements, balance sheets, VAT and discounts from actual retail stores locally. • Create a multiplication table using absolute reference.	

Formative Assessment:

- Create a spreadsheet finding totals, average, minimum and maximum calculations.
- Pitman Paper 1 Task 1-4

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Past City & Guilds Pitman Spreadsheet Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Excel
- Printed handouts (produced by the teacher)
- Websites
 - Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/computer-classes.html>
 - GCF Learn.org – Spreadsheet
 - <https://edu.gcfglobal.org/en/topics/excel/>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - Cell References
 - <https://www.youtube.com/watch?v=iDg9s7BJ2m4>
 - Functions in Excel
 - <https://support.office.com/en-us/article/overview-of-formulas-in-excel-ecfdc708-9162-49e8-b993-c311f47ca173>
 - Auto Sum Video
 - <https://www.youtube.com/watch?v=AdU5qlwev5Y>
- Computer Studies Textbooks
 - Interact for Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2010, 2013
 - The Adventures of a Computer Whiz (Levels I – IV)
 - We can use the Computer (Books A-D)
- Online Learning Platforms
 - Live Worksheet
 - Teams
 - Kahoot
 - Quizizz

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- Educa-Play
- Blooket
- Adobe Sparks
- Canva
- Guide-o-rama
- Edmodo

TOPIC 9.1.8 CHARTS

Subtopic	Students will:
9.1.8.a. - <i>Creating Charts</i>	1. State why charts are used. 2. Identify the types of charts found in Excel (pie, column, line and bar). 3. Distinguish between the different parts of a chart. 4. Express when to use a pie VS a column/bar chart. 5. Illustrate how to add the 4 types of charts in Excel. 6. Maneuver a chart in excel (as object in or on its own sheet). 7. Create 4 chart types (pie, column, bar and line) based on data and answer question from findings.
Suggested Activities: Answer unit questions (by chapter) • Short answer questions: Types of charts • Puzzles: Crossword discover chart parts • Labeling diagrams: Parts of a chart • Multiple choice • Computer vocabulary • Watch appropriate videos using a Guide-o-rama with questions • Oral type quizzes: Steps to placing a chart as object in or on its own sheet • Website: Chart elements https://www.youtube.com/watch?v=9YHCyb9p10g • Video: Charting Video Guided Steps to adding a chart. https://www.youtube.com/watch?v=FilyGJwiwHU	
Extension Activity: • Project: Discuss the topic Hurricanes. Using Excel to enhance your project, use tables with formulas and charts to support your piece on hurricanes.	
Formative Assessment: • Create charts based on past worksheets completed – Balance sheets, income statement and past Pitman papers.	
Summative Assessment: • Unit quiz • Short answer questions • Peer assessment • Use a variety of educational platforms to create a quiz • Example: Kahoot or Quizziz to create a quiz	

Resources:

- Past City & Guilds Pitman Spreadsheet Paper
 - (Essential)
- Software - Microsoft Office Suite 2013 or higher
 - Microsoft Excel
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 - Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/computer-classes.html>
 - GCF Learn.org – Spreadsheet
 - <https://edu.gcfglobal.org/en/topics/excel>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - Chart elements
 - <https://www.youtube.com/watch?v=9YHCyb9p10g>
- Video:
 - Charting Video Guided Steps to adding a chart.
 - <https://www.youtube.com/watch?v=FilyGJwiwHU>
- Computer Studies Textbooks
 - Interact with Information Technology BK 1 – 3
 - Discovery Computers by Shelly Cashman
 - A Guide to Microsoft Office 2003, 2007, 2010, 2013
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 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama
 - Edmodo

GRADE 9 – TERM TWO

GENERAL OBJECTIVES:

1. Microsoft PowerPoint:
 - a. Explain what is Microsoft PowerPoint.
 - b. Identify the features of the PowerPoint window.
 - c. Discuss the advantages and disadvantages of using PowerPoint to create presentations.
 - d. Create exciting PowerPoint presentations using various PowerPoint tools.
2. Web Page Design
 - a. Create a simple webpage.

TOPIC 9.2.1 - MICROSOFT POWERPOINT

Subtopic:	Students will:
9.2.1.a - Introduction to PowerPoint	1. Define the term presentation. 2. State what is Microsoft PowerPoint. 3. Demonstrate steps used to start up, save, view and share PowerPoint presentations. 4. Identify the PowerPoint window features. 5. Discuss advantages and disadvantages of using PowerPoint to create presentations.
Subtopic:	Students will:
9.2.1.b - PowerPoint Slide Basics	1. Distinguish between different slide layouts 2. Create a presentation 3. Demonstrate how to: a. add text to slides. b. change font style, font size and font color. c. add, delete and arrange slides. d. format slide background. e. add a theme to a presentation.
Subtopic:	Students will:
9.2.1.c - Planning and presenting the slideshow	1. Explain the importance of planning a presentation. 2. State the steps used when planning presentations. 3. Create a PowerPoint presentation. 4. Present a PowerPoint presentation using slideshow view.
Subtopic:	Students will:
9.2.1.d - Bullets and Numbering	1. Explain the purpose of bullets and numbering in PowerPoint. 2. Demonstrate how to insert bullets and numbering. 3. Describe steps used to customize bullets.
Subtopic	Students will:
9.2.1e - Slide media	1. Define slide media. 2. Discuss the advantages of using audio and video in PowerPoint.

	3. Describe slide timing. 4. Explain how movie mode works. 5. Demonstrate how to: a. insert audio files stored on the computer or record audio. b. insert video files in PowerPoint from the computer or online. c. customize videos. d. use the loop tool and trim video tool. e. record the screen.
Subtopic	Students will:
<i>9.2.1.f - Animations and Transitions</i>	1. Define the terms animation and transition. 2. Identify different types of animations and transitions. 3. Demonstrate how to: a. add animations to slides. b. add motion paths to the animations. c. add transitions to slides.
Subtopic:	Students will:
<i>9.2.1.g - Formatting images</i>	1. Identify types of image file extensions that can be used in PowerPoint (JPEG, PNG, GIF). 2. Discuss the advantages and disadvantages of using image files. 3. Demonstrate how to: a. insert online images as well as images stored on the PC (personal computer) into a PowerPoint presentation. b. insert screenshots. c. align, order, group and rotate images on a slide.
Subtopic:	Students will:
<i>9.2.1.h - Hyperlinks and Action Buttons</i>	1. State what are hyperlinks and action buttons. 2. Discuss the purpose of using hyperlinks and action buttons within a PowerPoint presentation. 3. Demonstrate how to: a. hyperlink slides within PowerPoint. b. hyperlink to other documents or websites. c. insert action buttons and link them to slides.
Subtopic:	Students will:
<i>9.2.1.i - SmartArt Graphics</i>	1. Explain what are SmartArt graphics. 2. Examine the types of SmartArt graphics used in PowerPoint. 3. Demonstrate how to insert SmartArt graphics. 4. Create an organizational chart.
Subtopic:	Students will:
<i>9.2.1.j - Inserting Callouts</i>	1. Define the term callout. 2. Identify types of callouts. 3. Demonstrate how to insert callouts on slides 4. .

Suggested Activities:

- Answer unit questions
- Short answer questions
- Drill and practice
- Puzzles
- Labeling diagrams
- Multiple choice
- True/False questions
- Fill in the blanks
- Watch appropriate videos using a Guide-o-rama with questions
- PowerPoint vocabulary
- Role play
- Oral type quizzes/reports

Extension Activity:

- Assign students a research project on a topic chosen by the students and approved by the teacher. Allow the student to choose the best way to present his/her topic using the PowerPoint tools learned in this unit.

Formative Assessment:

- Label the PowerPoint window.
- Discuss the advantages and disadvantages of using PowerPoint.
- Explain steps used to startup, view and save PowerPoint presentations.
- Create presentations in PowerPoint that include customized bullets, images, audio, video, animations and transitions, SmartArt graphics and callouts.

Summative Assessment:

- Unit quiz
- Short answer questions
- Peer assessment
- Use a variety of educational platforms to create a quiz.
 - Example: Kahoot or Quizziz to create a quiz

Resources:

- Software - Microsoft Office Suite 2013 or higher
 - Microsoft PowerPoint
- Printed handouts (produced by the teacher)
- Websites
 - Kathryn Parry - Baker Middle School
 - <http://parrydawg.weebly.com/computer-classes.html>
 - Teach ICT
 - <https://www.teach-ict.com/>
 - GCF Learn Free.org - PowerPoint
 - <https://edu.gcfglobal.org/en/powerpoint/>
- Computer Studies Textbooks

○ Interact with Information Technology BK 1 – 3 ○ Discovery Computers by Shelly, Cashman ○ A Guide to Microsoft Office 2003, 2007, 2010, 2013 ○ The Adventures of a Computer Whiz (Levels I – IV) ○ We can use the Computer (Books A-D) ● Online Learning Platforms ○ Liveworksheets ○ Teams ○ Kahoot ○ Quizizz ○ Pro-prof quiz ○ Educaplay ○ Blooket ○ Adobe Spark ○ Canva ○ Guide-o-rama ○ Edmodo	
TOPIC 9.2.2 – WEB PAGE DESIGN	
Subtopic	Students will:
9.2.2.a – Web page design	1. Explain the terms website and web hosting. 2. Describe the steps in designing a website. 3. List the components of a website. 4. Create a simple Web page using HTML Code and Notepad. 5. Create a simple Web page using a website builder. 6. List steps for maintaining a website.
Suggested Activities: ● Answer unit questions ● Short answer questions ● Multiple choice ● Website vocabulary ● Oral type quizzes	
Extension Activity: ● Individual or group project	
Formative Assessment: ● Design a simple website using HTML Code, Notepad or Website builder. ● Create a website with multiple pages and effective links.	
Summative Assessment: ● Unit Quiz ● Peer assessment ● Presentation of webpage	

- Use a variety of educational platforms to create a quiz
Example: Kahoot or Quizziz to create a quiz

Resources:

- Website builders
 - Wix: <https://www.wix.com/>
 - DoodleKit: <https://www.doodlekit.com/>
 - Weebly: <https://www.weebly.com/?lang=en>
 - SimpleSite: <https://www.simplesite.com/>
 - Site123: <https://www.site123.com/>
- Websites color generator <https://coolors.co/>
- Printed handouts (produced by the teacher)
- Online Learning Platforms
 - Liveworksheets
 - Teams
 - Kahoot
 - Quizizz
 - Educaplay
 - Blooket
 - Adobe Spark
 - Canva
 - Guide-o-rama

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- Digital Readiness – K-8 Computer Science Standards, Tennessee Department of Education, March 2018, [K-8 Computer Science Standards \(tn.gov\)](#)
- Minnesota K-12 Integrated Computer Science Benchmarks, <https://education.mn.gov/MDE/dse/stds/ComputerScience/>