REPUBLIC OF CAMEROON
Peace – Work – Fatherland

MINISTRY OF SECONDARY EDUCATION

INSPECTORATE GENERAL OF EDUCATION

Inspectorate of Pedagogy in charge of the Teaching of Computer Science

REPUBLIQUE DU CAMEROUN
Paix – Travail – Patrie

MINISTERE DES ENSEIGNEMENTS SECONDAIRES

INSPECTION GENERALE DES ENSEIGNEMENTS

Inspection de Pédagogie chargée de l'enseignement de l'informatique

ANNUAL HARMONISED PROGRESSION SHEET FOR COMPUTER SCIENCE FORM 2

SCHOOL YEAR……. **SCHOOL**…….. **WEEKLY WORKLOAD: 2 periods** **COEFFICIENT: 2**

TEACHER…….. **GRADE**……. **TEL**…….

Term	Week	Module	Category of action	Competency statement	Lesson title	Objectives	Nature of lesson			Observation
							Th	Prac	Dig	
FIRST TERM		Computing environment 2			Diagnostic evaluation					
	1		Classifying hardware components	Given a set of hardware, learners classify devices into appropriate categories	Lesson 1: Categories of computer hardware	State the main role of input, output, storage, and processing devices				
					Lesson 2: Types of Input and output devices	Identify input, output, storage and processing devices				
	2				Lesson 3: Types of processing devices and storage devices	State the function of a given input device				
					Lesson 4: Integration activities	State the function of a given output device				
	3		Applying basic preventive and corrective maintenance	Given a situation presenting computer faults, learners propose basic corrective and preventive maintenance actions to solve or stop such issues. The action proposed should be logical and pertinent.	Lesson 5: introduction to computer maintenance	Outline differences between impact and non-impact printers				
					Lesson 6: Common hardware problems	State the main components of the CPU (mention GPU)				
	4				Lesson 7: Common software problems	Outline examples of primary and secondary storage				
					Lesson 8: Integration activities					
	5				**Evaluation**					

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					Lesson 9: Initiation to cloud computing	Define cloud computing Outline the 3 main types of cloud computing services Outline examples of cloud services				
	6		Understanding embedded systems, IoT and cloud computing	Given a situation with factors related to IoT and embedded systems, learners identify the correct type of sensors used in the situation and their role.	**Remediation**					
					Lesson 10: Types of sensors	State common types of sensors State the function of a given type of sensor Differentiate between a sensor and an actuator				
	7				Lesson 11: Notions on embeded systems and IOT	Differentiate between embedded systems and IoT Describe situations where IoT and embedded systems are used Explain how IoT, embedded systems and cloud computing work together				
					Lesson 12: Integration activities					
	8		Examining technologies for the disabled	Provided with a situation with factors related to users with disabilities, learners identify appropriate technologies for a given disability within a context	Lesson 13: Assistive technologies	Explain the concepts of disability, and assistive technology Outline examples of assistive technologies State the role of a given assistive technology				
					Lesson 14: Assistive technologies for disabilities	Match a given assistive technology for an appropriate disability State common assistive technologies integrated in an operating system				
	9				Lesson 15: Integration activities					
			Choosing appropriate system software	Given a situation, learners select system software that are inline with the situation.	Lesson 16: Notions on operating systems	Explain the concept of operating systems State common types of operating systems and give examples of each Outline the functions of an operating system				

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	10				Lesson 17: Notions on utility software and device drivers	Differentiate between utility software and device drivers State the function of a given type of utility software with examples State the purpose of device drivers				
					Lesson 18: Integration activities					
	11				**Evaluation**					
			Using presentation, desktop publishing and spreadsheet software	Given a task that requires a desktop publishing, spreadsheet software or presentation software, learners choose adapted software and produce an output that corresponds to the task given.	Lesson 19: Notions on Spreadsheet software	State common examples of spreadsheet software Outline core features of a spreadsheet software Identify when to use an electronic spreadsheet				
	12				**Remediation**					
					Lesson 20: Using a spreadsheet to solve problems	Carry out simple formatting using a spreadsheet Perform simple calculations using a spreadsheet				
SECOND TERM	13				Lesson 21: Notions on presentation software	State common examples of presentation software Outline core features of a presentation software Identify when to use a presentation software				
					Lesson 22: Using a presentation software to solve problems	Carry out simple formatting using a presentation software Produce slides with different layouts				
	14				Lesson 23: Notions on desktop publishing software	State common examples of desktop publishing software Outline core features of a desktop publishing software Identify when to use a desktop publishing software				
					Lesson 24: Using a desktop publishing software to solve problems	Carry out simple formatting using a desktop publishing software Produce simple publications using a desktop publishing software				

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					Lesson 25: Integration activities					
	15		Exploring the internet and browsers	Provided with a situation related to the access and use of the internet, learners assemble the necessary and adapted tools needed to access the internet, and use basic features of a browser correctly.	Lesson 26: History of the internet	Outline major landmarks in the history of the internet Outline elements influencing the growth of the internet				
	16				Lesson 27: Accessing the internet	State the components needed to access the internet Choose appropriate ISP in a given context				
					Lesson 28: Using a browser	Explain the concepts of tabs, browsing history, and bookmark. Identify common features on the interface of a browser Perform basic operations that can be done with a browser				
	17				Lesson 29: Integration activities					
					Evaluation					
	18				**Remediation**					
			Using communication and collaboration tools	Given a situation that requires the use of a software to perform a task, learners create expected content using appropriate software.	Lesson 30: Communication and collaboration tools	Differentiate between communication and collaboration Give examples of communication tools and collaboration tools				
	19				Lesson 31: Email tool	Create an email account in a given email service Make use of an email service to send mails, read mails, and attach files.				
					Lesson 32: Chat tool	Make use of a chat tool to send and receive text messages Make use of a chat tool to send non-text messages Make use of a chat tool to respond to a specific message in a conversation				
	20				Lesson 33: Videoconference tool	Create a videoconference or meeting using an appropriate tool Make appropriate use of basic features in a videoconference tool				

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					Lesson 34: Word processors in the cloud	Outline examples of word processors in the cloud Make use of a word processor in the cloud to collaborate				
	21				Lesson 35: Integration activities					
			Representing numbers and characters	Given a situation in relation to encoding data, learners apply the right encoding technique to represent numbers and characters correctly.	Lesson 36: Introduction to number systems	Explain the concept of number systems State the number system used in computing Explain how to count in base 2, 8, and 16 Convert from base 2 to base 10				
	22				Lesson 37: Notions on encoding numbers	Explain the concept of encoding, and number encoding Explain the technique used to encode positive integers Convert from base 10 to base 2				
					Lesson 38: Notions on encoding characters	Explain the concept of character encoding State character encoding schemes Make use of the ASCII character encoding scheme.				
	23				Lesson 39: Integration activities					
					Evaluation					
	24				**Remediation**					
			Converting between units of time and storage	Given time units or storage units, learners compare and convert from one unit to another.	Lesson 40: Conversion between units of time	Identify units of time Arrange units of time in a particular order Convert between units of time				
THIRD TERM	25				Lesson 41: Conversion between units of storage	Identify units of storage Arrange units of storage in a particular order Convert from one unit of storage to another				
					Lesson 42: Integration activities					
	26		Protecting against data loss and unauthorised access	Presented with a situation with factors related to protecting data, learners propose appropriate protection mechanisms to fight	Lesson 43: Notions on authentication	Explain the concept of unauthorised access, and authentication Outline authentication techniques used to protect data from unauthorised access				
					Lesson 44: Notions on backup	Explain the concepts of data loss, backup, and recovery Explain how backup prevents data loss Outline different backup media				

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	27			against loss and unauthorised access.	Lesson 45: Local backup vs cloud backup	Describe local backup, and cloud backup Compare and Contrast cloud backup with local backup State pros and cons of local backup and cloud backup				
					Lesson 46: Integration activity					
	28	**Digital citizenship 2**	Managing digital identities	Provided with a situation with issues related to digital identities, digital footprints, and reputation, learners recommend best practices to deal with or prevent such a situation. The practices should be pertinent and coherent to the situation.	Lesson 47: Notions on digital identify	Explain the concepts of digital identify, and identity theft Outline common components of a digital identity (username and password) Outline best practices to manage multiple digital identities				
					Lesson 48: Types of digital footprint	Explain the concept of digital footprints State ways users create digital footprints Differentiate between passive and active digital footprints				
	29				Lesson 49: Managing digital footprints	State positive and negative effects of digital footprints Outline ways of minimising digital footprints Discuss ways of protecting online reputation				
					Lesson 50: Integration activities					
	30				**Evaluation**					
					Remediation					
	31		Evaluating the credibility and reliability of sources of information	Given a problem with factors related to the credibility of information, learners detect the credibility and reliability of common sources of information and digital content and recommend trustworthy sources to access information and digital content	Lesson 51: Sources of information	Differentiate between primary and secondary sources of information Identify the source of a given information Identify sponsored content on the internet				
					Lesson 52: Verifying the credibility of information	Explain ways of verifying the credibility of information State trustworthy sources of information and digital content Explain why secured websites and digital distribution services can be reliable sources of information				
	32				Lesson 53: Integration activities					

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		Computational thinking and coding 2			Lesson 54: Notions on Problem solving	Outline the steps of problem solving Explain the concepts of computational thinking Differentiate 2D representations from 3D			
	33		Problem solving strategies	Learners develop strategies to solve problems in a logical manner	Lesson 55: Solving problems 1	Apply the steps of problem solving to a problem Apply decomposition and pattern recognition to a problem			
					Lesson 56: Solving problems 2	Apply abstraction to a problem Write the solution to a problem as a sequence of steps such that key characteristics of abstraction are seen in the solution			
	34				Lesson 57: Integration activities				
			Notions of programming	Given a project or problem related to coding, learners with the guidance of the teachers use features of a block programming tool to produce code that responds to the project or situation.	Lesson 58: Writing programs in a block programming environment 1	Work in block programming environments Write programs using a block programming environment			
	35				Lesson 59: Writing programs in a block programming environment 2	Write programs using a block programming environment			
					Lesson 60: Integration activities				
	36				**Evaluation**				
					Remediation				
		END OF PROGRAM							

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