

REPUBLIC OF KENYA
MINISTRY OF EDUCATION

COMPETENCY-BASED CURRICULUM (CBC)

GRADE 10 COMPUTER SCIENCE
TERM 2 LESSON PLANS

2026 (Rationalised CBC)

— PREVIEW —

This is a 2-lesson preview. The full pack contains 36 lesson plans.

Buy the full pack at cbcedukenya.com — KES 300

TEACHER'S NAME	_____
SCHOOL	_____
GRADE	10
TERM	Term 2
YEAR	2026

REFERENCE MATERIALS

1. Computer Science Grade 10 Curriculum Design (KICD)
2. Approved Computer Science Grade 10 Learner's Book
3. Approved Teacher's Guide
4. MTP Computer Science Grade 10

CBC Edu Kenya · cbcedukenya.com

Aligned with KICD Curriculum Designs · Editable Word Document

Not an official MoE/KICD publication

CBC Edu Kenya · cbcedukenya.com · Aligned with KICD Curriculum Designs

SECTION A: DETAILED LESSON PLANS

The following lesson plans provide a detailed guide for selected lessons across Term 2. All plans follow the rationalised CBC format aligned with the KICD curriculum design for GRADE 10 COMPUTER SCIENCE.

LESSON PLAN — WEEK 1, LESSON 1

Strand: **FOUNDATIONS** | Sub-Strand: **Computer Systems**

SCHOOL	_____
LEARNING AREA	Computer Science
GRADE	10
TERM	2
WEEK / LESSON	Week 1 Lesson 1
STRAND	FOUNDATIONS
SUB-STRAND	Computer Systems
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Identify components b) Function c) Apply
KEY INQUIRY QUESTION(S)	What is computer?
CORE COMPETENCY	Communication; Critical Thinking; Self-Efficacy
VALUES	Respect, Responsibility, Patience
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Values Education
LEARNING RESOURCES	Computer

ORGANISATION OF LEARNING

INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Computer Systems by writing the key inquiry question on the board: "What is computer?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to identify components. Display the resources for the lesson (Computer) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Demonstrate. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Identify components". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. explain the key idea of Computer Systems with one clear example. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry question "What is computer?" and answer it now

	using the example you just completed. Connect explicitly to the SLO: "Function". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.
STEP 3	(8 min) Guided practice in pairs or small groups. practise Computer Systems together in pairs. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Computer Systems independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Apply".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Computer Systems? (2) How would you answer "What is computer?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Computer Systems in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

LESSON PLAN — WEEK 1, LESSON 2

Strand: **FOUNDATIONS** | Sub-Strand: **Hardware**

SCHOOL	_____
LEARNING AREA	Computer Science
GRADE	10
TERM	2
WEEK / LESSON	Week 1 Lesson 2
STRAND	FOUNDATIONS
SUB-STRAND	Hardware
SPECIFIC LEARNING OUTCOMES	By the end of the lesson, the learner should be able to: a) Identify b) Function c) Apply
KEY INQUIRY QUESTION(S)	What hardware?
CORE COMPETENCY	Communication; Critical Thinking; Self-Efficacy
VALUES	Respect, Responsibility, Patience
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Values Education
LEARNING RESOURCES	Components

ORGANISATION OF LEARNING

INTRODUCTION	(5 min) Greet the learners warmly and settle them. Briefly recap the previous lesson by asking one or two learners to share something they remember. Introduce today's focus on Hardware by writing the key inquiry question on the board: "What hardware?". Allow two to three learners to give quick answers — accept all responses without correcting yet. Tell learners that by the end of the lesson they will be able to identify. Display the resources for the lesson (Components) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Demonstrate. Hold up the relevant resource or write the key term on the board. Ask learners what they already know about it. Note 3-4 learner ideas on the board — these become anchors for the lesson. Link learners' ideas to the SLO: "Identify". Manage the class actively — walk to the back of the room, call on learners by name, and keep the pace brisk so no one drifts.
STEP 2	(8 min) Direct teach with a worked example. Pair classify. Demonstrate one full example on the board, thinking aloud as you go: name the step, do the step, check the step. Pause halfway and ask the class to predict the next step before you reveal it — this is your formative check. Re-state the inquiry question "What hardware?" and answer it now using the example you just completed. Connect explicitly to the SLO: "Function". Invite one or two volunteers to come up and try the next example with you guiding — give immediate corrective feedback.
STEP 3	(8 min) Guided practice in pairs or small groups. practise Hardware together in pairs. Distribute the practice task and put learners in pairs of mixed ability. Set a clear time limit (5 minutes for the task, 2 minutes for sharing). Walk around the room and listen in — pick up two pairs whose work is going

	well and one pair that is stuck. Differentiate as you go: for fast finishers, add a stretch question (e.g. "now try a harder example"); for learners who are stuck, scaffold by working through the first step together. Keep a low murmur in the room — silence usually means confusion, loud chatter usually means off-task.
STEP 4	(7 min) Independent application and formative assessment. apply Hardware independently in a short task. Set a short individual task that mirrors the worked example but with different numbers, names, or context. While learners work, circulate and tick exercise books for two things only: did the learner attempt the task, and did they get the core idea right. This gives you a quick read on the class. After 5 minutes, call time and ask three learners to share their answers — choose one strong, one developing, and one who needs support. Affirm progress on the SLO: "Apply".
CONCLUSION	(5 min) Recap and exit ticket. Ask the whole class three quick questions to verify learning: (1) What is one new word or idea you learned today about Hardware? (2) How would you answer "What hardware?" in one sentence? (3) Where could you use this learning outside the classroom? Take answers from different learners — including the quieter ones. Close by reminding learners of the values for the lesson and previewing the next lesson briefly. Affirm specific learners by name for effort, accuracy, or helpfulness during the lesson.
EXTENDED ACTIVITIES	Set a short, concrete task for home: ask learners to find one example of Hardware in their environment (in the home, market, neighbourhood, or community) and bring evidence to the next lesson — a sketch, a written description, or a photograph if available. Fast finishers in class can begin this task immediately as enrichment. Encourage learners to discuss the lesson with a parent, sibling, or guardian — this strengthens learning at home and invites family involvement, which is a core CBC principle.
REFLECTION ON THE LESSON	_____

— END OF PREVIEW —

You have viewed 2 of 36 fully-detailed lesson plans. The complete pack covers every week of Term 2 (36 lessons) plus the full Scheme of Work.

Buy the full pack — only KES 300

cbcedukenya.com · M-Pesa accepted · Instant download

SECTION B: SCHEME OF WORK — GRADE 10 COMPUTER SCIENCE TERM 2

School: _____ Teacher: _____ Year: 2026

WK	LSN	STRAND	SUB-STRAND	SPECIFIC LEARNING OUTCOMES	KEY INQUIRY QUESTION(S)	LEARNING EXPERIENCES	LEARNING RESOURCES	ASSESSMENT METHODS
1	1	Foundations	Computer Systems	a) Identify components b) Function c) Apply	What is computer?	Demonstrate	Computer	Practical, oral
1	2	Foundations	Hardware	a) Identify b) Function c) Apply	What hardware?	Demonstrate; pair classify	Components	Practical, peer
1	3	Foundations	Software	a) Identify b) Categories c) Apply	What software?	Demonstrate	Computer	Practical, peer
2	1	Operating Systems	Functions	a) State b) Apply c) Apply	What does OS do?	Discuss; demonstrate	Computer	Oral, written
2	2	Operating Systems	File Management	a) Organise b) Backup c) Apply	How manage files?	Demonstrate	Computer	Practical, peer
2	3	Operating Systems	User Interface	a) GUI b) CLI c) Apply	How interfaces differ?	Demonstrate	Computer	Practical, peer
3	1	Programming	Algorithm Design	a) Define b) Steps c) Apply	How design?	Worked examples	Notebooks	Written, peer
3	2	Programming	Flowcharts	a) Symbols b) Draw c) Apply	How represent?	Demonstrate; pair draw	Templates	Practical, peer
3	3	Programming	Pseudocode	a) Write b) Apply c) Build technique	How write?	Templates	Templates	Written, peer
4	1	Python Programming	Variables	a) Declare b) Use c) Apply	What is variable?	Demonstrate; pair code	Computer	Practical, peer
4	2	Python Programming	Data Types	a) Identify b) Use c) Apply	What types?	Demonstrate; pair code	Computer	Practical, peer
4	3	Python Programming	Operators	a) Identify b) Use c) Apply	How operate?	Demonstrate; pair code	Computer	Practical, peer
5	1	Python Programming	Conditionals	a) If/elif/else b) Apply c) Build technique	How decide?	Demonstrate; pair code	Computer	Practical, peer
5	2	Python Programming	Loops	a) For b) While c) Apply	How repeat?	Demonstrate; pair code	Computer	Practical, peer
5	3	Python Programming	Functions	a) Define b) Call c) Apply	How reuse code?	Demonstrate; pair code	Computer	Practical, peer
6	1	Python Programming	Lists	a) Create b) Operate c) Apply	How store many?	Demonstrate; pair code	Computer	Practical, peer

		ng						
6	2	Python Programming	Dictionaries	a) Create b) Operate c) Apply	How key-value?	Demonstrate; pair code	Computer	Practical, peer
6	3	Python Programming	File I/O	a) Read b) Write c) Apply	How handle files?	Demonstrate; pair code	Computer	Practical, peer
7	1	Data	Databases	a) Define b) Examples c) Apply	What is database?	Demonstrate	Computer	Practical, peer
7	2	Data	SQL Basics	a) Select b) Insert c) Apply	How query?	Demonstrate; pair code	Computer	Practical, peer
7	3	Data	Data Visualisation	a) Charts b) Tools c) Apply	How visualise?	Demonstrate	Computer	Practical, peer
8	1	Networking	Networks	a) Define b) Types c) Apply	What is network?	Discuss; demonstrate	Diagrams	Oral, written
8	2	Networking	Internet	a) Define b) How works c) Apply	How internet works?	Discuss; demonstrate	Diagrams	Oral, written
8	3	Networking	Web Basics	a) HTML b) CSS c) Apply	How web pages?	Demonstrate; pair code	Computer	Practical, peer
9	1	Cybersecurity	Threats	a) Identify b) Defend c) Apply	What threats?	Discuss; case study	Articles	Oral, peer
9	2	Cybersecurity	Passwords and Encryption	a) Strong passwords b) Define encryption c) Apply	How protect data?	Demonstrate	Computer	Practical, peer
9	3	Cybersecurity	Safe Online Practices	a) Identify b) Apply c) Build culture	How stay safe?	Discuss; pair quiz	Charts	Oral, peer
10	1	Emerging Technology	AI Basics	a) Define b) Examples c) Apply	What is AI?	Discuss; demonstrate	Articles	Oral, peer
10	2	Emerging Technology	IoT	a) Define b) Examples c) Apply	What is IoT?	Discuss; demonstrate	Articles	Oral, peer
10	3	Emerging Technology	Cloud Computing	a) Define b) Benefits c) Apply	What is cloud?	Discuss; demonstrate	Articles	Oral, peer
11	1	Project	Project Planning	a) Identify b) Plan c) Apply	What to build?	Plan; pair share	Notebooks	Written, peer
11	2	Project	Project Build	a) Code b) Test c) Apply	How build?	Workshop time	Computer	Practical, peer
11	3	Project	Project Display	a) Display b) Explain c) Build confidence	How present?	Display; pair explain	Computer	Performance, peer
12	1	All Strands	Term 2 Revision	a) Recap b) Use strategies c) Show progress	What learn?	Pair quiz	Materials	Oral, peer
12	2	All Strands	Term 2 Revision	a) Apply b) Show skills c) Self-assess	How use this?	Practical tasks	Materials	Observation, oral
12	3	All Strands	Term 2	a) Demonstrate b) Reflect	Am I ready?	Assessment	Assessment	Written, self-

			Assessment	c) Build readiness			paper	assessment
--	--	--	------------	--------------------	--	--	-------	------------

