REPUBLIC OF KENYA

MINISTRY OF EDUCATION

COMPETENCY-BASED CURRICULUM (CBC)

GRADE 10 BIOLOGY

TERM 2 LESSON PLANS

2026 (Rationalised CBC)

— PREVIEW —

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

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

REFERENCE MATERIALS

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

CBC Edu Kenya · cbcedukenya.com

Aligned with KICD Curriculum Designs · Editable Word Document

Not an official MoE/KICD publication

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 BIOLOGY.

LESSON PLAN — WEEK 1, LESSON 1

Strand: **CELL BIOLOGY** | Sub-Strand: **Cell Structure**

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

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 Cell Structure by writing the key inquiry question on the board: "What in cell?". 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 organelles. Display the resources for the lesson (Microscope) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Microscope. 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 organelles". 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 observe. 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 in cell?" 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 Cell Structure 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 Cell Structure 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 Cell Structure? (2) How would you answer "What in cell?" 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 Cell Structure 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: **CELL BIOLOGY** | Sub-Strand: **Cell Specialisation**

SCHOOL	_____
LEARNING AREA	Biology
GRADE	10
TERM	2
WEEK / LESSON	Week 1 | Lesson 2
STRAND	CELL BIOLOGY
SUB-STRAND	Cell Specialisation
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)	How cells specialise?
CORE COMPETENCY	Communication; Critical Thinking; Self-Efficacy
VALUES	Respect, Responsibility, Patience
PERTINENT & CONTEMPORARY ISSUES (PCI)	Life Skills; Values Education
LEARNING RESOURCES	Diagrams

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 Cell Specialisation by writing the key inquiry question on the board: "How cells specialise?". 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 (Diagrams) so learners know what to expect.
STEP 1	(7 min) Whole-class minds-on activity. Diagrams. 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 label. 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 "How cells specialise?" 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 Cell Specialisation 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 Cell Specialisation 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 Cell Specialisation? (2) How would you answer "How cells specialise?" 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 Cell Specialisation 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.

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SECTION B: SCHEME OF WORK — GRADE 10 BIOLOGY 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	Cell Biology	Cell Structure	a) Identify organelles b) Function c) Apply	What in cell?	Microscope; pair observe	Microscope	Practical, written
1	2	Cell Biology	Cell Specialisation	a) Identify b) Function c) Apply	How cells specialise?	Diagrams; pair label	Diagrams	Written, peer
1	3	Cell Biology	Mitosis	a) Define b) Stages c) Apply	How cells divide?	Diagrams; demonstrate	Models	Written, peer
2	1	Cell Biology	Meiosis	a) Define b) Stages c) Apply	How produce gametes?	Diagrams; demonstrate	Models	Written, peer
2	2	Cell Biology	Cell Transport	a) Diffusion b) Osmosis c) Active transport	How materials move?	Demonstrate	Lab	Practical, peer
2	3	Cell Biology	Enzymes	a) Define b) Properties c) Apply	How enzymes work?	Experiment	Lab	Practical, peer
3	1	Plant Biology	Photosynthesis	a) Define b) Equation c) Apply	How plants make food?	Demonstrate	Lab	Practical, peer
3	2	Plant Biology	Transport in Plants	a) Xylem b) Phloem c) Apply	How plants transport?	Demonstrate	Plants	Practical, peer
3	3	Plant Biology	Plant Reproduction	a) Sexual b) Asexual c) Apply	How plants reproduce?	Discuss; demonstrate	Plants	Oral, peer
4	1	Human Biology	Digestion	a) Trace food b) Enzymes c) Absorption	How food digested?	Diagrams; demonstrate	Diagrams	Written, peer
4	2	Human Biology	Circulation	a) Heart structure b) Blood c) Vessels	How blood circulates?	Diagrams; demonstrate	Diagrams	Written, peer
4	3	Human Biology	Respiration	a) Mechanism b) Gas exchange c) Apply	How we breathe?	Diagrams; demonstrate	Diagrams	Written, peer
5	1	Human Biology	Excretion	a) Kidney structure b) Function c) Apply	How body cleans?	Diagrams; demonstrate	Diagrams	Written, peer
5	2	Human Biology	Nervous System	a) Brain b) Spinal cord c) Reflexes	How brain controls?	Diagrams; demonstrate	Diagrams	Written, peer
5	3	Human Biology	Endocrine System	a) Glands b) Hormones c) Apply	What hormones do?	Discuss	Charts	Oral, peer
6	1	Human Biology	Reproduction	a) Male b) Female c) Apply	How reproduction works?	Diagrams; respectful	Diagrams	Oral, written
6	2	Human Biology	Pregnancy	a) Stages b) Care c) Apply	How baby develops?	Discuss	Charts	Oral, peer

6	3	Human Biology	Immunity	a) Define b) Types c) Apply	How body fights?	Discuss	Diagrams	Oral, written
7	1	Genetics	DNA	a) Structure b) Function c) Apply	What is DNA?	Models; pair build	Models	Practical, peer
7	2	Genetics	Mendelian Genetics	a) Laws b) Punnett square c) Apply	How traits inherited?	Worked examples	Worksheets	Written, peer
7	3	Genetics	Genetic Disorders	a) Identify b) Causes c) Apply	What causes disorders?	Discuss; case study	Articles	Oral, peer
8	1	Evolution	Theory	a) State b) Evidence c) Apply	What is evolution?	Discuss; case study	Articles	Oral, peer
8	2	Evolution	Natural Selection	a) Define b) Examples c) Apply	How selection works?	Examples	Articles	Oral, peer
8	3	Evolution	Adaptation	a) Define b) Examples c) Apply	How adapt?	Discuss	Pictures	Oral, peer
9	1	Ecology	Ecosystems	a) Define b) Components c) Apply	What is ecosystem?	Field visit	Field	Practical, oral
9	2	Ecology	Food Chains	a) Construct b) Energy flow c) Apply	How energy flows?	Construct chains	Charts	Practical, peer
9	3	Ecology	Conservation	a) State practices b) Apply c) Build values	How conserve?	Discuss; pair plan	Charts	Oral, peer
10	1	Health	Diseases	a) Identify b) Prevent c) Apply	How prevent?	Discuss; pair plan	Articles	Oral, peer
10	2	Health	Vaccination	a) Define b) Importance c) Apply	Why vaccinate?	Discuss	Charts	Oral, peer
10	3	Health	Public Health	a) State practices b) Apply c) Apply	How protect community?	Discuss	Articles	Oral, peer
11	1	Practical Skills	Lab Skills	a) Design b) Carry out c) Report	How investigate?	Lab work	Lab	Practical, written
11	2	Practical Skills	Mock Paper	a) Sit mock b) Manage time c) Build stamina	Can I complete?	Sit mock	Mock paper	Written, self-assess
11	3	Practical Skills	Mock Paper 2	a) Improve b) Apply strategies c) Build confidence	Did I improve?	Second mock	Mock paper	Written, self-assess
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 Assessment	a) Demonstrate b) Reflect c) Build readiness	Am I ready?	Assessment	Assessment paper	Written, self-assessment