

PRESIDENT'S OFFICE, REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

SCHEME OF WORK

Name of teacher: THOMAS WILSON OMARY

Name of School: FARM 17 S. S

Year: 2025

Class/Stream: FORM TWO

Term: 1 & 2

Subject: CHEMISTRY

MAIN COMPETENCE	SPECIFIC COMPETENCE	TEACHING ACTIVITIES	MONTH	WEEK	PERIODS	REFERENCE	TEACHING/LEARNING TOOLS	ASSESSMENT TOOLS	REMARKS
OXYGEN	Preparation and properties of Oxygen	Preparing students to prepare, test and explain the properties of oxygen gas	JANUARY	3 RD	06	Tanzania Institute of Education (2021), Chemistry for Secondary Schools, Book two, TIE, DSM.	H ₂ O ₂ , MnO ₂ Apparatus	Exercise	
	Uses of oxygen	Preparing students to list and explain the uses of oxygen		4 TH			Wall chart showing some uses of oxygen	Exercise	
HYDROGEN	Preparation and properties of hydrogen	Preparing students to prepare, test and explain the properties of hydrogen gas	FEBRUARY	1 ST TO 2 ND	06		Zinc granules, Dil.HCL Apparatus	Homework	
	Uses of hydrogen	Preparing students to list and explain the uses of hydrogen					Wall chart showing some uses of hydrogen	Class work	
WATER	Occurrence and Nature of water	Preparing students to : - discuss the occurrence and nature of water -describe and relate water cycle to environmental conservation.		3 RD	03		Wall chart showing occurrence of water and water cycle	Group work	
	Properties of water	Preparing students to explain the physical and chemical properties of water					Wall chart showing properties of water	Test	
	Treatment and purification of water	Preparing discussion on the: - treatment and purification of water at home and large scale water treatment (urban) - importance of water treatment and purification		4 TH	06		Water, clean piece of cloth, sand, filter paper, boiling vessel, charcoal gravel,	Assignment	

	Uses of water	To summarize discussion on the uses of water through question and answers	MAR CH	1 ST		06	Wall chart showing uses of water	Exercise	
FUELS AND ENERGY	Fuel sources	Preparing students to discuss the different sources of fuels and methods of obtaining fuels from locally available materials.		2 ND			Kerosene, fire wood, petrol, diesel, wall chart showing charcoal making.	Homework	
	Categories of Fuels	Preparing students to classify fuels according to their states and efficiency		3 RD			Heating gas, charcoal, fire wood, kerosene	Class work	

MID-TERM ASSESSMENT (4TH WEEK OF MARCH TO 2ND WEEK OF APRIL)
MID-TERM BREAK (11/04/2025-22/04/2025)

	Uses of fuels	Preparing students to discuss different uses of fuels in daily life and assess the environmental effects	APRI L	2 ND	03	06	Tanzania Institute of Education (2021), Chemistry for Secondary Schools, Book two, TIE, DSM.	Wall charts showing uses of fuels	Exercise	
	Conservation of energy	Preparing students to explain the law of conservation of energy and carry out experiment on it.		3 RD			Wall chart showing energy, energy change	Homework		
	Renewable Energy (biogas)	Preparing students to discuss the working mechanism of a biogas plant and explain the uses of biogas in environmental conservation		4 TH	03		Biogas plant model, water, pipes, cow dung, sewage, concrete, animal/plant waste	Class work		
ATOMIC STRUCTURE	The atom and Sub-atomic particles	Preparing students to: -analyses the Dalton's atomic theory -identify sub-atomic particles in an atom and explain their properties in an atom.					Tanzania Institute of Education (2021), Chemistry for Secondary Schools, Book two, TIE, DSM.	Wall chart showing Dalton's atomic structure, modern periodic table, model of an atom	Exercise	

	Electronic arrangements	Preparing students to establish the maximum number of electrons in the shells and draw energy shell diagrams	MAY	1 ST TO 3 RD	09		Atomic diagrams, wall charts showing energy shell diagram	Homework	
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TERMINAL ASSESSMENT (4TH WEEK OF MAY TO 1ST WEEK OF JUNE)

FIRST TERM BREAK (06/06/2025-08/07/2025)

UMISSETA SPORTS COMPETITIONS (22/06/2025-05/07/2025)

	Atomic number, mass number and isotope	Preparing students to: - discuss the relationship between the atomic and number of protons - obtain mass number from number of protons and neutrons. - explain the concept of isotope		2 ND	09		Wall chart showing the number of protons and neutrons of elements and isotopes of carbon, chlorine, oxygen	Class work	
PERIODIC CLASSIFICATION	periodicity	Preparing students to discuss on the concept of periodicity	JULY	3 RD TO 4 TH	09		Wall chart displaying the modern periodic table	Exercise	
	General trends	Preparing students to discuss the change in properties of elements across the periods and down the groups	AUGU ST	1 ST	09	Tanzania Institute of Education (2021) Chemistry for Secondary Schools, Book two, TIE, DSM.	Wall chart showing the modern periodic table	Homework	
		Preparing students to write the configuration of the first 10 elements		2 ND	06		Modern periodic table and atomic model	Class work	
FORMULA, BONDING AND NOMENCLATURE	Valence and chemical formula	Preparing discussion on the concept of valence and how to write simple formulae of binary compounds.		3 RD			Modern periodic table and valence cards	Group work	
		Preparing discussion on the concept of empirical and molecular formulae and how to calculate them					Modern periodic table , wall chart showing empirical and molecular formula	Test	

MID-TERM ASSESSMENT (4TH WEEK OF AUGUST 2ND WEEK OF SEPT)
MID-TERM BREAK (29/08/2025-15/09/2025)

	Oxidation state	Preparing discussion on the concept of oxidation state and differentiate it from valence	SEPT EMBE R	3 RD	03		Periodic table Wall chart showing valence and oxidation state	Assignment		
	Radicals	Preparing students to explain the concept of radicals and write chemical formulae of common compounds.					Tanzania Institute of Education (2021), Chemistry for Secondary Schools, Book two, TIE, DSM..	Modern periodic table, wall chart showing common radicals	Exercise	
	Covalent bonding	Preparing student to explain the concept of covalent bonding and state the properties of covalent comp.	OCTO BER	4 TH	03		Modern periodic table, wall chart showing covalent compounds	Homework		
	Electrovalent bonding	Preparing student to explain the concept of electrovalent bonding and state the properties of electrovalent compounds					Modern periodic table, wall chart showing electrovalent compounds	Class work		
	Naming chemical compounds	Preparing student to explain the concept of nomenclature and give systematic names of inorganic compounds.		1 ST	09		Wall charts showing rules of naming compounds	Test		

PREPARATION FOR FORM TWO NATIONAL ASSESSMENT (OCTOBER 3RD WEEK TO 4TH WEEK)
END OF YEAR BREAK (05/12/2025)