**THE PRESIDENT’S OFFICE-**

**REGIONAL ADMINISTRATION AND LOCAL GOVERNME**

**SCHEME OF WORK**

**NAME OF SCHOOL: SECONDARY SCHOOL**

**TEACHER'S NAME:**

**SUBJECT: CHEMISTRY**

**CLASS: FORM ONE**

**TERM: 1st& 2nd TERM**

**YEAR: 2025**

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| **COMPETENCE** | **OBJECTIVES** | **MONTH** | **WEEK** | **MAIN-TOPIC** | ***SUB*- TOPIC** | **PERIOD** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L AIDS** | **REFERENCE** | | **ASSESSMENT** | **REMARKS** | |
| ORIENTATION COURSE |  | J  ANUARY | 3 |  |  |  |  |  |  |  | |  |  | |
| 4 |  |  |  |  |  |  |  | |  |  | |
| ORIENTATION COURSE |  | **F**  **E**  **B**  **RUARY** | 1 |  |  |  |  |  |  |  | |  |  | |
| 2 |  |  |  |  |  |  |  | |  |  | |
| 3  &  4 |  |  |  |  |  |  |  | |  |  | |
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| **COMPETENCE** | **OBJECTIVES** | **MONTH** | **WEEK** | **MAIN-TOPIC** | ***SUB*- TOPIC** | **PERIOD** | **TEACHING ACTIVITIES** | **LEARNING ACTIVITIES** | **T/L AIDS** | **REFERENCE** | | **ASSESSMENT** | **REMARKS** | |
| By the end of the topic the student should have developed competences in using chemistry skills and knowledge in daily life | By the end of the topic the student should be able to explain the importance of chemistry in daily life | **MARCH** | 1  &  2 | 1.**0 INTRODUCTION TO CHEMISTRY** | **1.1 The concept of chemistry** | 2 | To guide students to explain the meaning of chemistry | Students to explain the meaning | Wall charts  Soaps  toothpaste  Fertilizers  insecticides  soft drinks  drugs |  | | Students to name the substances made by application of chemistry  Students to discuss the importance of chemistry in daily life by giving examples |  | |
| **1.2 The importance of chemistry in life** | 2 | To guide students to discuss how chemistry is applied in industry and at home | Students to explain the importance of chemistry in daily life by giving examples |
| By the end of the topic the student should have developed competences in working safely in chemistry laboratory | By the end of the topic the student should be able to carry out chemistry activities safely and efficiently | **MARCH** | 3  &  4 | 2.0 **LABORATORY TECHNIQUES AND SAFETY** | **2.1 Rules and safety precautions in a chemistry laboratory** | 4 | To guide students to explain the laboratory rules and outline its importance | Students to prepare a list ten rules in a chemistry laboratory and discuss the laboratory safety measures | Chemistry laboratory mannual  wall charts | Students to prepare a list ten rules in a chemistry laboratory and discuss the laboratory safety measures |  | |
|  | **2.2 First aid and first aid kit** | 4 | To guide students to discuss activities which are likely to cause accidents in a chemistry laboratory | Students to discuss activities which are likely to cause accidents in a chemistry laboratory | -A pair of scissors  -adhesive tape  -bandage  -cotton wool  -soap  -razor blade | Students to discuss activities which are likely to cause accidents in a chemistry laboratory and to name every item found in a first aid kit and simulate a mock use of each item in a first aid kit |  | |
| To guide students to name every item found in a first aid kit and simulate a mock use of each item in a first aid kit  and guide students on how to render first aid in a real situation | Students to name every item found in a first aid kit and simulate a mock use of each item in a first aid kit |
| APR  I  L | 1 | **2.3 Basic chemistry laboratory apparatus and their uses** | 4 | To guide students to give names of different pieces of apparatus used in the chemistry laboratory and categorize them into apparatus for holding things, taking measurements of mass, volume and temperature and heating purposes | Students to give names of different pieces of apparatus used in the chemistry laboratory and categorize them into apparatus for holding things, taking measurements of mass, volume and temperature and heating purposes | Apparatus for holding things in place  -apparatus for taking measurements |  | | Students to give names of different pieces of apparatus used in the chemistry laboratory and categorize them into apparatus for holding things, taking measurements of mass, volume and temperature and heating purposes  And to practice the uses of each of the apparatus for measuring volumes liquids, volumes of gases etc |  | |
| To guide students to practice the uses of each of the apparatus for measuring volumes liquids, volumes of gases etc | Students to practice the uses of each of the apparatus for measuring volumes liquids, volumes of gases etc |
|  |  |  | 2 |  | 2**.4 Warning signs** | 4 | To guide students to draw simple diagrams of the following warning signs toxic, harmful. Irritant, poison, explosive, corrosive, oxidant. | Students to draw simple diagrams of the following warning signs toxic, harmful. Irritant, poison, explosive, corrosive, oxidant. | Oxidants  irritants  corrosive  poison |  | | Students to draw simple diagrams of the following warning signs toxic, harmful. Irritant, poison, explosive, corrosive, oxidant. |  | |
| **MIDTERM TEST** | | | | | | | | | | | | | | |
| **MIDTERM BREAK 11TH APRIL– 21ST APRIL 2025** | | | | | | | | | | | | | | |
| By the end of the topic the student should have developed competences in dealing with flames | By the end of the topic the student should be able to explain the uses of different types of flames | **APRI**  **L** | 4 | 3.0**HEAT SOURCES AND FLAMES** | **3.1 Heat sources** | 4 | To guide students on how to use the following heat source in a chemistry laboratory  candle, spirit burner, kerosene, kibatari,charcoal burner | Student to discuss on how to use the following heat source in a chemistry laboratory  candle, spirit burner, kerosene, kibatari,charcoal burner | Candle  spirit burner  Bunsen burner  kerosene |  | | Student to discuss on how to use the following heat source in a chemistry laboratory  candle, spirit burner, kerosene, kibatari,charcoal burner |  | |
| To guide students to discuss how a Bunsen burner works | Students to discuss how the Bunsen burner works |
|  |  | **3.2 Types of Flames** | 4 | To guide students to use the different types of burners to produce luminous and non-luminous flames | Students to use the different types of burners to produce luminous and non-luminous flames | burner  Bunsen burner  kerosene  charcoal burner  wall charts | Students to use the different types of burners to produce luminous and non-luminous flames |  | |
| To guide students to discuss how different flames are used | Students to discuss how different flames are used |
| By the end of the topic the student should have developed competences in applying the scientific procedure to carry out investigations in chemistry | By the end of the topic the student should be able to explain the use of scientific procedures in carrying out investigations |  | 3 | 4.0T**HE SCIENTIFC PROCEDURES** | **4.1 Significance of the scientific procedures** | 4 | To guide students in the discussion about the meaning and significance of the scientific procedures | Students to discuss the meaning and significance of the scientific procedures | Wall charts |  | | Students to discuss the meaning and significance of the scientific procedures |  | |
| To guide students on how the scientific procedure is used in carrying out the systematic investigations | Students to discuss on how the scientific procedure is used in carrying out the systematic investigations |
| 4 | **4.2 The main steps of the scientific procedure** | 4 | To guide students to discuss the main steps of the scientific procedure | Students to discuss the main steps of the scientific procedure | Wall charts | Students to discuss the main steps of the scientific procedure |  | |
|  | 4 | **4.3 Application of the scientific procedure** | 2 | To supervise students' project | Students to apply the scientific procedure to carry out a project on a chemistry problem |  | Students to apply the scientific procedure to carry out a project on a chemistry problem |  | |
| By the end of the topic the student should have developed competences in dealing with nature and properties of matter | By the end of the topic the student should be able to explain the difference between physical and chemical change and separate various mixtures using variety of methods | **MAY** | 1 | 5.0**MATTER** | **5.1 Concept of matter** | 4 | To guide students to discuss the meaning and definition of matter | Students to discuss the meaning and definition of matter | Solid  liquid  gases |  | | Students to discuss the meaning and definition of matter |  | |
| 2 | **5.2 States of Matter** | 4 | To guide students to apply the kinetic nature of matter to explain the existence of matter in the three states and demonstrate the changes of matter form one state to another | Students to apply the kinetic nature of matter to explain the existence of matter in the three states and demonstrate the changes of matter form one state to another | Maize grains  bottle with lid  bottle or jar with gas  ice  stove  water | Students to apply the kinetic nature of matter to explain the existence of matter in the three states and demonstrate the changes of matter form one state to another |  | |
| To lead students to brainstorm on the advantages of changing one state of matter to another | Students to brainstorm on the advantages of changing one state of matter to another |
|  | 3 | **5.3 Physical and chemical change** | 4 | To lead students to discuss the meaning and characteristics of physical change and guide them to demonstrate the physical change including melting of ice, boiling of water, and condensation of steam | Students to discuss the meaning and characteristics of physical change and demonstrate the physical change including melting of ice, boiling of water, and condensation of steam | Sugar  table salt  heat source  chalk  magnet  sugar  fruit  yeast  paper  match box  candle | Students to discuss the meaning and characteristics of physical change and demonstrate the physical change including melting of ice, boiling of water, and condensation of steam |  | |
| To lead students to discuss the meaning and characteristics of chemical changes and carry out the following chemical changes.  Burning of paper,  ripening of fruit and fermentation | Students to discuss the meaning and characteristics of chemical change and carry out the following chemical changes  Burning of paper,  ripening of fruit and fermentation |
| **TERMINAL EXAMINATIONS** | | | | | | | | | | | | | | |
| **TERMINAL LEAVE 6TH JUNE – 7TH JULY 2025** | | | | | | | | | | | | | | |
|  |  | **JUL**  **Y** | 4 |  | 5.4 **Elements and symbols** | 2 | To guide the students to discuss the meaning of an element as compared to other substances and the choice of alphabetical letters and their combinations to form the symbols of elements | Students to discuss the meaning of an element as compared to other substances and the choice of alphabetical letters and their combinations to form the symbols of elements | Copper  sodium  periodic table  zinc  iron  sulphur  hydrogen |  | | Students to discuss the  meaning of an element as compared to other substances and the choice of alphabetical letters and their combinations to form the symbols of elements |  | |
| 2 | To guide students on how to use the periodic table to differentiate metal and non-metal elements | Students to discuss on how to use the periodic table to differentiate metal elements and non-metal elements |
| **AUGUS**  **T** | **1** | **5.5 Compound and mixtures** | 2 | To lead students to discuss the differences between compounds and mixtures by referring to their characteristics and prepare a binary compound such as Fe2S | Students to discuss the differences between compounds and mixtures by referring to their characteristics and prepare a binary compound such as Fe2S | Copper  sodium  periodic table  zinc  iron  sulphur  hydrogen  milk  clay soil  water  margarine  ethanol  chalk powder |  | Students to discuss the differences between compounds and mixtures by referring to their characteristics and prepare a binary compound such as Fe2S | | |  | |
| to discuss the properties of a compound in comparison to the properties of its constituents elements | | |
|  |  |  |  | 1 | To lead students to discuss the properties of a compound in comparison to the properties of its constituents elements | Students to discuss the properties of a compound in comparison to the properties of its constituents elements |
|  |  |  |  | 1 | To guide students to discuss the meaning of mixtures , properties of solutions, suspensions, emulsions and give their examples | Students to discuss the meaning of mixtures , properties of solutions, suspensions, emulsions and give their examples | to discuss the meaning of mixtures , properties of solutions, suspensions, emulsions and give their examples | | |
|  | **AUGUST** | 2  3  4 | **5.6 Separation of mixture** | 4 | To guide students to discuss the procedures for carrying out the named processes of separation of mixtures | Students to discuss the procedures for carrying out the named processes of separation of mixtures | Wall charts  sugar  heat source  kerosene  table salt  iron fillings | Students to discuss the procedures for carrying out the named processes of separation of mixtures  to brainstorm on the importance of obtaining separate components of a mixture  to demonstrate the separation of different mixtures by applying different separation methods | | |  | |
| 4 | To guide students to brainstorm on the importance of obtaining separate components of a mixture | Students to brainstorm on the importance of obtaining separate components of a mixture |
| 4 | To guide students to demonstrate the separation of different mixtures by applying different separation methods | Students to demonstrate the separation of different mixtures by applying different separation methods |
|  | **MIDTERM TEST** | | | | | | | | | | | | |  | |
|  | **MIDTERM BREAK 29TH AUGOST – 14TH SEPTEMBER 2025** | | | | | | | | | | | | |  | |
| By the end of the topic the student should have developed competences in dealing with fires and rust | By the end of the topic the student should be able to control fire and iron rusting | **SEPTEMBER** | 4 | 6.0  **AIR, COMBUSTION AND FIRE FIGHTING** | 6.1 **Composition of air** | 4 | To lead students to discuss the proportions of different gases in air and demonstrate the presence of the carbon-dioxide and oxygen in the air | Students to discuss the proportions of different gases in air and demonstrate the presence of the carbon-dioxide and oxygen in the air | Wall charts  lime water  bell jar  water  trough  candle  phosphorus |  | Students to discuss the proportions of different gases in air and demonstrate the presence of the carbon-dioxide and oxygen in the air | | |  | |
| To facilitate students to carry out an experiment to determine the percentage of oxygen in air | Students to carry out an experiment to determine the percentage of oxygen in air |
| **OCTOBER** | 1 | **6.2 Combustion** | 2  2 | To facilitate students to discuss the meaning and significance of combustion of the different substances | Students to students to discuss the meaning and significance of combustion of the different substances | Piece of paper  candle  charcoal  spirit | Students to students to discuss the meaning and significance of combustion of the different substances | | |  | |
| To guide students to determine the products of complete combustion of the kerosene, paper, charcoal, candle and spirit in air and describe the application of combustion in real life | Students to determine the products of complete combustion of the kerosene, paper, charcoal, candle and spirit in air and describe the application of combustion in real life | Students to determine the products of complete combustion of the kerosene, paper, charcoal, candle and spirit in air and describe the application of combustion in real life | | |  | |
| **OCTOBER** | 2 | **6.2 Fire Fighting** | 4 | To guide students to discuss the fire caused by petroleum products, electricity, wood and charcoal, paper and identify different types of fire extinguishers | Students to discuss the fire caused by petroleum products, electricity, wood and charcoal, paper and identify different types of fire extinguishers | Sand bucket  water hose  charcoal  spirit  candle | Students to discuss the fire caused by petroleum products, electricity, wood and charcoal, paper and identify different types of fire extinguishers | | |  | |
| 3 |  |  | 4 | To lead students to discuss the role played by fuel and oxygen in a fire and classification of fire extinguishers | Students to discuss the role played by fuel and oxygen in a fire and classification of fire extinguishers | Students to discuss the role played by fuel and oxygen in a fire and classification of fire extinguishers | | |  | |
| 4 |  |  | 4 | To guide students to prepare a small fire carefully and extinguish it | Students to prepare a small fire carefully and extinguish it | Students to prepare a small fire carefully and extinguish it | | |  | |
|  |  | NOVEMBER | 1 |  | **6.4 Rusting** | 8 | To guide students to discuss  the meaning of rusting and its economic importance | Students to discuss the  meaning of rusting and its economic importance | Iron filings  steel wool  water  cotton wool  grease  heat source  magnesium ribbon  oil |  | Students to discuss the  meaning of rusting and its economic importance | | |  | |
| To design an activity for students to demonstrate the conditions necessary for iron to rust | Students to demonstrate the conditions necessary for iron to rust | to demonstrate the conditions necessary for iron to rust | | |
| To guide students to summarize and discuss the experimental findings | Students to carry out experiments on different methods of preventing iron from rusting | to carry out experiments on different methods of preventing iron from rusting | | |
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|  |  | **10 TH NOV. 2025 TO 05 DEC. 2025, REVISION & ANNUAL EXAM** | | | | | | |  | | |  | |
|  |  | **06 TH DECEMBER 2025 ANNUAL HOLIDAY** | | | | | | |  | | |  | |